

United Nations Educational, Scientific and Cultural Organization Venice Office

Turkish

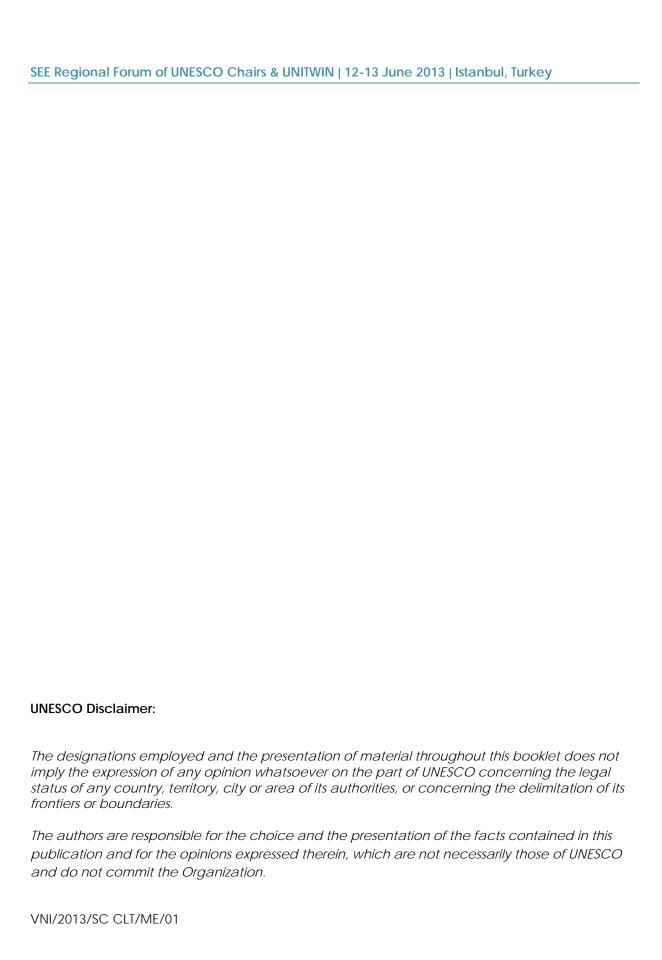
**National Commission** 

for UNESCO

**PROGRAMME** 

South East Europe (SEE)
Regional Forum of UNESCO Chairs
and UNITWIN Networks

12-13 June 2013 <u>Armada</u> Hotel, Istanbul, Turkey



## South Eastern European Regional Forum of UNESCO Chairs and UNITWIN 12-13 June 2013 – Istanbul, Turkey

Established in 1992 by the General Conference, both UNESCO Chairs and University Twinning and Networking (UNITWIN) aim to advance research, training, and programme development through the recognition of excellence and university cooperation. Thus far UNESCO Chairs/UNITWINs have proven useful in establishing new teaching programmes, generating original ideas through research, and facilitating the enrichment of existing university programmes while respecting cultural diversity.

As of 2012, 715 UNESCO Chairs and 69 UNITWIN Networks have been established within the Programme, involving over 830 institutions in 131 countries. A majority of the projects are interdisciplinary and intersectoral, including all of UNESCO's programme sectors (Education, the Natural Sciences, the Social and Human Sciences, Culture, Communication and Information), with the active assistance of UNESCO Field Offices, Institutes and Centres.

The UNESCO Regional Bureau for Science and Culture in Europe, Venice (Italy), together with the Turkish National Commission for UNESCO jointly collaborated to convene the Forum from 12 to 13 June 2013 in Istanbul, Turkey. The SEE Region UNESCO Chairs that participated in the Istanbul Forum were identified in collaboration with UNESCO's Section for Higher Education (ED/THE/HED).

The objective of this Forum was to identify and outline a shared Regional roadmap and common vision of the role of UNESCO Chairs in the SEE area. Discussions were encouraged to reflect upon and enhance the dual function of these UNESCO instruments and networks as "think tanks" and "bridge builders" between the academic world, civil society, local communities, research, and policy-making.

As brain drain continues to affect socioeconomic development of the Region, the Forum was also an opportunity to promote Regional as well as sub-Regional poles of innovation and expertise. Additionally, the Forum served to share best practices and exchange knowledge, with a final objective to encourage one common strategy and vision for the role of UNESCO Chairs in the SEE Region. The one and a half day thematic sessions provided participants with an opportunity to discuss the operational framework of the Chairs Network and elaborate or propose joint Regional projects.

#### .....

#### **UNESCO Chairs**

UNESCO Chairs are established to individual universities, centres of excellence and institutions to elaborate further research and training in one of UNESCO's fields of competence.

#### **UNITWIN Networks**

Through the UNITWIN scheme, universities and research institutions in industrialized countries with counterparts in the developing world to share information and knowledge in areas of need.

#### PROGRAMME

#### Tuesday 11 June 2013

Arrival of participants

#### Wednesday 12 June 2013

#### 09:00-09:30 Opening session

Sina Baydur, Vice President, Turkish National Commission for UNESCO Mario Scalet, Head of Science Unit, UNESCO Venice Office

#### 09:30-10:30 What role for UNESCO Chairs in Europe?

Introduction and Moderator. Meral Özgüç, Member of the Executive Board, Chair of Bioethics and Basic Sciences Committee, Turkish National Commission for UNESCO

Ali Rıza Özdemir, Acting Head of Department, Department of International Cooperation, TUBITAK

Lorenzo Mattarolo, UNESCO Chair in Energy for Sustainable Development, Politecnico di Milano

Q & A session

Coffee Break

#### 11:00-13:00 Round Table I

## UNESCO Chairs as poles of excellence: assessment, perspectives and challenges

Introduction and Moderator: Anthony Krause, Head of Culture Unit, UNESCO Venice Office

Ioanna Kuçuradi, Chair in Philosophy and Human Rights, Maltepe University, Istanbul

Nikolaos Melis, Chair on natural Disasters, National Observatory of Athens

Milena Dragicevic Sesic, Chair in cultural policy and management, University of Arts, Belgrade

Silvia Hostettler, Cooperation & Development Center, UNESCO Chair in Technologies for Development, Lausanne

Q & A session

Lunch break

#### 14:30-18:00 Round Table II

## Advancing UNESCO strategies for regional cooperation in the fields of science and culture

Introduction and Moderator: Rosanna Santesso, Programme Specialist, Science Unit, UNESCO Venice Office

Okyay Kaynak, Chair on Mechatronics, Boğaziçi University, Istanbul

Gayane Poghosyan – Chairholder UNESCO Chair on Education for Sustainable Development, Center for Ecological-Noosphere Studies-National Academy of Sciences, Yerevan

Snezana Trpevska, Chair in Media Dialogue and Mutual understanding, School of Journalism and Public Relations, Skopje

Mariana Correia, Escola Superior Gallaecia, Chair on Earth and Architecture, Ecole Nationale Supérieure d'Architecture de Grenoble

Coffee Break

Q & A session

#### 19:00 Official Dinner

#### Thursday 13 June 2013

#### 09:00-12:30 Round Table III

## Improving coordination and cooperation among UNESCO Chairs: new avenues for action

Introduction and Moderator: Mario Scalet, UNESCO Venice Office

Roumen Nikolov, Chair on ICTs in Library Studies, Education and Cultural Heritage, State University of Library Studies and Information Technologies, Sofia

Daniela Elenciuc, Dean of the Faculty of Natural Sciences, University of the Academy of Sciences of Moldova, Chisinau

Slavica Singer, Chair in Entrepreneurship Education, J.J Strossmayer University, Osijek

Pietro Tundo, UNITWIN Green Chemistry, University of Ca' Foscari-Venice

Q & A session

#### 12:30-13:00 Conclusions and closing remarks

**UNESCO** Representatives

Turkish authorities

Departure of participants

#### **Hotel Information**

#### Armada Hotel, Istanbul

Ahirkapi Sok, No. 24, Cankurtaran, Istanbul tel. +90-212-455-4455, fax. +90-212-455-4499

Email: <u>info@armadahotel.com.tr</u> website: <u>www.armadahotel.com.tr</u>

#### LIST OF PARTICIPANTS

#### **Albania**

**Ms Venera Domi** – Secretary General of the Albanian National Commission for UNESCO Ministry of Foreign Affairs Blvd. Gjergj Fishta, No. 6

Tiranë – ALBANIA, Tiranë, Albania Tel. +355 4 23 64 090 / 060 ext. 79 202

Email: venera.domi@mfa.gov.al / unesco.al@mfa.gov.al

#### Armenia

**Prof Gayane Poghosyan** – Chairholder UNESCO Chair on Education for Sustainable Development, Center for Ecological-Noosphere Studies-National Academy of Sciences State Committee of Science, RA

Yerevan

Tel: 091 10 46 07, 010 22 15 56

Email: gayane\_surenovna@yahoo.com

#### **Bosnia and Herzegovina**

**Prof Dr Gordana Đurić** – Univerzitet u Banjaluci Bulevar vojvode Petra Bojovića 1 A 78000 Banjaluka, Republika Srpska, Bosna i Hercegovina

Tel: +387 51 312216, 330933

Fax: +387 51 312818

Email: gordana.djuric@griunibl.rs.ba/gordanadju@gmail.com

#### Bulgaria

**Prof Roumen Nikolov** – Representative UNESCO Chair on ICTs in Library Studies, Education and Cultural Heritage, State University of Library Studies and Information Technologies

Email: r.nikolov@unibit.bg

#### Croatia

**Dr Slavica Singer** – UNESCO Chair in Entrepreneurship Education, J.J. Strossmayer

University in Osijek, Gajev trg 7, 31000 Osijek, Croatia.

Phone: +385 31 224 444, Fax: +385 31 211 604,

Email: singer@efos.hr

#### Georgia

Prof Nino Chikovani – Chairholder UNESCO Chair in Intercultural Dialogue, Ivane

Javakhishvili State University, Tbilisi Email: <a href="mailto:tsuculturologia@yahoo.com">tsuculturologia@yahoo.com</a>

#### Greece

**Dr Nikolaos Melis** – representing UNESCO Chair on Natural Disasters at the National Observatory of Athens, Greece

Email: nmelis@noa.gr

#### Italy

Prof Pietro Tundo – Director UNITWIN Green Chemistry, Marghera, Venice

Email: tundop@unive.it

Prof Lorenzo Mattarolo – UNESCO Chair in Energy for Sustainable Development,

Politecnico di Milano, Via Lambruschini, 4

20156 Milano - Italy cell: +39.347-012-5099

Email: <u>lorenzo.mattarolo@polimi.it</u>

Dr Andrea Maniscalco – UNESCO Chair in Sustainable Development and Territory

Management University of Turin

Via Po 18, 10124 Turin, Italy Phone: 0039.011.6702733

Email: unescochair@unito.it / andrea.maniscalco@unito.it

#### Republic of Moldova

**Prof Daniela Elenciuc** – Dean of the Faculty of Natural Sciences, University of the Academy of Sciences of Moldova

Chisnau. Moldova tel. (+373) 69526370

Email: <u>ciumac@yahoo.com</u>

Prof Emil Dragnev – UNESCO Chair of South-East European Studies, Moldova State

University

Email: edragnev@gmail.com

#### Montenegro

**Prof Bojka Djukanovic** – Chairholder UNESCO Chair in Education for Democratic Citizenship and Human Rights, University of Montenegro, Faculty of Philosophy, Danila Bojovica bb,

81400 Niksic, Montenegro

Tel. 00 382 (0)69 046 749 (mobile)

Email: bojkadj@t-com.me

#### **Portugal**

**Prof Mariana Correia** – Escola Superior Gallaecia, representing UNESCO Chair Earthen architecture, building cultures and sustainable development

Email: marianacorreia@esg.pt

#### Romania

**Prof Martin Hauser** – Chairholder Département Chaire UNESCO d'Etude des Echanges Interculturels et Interreligieux, Université de Bucarest

Email: martin.hauser@unifr.ch

#### Slovenia

**Prof Davor Sostaric** – Director Regional Centre for Library and Information Systems and current research information systems-IZUM, Maribor

Email: davor.sostaric@izum.si

**Mr Gasper Hrastelj** – Deputy Secretary General Slovenian National Commission for UNESCO

Kotnikova ulica 38 - 1 000 Ljubljana - Slovenia

T (386 1) 478 4678 - F (386 1) 478 4660

Email: gasper.hrastelj@gov.si

#### Serbia

**Prof Milena Dragicevic Sesic** – Chairholder UNESCO Chair in Studies of Interculturalism, Art and Cultural Management and Mediation in the Balkans, The University of Arts in Belgrade

Email: msesic@gmail.com

**Mr Miodrag Milovanovic** – Deputy Director of Jaroslav Cerni Institute - Representative of UNESCO category 2 Center for Water, Sustainable Development and Adaptation to Climate Change

Belgrade

Email: miodrag.milovanovic@jcerni.co.rs

**Prof Biljana Radojevic** – Representing Director General of the Serbian UNESCO cat II center on water and adaptation to climate change

Email: biljana.radojevic@yahoo.com

#### **Switzerland**

**Dr Silvia Hostettler** – Deputy Director CODEFV - UNESCO Chair on UNESCO Chair Technologies for Development, Lausanne Switzerland

Email: silvia.hostettler@epfl.ch

#### The former Yugoslav Republic of Macedonia

**Dr Snezana Trpevska** – Chairholder UNESCO Chair in Media, Dialogue and Mutual Understanding, The School of Journalism and Public Relations

Email: strpevska@vs.edu.mk

#### **Turkey**

**Prof Okyay Kaynak** – Chairholder UNESCO Chair on Mechatronics, Bogaziçi University, Istanbul

Email: okyak.kaynak@boun.edu.tr

**Prof Dr Ioanna Kuçuradi** – Chairholder UNESCO Chair in Philosophy and Human Rights, Malpete University

Email: ionnak@maltepe.edu.tr

**Dr Aslıhan Öztezel** – Coordinator UNESCO Unit for Culture of Peace, Bahcesehir University, Istanbul

**Assist. Prof Dr Evrim Ölçer Özünel** – representative of an applicant Chair for Intangible Cultural Heritage in Gazi University Turkish Folklore Research and Application Center. Email: evrimolcer@gmail.com

**Prof E. Ertuğrul Karsak** – Co-Chairholder UNESCO Chair in Computer-Integrated Manufacturing, Industrial Engineering Department, Galatasaray University, Ciragan Caddesi 36, Ortakoy, Istanbul

Email: <u>ekarsak@gsu.edu.tr</u>

**Dr Hakan Öniz** – Coordinator of UNESCO UNITWIN Underwater Archaeology Network, Faculty of Letters, Department of Archaeology Campus, Selçuk University, Konya, Turkey Email: hakan.oniz@gmail.com

**Prof Dr Ahmet Adil Tırpan** – Head of Archaeology Department, Selçuk University, UNESCO UNITWIN Underwater Archaeology Network

Email: ahmettirpan1@yahoo.com

**Doç Dr Ali Rıza Özdemir** – Acting Head of Department, Department of International Cooperation

Email: aliriza.ozdemir@tubitak.gov.tr / uidb@tubitak.gov.tr

#### **Turkish National Commission for UNESCO**

Ms İrem Alpaslan – Assistant Secretary General, Turkish National Commission for UNESCO

Phone: (+90 312) 426 58 94 / 119 Email: <u>iremalpaslan@unesco.org.tr</u>

**Ms Sina Baydur** – Vice President, Turkish National Commission for UNESCO, Chair of UNESCO International Agreements Committee

Email: <a href="mailto:sbaydur@unesco.org.tr">sbaydur@unesco.org.tr</a> / <a href="mailto:msbaydur@yahoo.com">msbaydur@yahoo.com</a>

**Prof Meral Özgüç** – Member of the Executive Board, Chair of Bioethics and Basic Sciences Committee, Turkish National Commission for UNESCO Email: meralozguc@unesco.org.tr / mozguc@hacettepe.edu.tr

Mr Tevfik Akbabaoğlu – Technical expert, Turkish National Commission for UNESCO

Email: <a href="mailto:tevfikakbabaoglu@unesco.org.tr">tevfikakbabaoglu@unesco.org.tr</a>

Mr Burçer Cankurtaran – Technical expert, Turkish National Commission for UNESCO

Email: <u>burcercankurtaran@unesco.org.tr</u>

**Prof Dr Harun Tepe** – Member of Executive Board, Turkish National Commission for

**UNESCO** 

Email: <a href="mailto:harunt@unesco.org.tr">harunt@unesco.org.tr</a> / <a href="mailto:harunt@unesco.org.tr">harunt@unesco.org.tr</a> / <a href="mailto:harunt@unesco.org.tr">harunt@unesco.org.tr</a> / <a href="mailto:harunt@unesco.org.tr">harunt@hacettepe.edu.tr</a></a>

#### **UNESCO**

Mr Mario Scalet - Head of Science Unit UNESCO Venice Office

Email: <u>m.scalet@unesco.org</u>

Mr Anthony Krause - Head of Culture Unit UNESCO Venice Office

Email: <u>a.krause@unesco.org</u>

Ms Rosanna Santesso – Programme Specialist UNESCO Venice Office

Email: <u>r.santesso@unesco.org</u>

#### ISTANBUL CONCLUSIONS

We, the participants of the SEE Regional Forum of UNESCO Chairs & UNITWIN Networks (Istanbul, Turkey, 12-13 June 2013), co-organized by the Turkish National Commission for UNESCO and the UNESCO Regional Bureau for Science and Culture in Europe, Venice (Italy), reaffirm the role of UNESCO Chairs / Networks / Category 2 Centers as sustainable poles of innovation and excellence in higher education for reinforcing our cooperation in the following domains of action:

#### Information and communication

- Introduce a regular system of exchanging information and data to improve communication, cooperation and coordination between UNESCO Chairs / Networks / Category 2 Centers
- Use existing models such as OpenAIRE (Open access Infrastructures for Research in EU);
   Living Labs in Europe; and SMART Specialization to share research in the Region to contribute to the emergence of an integrated area of knowledge;
- Clarify communication channels between the Chairs, the National Commissions, the UNESCO Venice Office and UNESCO HQ as well as their respective roles;
- Promote the role and visibility of UNESCO Chairs / Networks / Category 2 Centers as think tanks and bridge builders between the academic world, civil society local communities, research and policy-making.

#### **Networking and partnerships**

- Recall the role of National Commissions in facilitating the process leading to the identification and creation of Chairs, as well as in promoting the activities and achievements of Chairs:
- Initiate and strengthen intersectoral approaches to research and partnerships with public/private sectors, key civil society partners and NGOs, emphasizing innovation and business opportunities;
- Expand collaboration between the Chairs network with other centers and networks of excellence;
- Encourage cooperation with the less developed countries in order to share knowledge and information.

#### **Fundraising**

- Enhance cooperation and coordination amongst UNESCO Chairs / Networks / Category 2
  Centers in the preparation and submission of EU-related and other funding projects and
  proposals;
- Raise awareness of ministries, national, regional, international funding and development agencies about the role of UNESCO Chairs in encouraging inter-university cooperation and strengthening educational and research capacities.

#### **Transdisciplinarity**

- Use Chairs as facilitators that bring together innovative multi and trans-disciplinary groups of professional and academic groups to address emerging regional priorities and global challenges;
- Reaffirm and adopt a human rights-based approach to all programmes and activities;
- Reinforce multidisciplinary approaches to peace and sustainable development, underlining the ethical dimensions within all avenues of action.

#### The way forward

• Reinforce the role of Chairs in the upcoming discussions on the post-2015 UN

Development agenda;

- Use Chairs as a model for implementing the new European Research Area (ERA) Chairs initiative at the EU level;
- Create a comprehensive portal/database hosted by the UNESCO Venice Office on SEE UNESCO Chairs / Networks / Category 2 Centers to be used as a platform for the dissemination of information on ongoing and future activities and programmes (events, open calls, funding opportunities, exchanges, scholarships, updated annual reports, etc.);
- Organize thematic UNESCO Chairs/UNITWIN Summer Schools on innovative topics of common interest to mobilize partners as well as develop further interaction amongst Chairs, with the support of UNESCO National Commissions;
- Build alliances by developing joint academic research and education programmes (Masters, scholarships, courses and trainings, open access education, etc.) amongst UNESCO Chairs;
- Organize regional meetings of UNESCO Chairs / Networks / Category 2 Centers to allow regular exchange and facilitate cooperation;
- Request the designation of thematic contact points at UNESCO for UNESCO Chairs.

Istan	bu	l, T	ur	key
-------	----	------	----	-----

13 June 2013

## WHAT ROLE FOR UNESCO CHAIRS IN EUROPE?



# UNESCO Chair Energy for Sustainable Development

#### 1<sup>ST</sup> YEAR ACTIVITIES

Prof. Emanuela Colombo Chair Holder

Dr. Lorenzo Mattarolo Program Manager

4<sup>th</sup> June 2013



#### **Summary**

General Information	3
Executive Summary	3
Activities	3
Education	3
Training	4
Research	5
Conference hosted by the Chair	6
Projects	6
Advisory	7
University Partnerships	7
Further activities and Development Prospects	8
Appendix – Curricula Vitae	9





#### **General Information**

Title: UNESCO Chair in Energy for Sustainable Development

**Host institution:** Politecnico di Milano

**Establishment:** March 2012

#### **Executive Summary**

The UNESCO Chair in Energy for Sustainable Development has been taken place at Politecnico di Milano since March 2012.

The Chair has given primary attention to teaching and education: curricula upgrading and staff exchanges with DCs have been promoted, aiming at creating new competences towards social responsibility, access to energy and global development global issues. One of the main achievements has been the implementation of a new track within the MSc in Energy Engineering specifically devoted on 'Energy for the Development'.

Research has been addressed to foster distributed generation and enhance the strategy programming for improving access to energy. Optimization of the match Need/Resources and the choice of appropriate technologies are being investigated.

Partnership with universities in DCs has been enforcing: two projects proposal have received the grant (call Tempus and Edulink) by the European Commission, aiming at upgrading higher education system on Sustainable Development, Sustainable Energy strategies and North-South cooperation and two lecturers (from Tanzania and Cameroon) are now developing their PhD research at the Department of Energy, one below the supervision of the Chair holder and another one under the supervision of Prof. Berizzi.

The Chair cooperates with international institution and NGOs, in activities of knowledge sharing and training on issues related to access to energy and sustainable energies strategies. The public-private partnership has been enforced by working with the civil society players and/or public institution on research projects funded by private bodies for supporting local socio-economic growth (for the first year mainly in Mozambique).

#### **Activities**

#### **Education**

In accordance with the deep connection between energy and development, highlighted also by UNDP, the Chair has promoted and made effective the implementation of a **new track on Energy for the Development (MSc in Energy Engineering)**, created to combine engineering fundamentals with the aim of addressing global problems with an holistic approach by using all the tools necessary to assess economic, environmental and social impacts of any technological solution. Studies in this plan aim at preparing a professional figure having a broad knowledge in technical and scientific fields, able to operate in the energy sector at a multi-scale level, including the



development of specific technologies and the energy analyses of different scenarios for promoting local sustainability and socio-economic growth.

#### Courses currently offered at Politecnico di Milano, in cooperation with the Chair:

- Engineering and cooperation for development (8 ECTS)
   MSc in Energy Engineering Milano Bovisa
- Energy for sustainable development (6 ECTS)
   MSc in Environmental and Geomatic Engineering Como

#### **Training**

In line with the strategy of the Chair, several conferences and courses have been organized, aiming at promoting a knowledge sharing network, through capacity building and dissemination towards different actors. Training were addressed to Italian and foreign students, international experts and NGOs.

#### Training in collaboration with Universities

Department of Design, Politecnico di Milano, 26<sup>th</sup> March 2013
 Lecturers at the Seminar on "Renewable and Distributed Energy Generation for Sustainable Development in Low-Income Contexts"

#### <u>Training in collaboration with International Organizations</u>

• ICS-UNIDO, Trieste, 4<sup>th</sup>–8<sup>th</sup> June 2012

Lecturers at the Summer Course on "Renewable energies for decentralized systems: supporting tools and best practices for green energy and sustainable development"

• ICS-UNIDO, Tunisi, 8<sup>th</sup>–12<sup>th</sup> October 2012

Lecturers at the Training Course on "Options and best practices for renewable energy technologies for productive uses in the Mediterranean region"

UNIDO Renewable Energies Course (e-learning)

This e-learning course is presented by the ICS-UNIDO in joint collaboration with the Politecnico di Milano, the METID Service Area and the Department of Energy. The course covers subjects within a broad frame of renewable energies, specifically solar thermal energy, small-scale hydro power, biomass, and geothermal energy. Each subject is faced in a specific module by considering general basic concepts, technological aspects, economics, environmental issues, and appropriateness in relation with the context. After closure of UNIDO-ICS, the platform is now in the hand of the UNIDO Institute.

#### Training in collaboration with Civil Society Organizations

- CellM, 13<sup>th</sup> October 2012
   Energy, Environment and Development: challenges in the third millennium
- AVSI Foundation, 20<sup>th</sup> November 2012
   Lecture in the annual upgrading course for expatriates
   Access to Energy, Human Promotion and Sustainable Development





#### Research

The activities of the Chair are in line with the vision of the Research Group Blaise Pascal Lab of the Department of Energy: the Group aims at contributing to the shift toward more sustainable and equitable energy systems, able to meet the need of global development. Indeed teaching and research activities are oriented to transfer the achievements to the industrial framework and the social community.

Strategies are defined for improving energy access and for the impact evaluation of energy project and systems in order to meet the demanding constrains of economic, environmental and social sustainability.

#### Research activity is mainly divided in the following lines:

- Sustainable Strategies planning for improving access to energy
  - o Needs-Resource math: need assessment and resources analysis
  - o Demand side planning in relation to the local framework
  - Multi-criteria, multi-objective and multi-stakeholders evaluation for selection of strategies in DCs
  - Appropriate technologies and their integration in small scale grid based on renewable sources
- Monitoring & Evaluation of the impact for energy project and systems
  - Result Chain Evaluation for the project (OCSE DAC): from input to outcome
  - o Evaluation of the Impact over the capitals (environmental, physical, financial, human and social) of the local contest
  - Definition and implementation of a Performance Measurement System (PMS) for Cooperation Project in the Energy field

#### The following PhD researches are now active:

- Optimization of energy systems in rural areas: distributed generation for rural electrification (Italian PhD student supervised by the Chair Holder)
- Energy technologies for efficient cooking in DCs: Improved Cook Stoves, domestic and community biogas systems (PhD student from Cameroon supervised by the Chair Holder)
- Rural Electrification: smart mini grids development and optimization (PhD student from Tanzania supervised by Prof Berizzi)



#### **Conference hosted by the Chair**

#### International conference organized in cooperation with UNIDO and ICS-UNIDO

"Sustainable Energy Strategies in Low and Middle-Income Economies" Milan, 22<sup>nd</sup>-23<sup>rd</sup> November 2012

The conference aimed at establishing an international and effective network of experts working worldwide in the field of access to energy and sustainable energy. It served as a high level platform for discussion on sustainable implementation models as part of an integrated approach to global resource management. Three main interlinked topics related to the role of energy for sustainable growth were discussed: technologies to be promoted, business models for new inclusive energy markets, policies and institutions to support new energy systems. During the conference a web based community implemented by Politecnico di Milano was created, giving the opportunity to start a knowledge-sharing platform within the community of experts who attended the conference.

#### **Projects**

The Chair aims at promoting international university partnership with developing and emerging countries, supporting the upgrading of higher education in the target countries, promoting joint research and staff exchange. Currently the most effective collaborations have been in place with the MENA Region and with some Sub-Saharan Countries. Indeed Politecnico di Milano, under the flag of UNESCO Chair, is coordinating the following European Grants.

## <u>Tempus IV TEMPUS-530611-2012-IT-JPCR</u> GIEP - Green Innovation and Entrepreneurship Programme

Energy Engineering on Local Development

The project aims at making Sustainable Development and Green Economy the new entrepreneurial frontier and business in Egypt. The objective of the project consist in developing a joint/double MSc program on "Green Innovation and Entrepreneurship" with the cooperation of 3 European universities and 4 Egyptian Universities. The program will create a whole new generation of business and social entrepreneurs with skills allowing them to start-up green businesses, launch innovative ventures and products, and put in place public policy and social entrepreneurship innovations.

## ACP-EU Co-operation Programme in Higher Education EDULINK II ENERGISE - Enlarged Network in Education and Research for a Growing Impact of Sustainable

The project has the objective to develop high quality, market-driven curricula in Energy Engineering focused on sustainability, innovative technologies and modern renewable energies relevant to the energy asset within the countries of Ethiopia, Kenya and Tanzania. The project involves 4 local universities and will count on the cooperation of local enterprises, NGOs, ministerial department and rural agencies working at different level on access to energy.



#### **Advisory**

The activity of the Chair also includes advisory to NGOs and private companies. To improve the effectiveness and sustainability of cooperation projects, the Chair is convinced in the complementarity of all interested actors and in the need for partnership. The role of university focuses on research and is oriented towards innovative solution, by improving methodologies and assessing most appropriate technologies for specific contexts.

Pre-feasibility study: access to energy in north Mozambique, Cabo Delgado Province

The study was carried out for an Italian NGO. It allowed to state the actual situation of the energy sector in Mozambique, in particular in two focus areas in Cabo Delgado Province. Problems related to energy have been investigated thanks to both the analysis of policies, programmes and projects, and an on-field assessment of the actual situation of access to energy in the target areas. A preliminary identification of the problems and opportunities at the target level allowed to define some main actions to be considered in order to enhance access to energy in compliance with the principles of sustainable development.

• <u>Pre-feasibility study: Improved Cook Stoves and Thermoelectric Modules for domestic usage in Mozambique</u>

The study was carried out as advisory service for an Italian energy company. The analysis of the context of Mozambique and the study of the household needs within this study underlined the massive use of traditional biomass and the problems coming from the traditional cooking devices. Since transition to modern fuels and technologies results unfeasible in the short term, a good intermediate solution is the use of "Improved stoves", which have a good thermal efficiency of combustion, relatively low emissions and offer the possibility of integration with TE modules for island household electric generation.

#### **University Partnerships**

- Italian network of UNESCO Chairs
- UNESCO Chair in Hydrological Change and Water Resources Management, RWTH Aachen
- Chaire UNESCO en alimentations du monde, Centre international d'enseignement supérieur en sciences agronomiques, Montpellier SupAgro
- Tempus partners: The American University in Cairo, Alexandria University, Aswan University, Heliopolis University, Zagazig University (Egypt), Technical University of Graz
- Edulink partners: Jimma University (Ethiopia), Dar Es Salaam Institute of Technology (Tanzania), Technical University of Kenia, Technical University of Mombasa (Kenya)
- Framework agreement: Catholic University of Bamada (Cameroon)
- Existing relationship for previous projects/activities: Ramakumar Research Group (Canada)





NTNU Trondheim (Norway), University of Cairo (Egypt), University of Sfax (Tunisia), University of Hassan II (Morocco), University of Saint Joseph (Lebanon), University of Aleppo (Syria), Technical University of Delft (Netherlands)

• CUCS Network - Formal Protocol signed by 27 Rectors of Italian Universities on Cooperation and Development coordinated by Politecnico di Milano:

#### **Further activities and Development Prospects**

The Chair aims at fostering the activity of knowledge sharing within the network that it has been created. In line with this objective:

- The UNESCO Chair website will be implemented, to disseminate the results and have an interactive platform to support the joint activities of the community
- A conference, in cooperation with private Italian utilities and public institutions, has been already planned for December 2013 oriented to International Cooperation for Sustainable Energy Strategies, Energy Access and Nexus with Water, Food and Land.

The activity of capacity building and dissemination will be implemented with a publication of a book published by Springer within the year 2013. The book (tentative title: "Renewable Energy for Unleashing Sustainable Development") will base its contents on the conference held in November 2012 and propose a whole elaboration of the discussed subjects with the contribution of high level experts. The Chair will also organize a PhD School in cooperation with UNIDO in February 2014.

The activity of the Chair will be particularly addressed to Mediterranean and MENA Regions, with the aim at promoting cooperation, joint research and staff exchange for creating an integrated area of knowledge. In line with this objective, under the last call of Tempus Programme (closed in March 2013), the Chair summited a proposal for tackling a strategic priority in Egypt: the Water-Energy-Food Nexus.

In long-term the idea of the Chair is to strengthen the knowledge sharing between partners and enforce the networking activity. Joint researches with universities and lecturers coming from DCs attending Politecnico di Milano as PhD students will be supported. The Chair will intent to work on the creation of a remote access system to the Library Network Platform of Politecnico di Milano and on an open knowledge system for free on line training to increase access to global scientific knowledge.





#### Appendix – Curricula Vitae

## Prof. Emanuela Colombo, Rector's Delegate to Cooperation and Development Chair Holder

Emanuela Colombo, MD in Nuclear Engineering in 1995, achieved a PhD in Energetic and a Nuclear Engineering in 2000 at Politecnico di Milano. She is Associate Professor in Energy Engineering for Sustainable Development and in Engineering and Cooperation for Development and she was named Chair holder of the UNESCO CHAIR on Energy for Sustainable Development since 2012. From a scientific perspective she is working on the interrelations between Energy, Environment and Sustainable Development and on Access to Energy in developing countries. She is author of more than 90 scientific papers and is currently the scientific coordinator of two European projects on Green Innovation and Sustainable Energy in Egypt, Kenya, Tanzania and Ethiopia. One of the founders and member of the board of *Engineers Without Border in Milan*, she was named Rector's delegate to Cooperation and Development in 2005 and more recently to the International Relationship with Africa. She is in charge of coordinating a network of 26 Italian universities and is member of the working group for university cooperation at the Italian Ministry of Foreign Affairs. She works as international expert for UNIDO and is currently a member of the Sustainable Development panel of EDF.

#### Dr. Lorenzo Mattarolo Program Manager

Lorenzo Mattarolo graduated in mechanical engineering at Università degli Studi di Padova. He first focused his works on energy efficiency in the built environment, in an Italian consulting company and afterwards at the International Centre for Indoor Environment and Energy, at the Technical University of Denmark. His activity included the development of models for thermal simulation in the built environment and the definition of solutions regarding energy saving, heating and cooling design. In 2008 he started working in the R&D direction of an Italian energy utility. He dealt with energy efficiency measures in the industrial and tertiary sectors, aiming at optimizing energy consumption and offering economically and environmentally sustainable solutions. He was also in charge of development and optimization of gas storage infrastructure. Since September 2012 he has been working at Politecnico di Milano as researcher. He is program manager for UNESCO Chair, dealing with projects related to access to energy, sustainable development and international cooperation. He is also member of Engineering Without Border – Milan (ISF-MI), in the activities concerning appropriate technologies, decentralized generation and renewable energies in developing countries.

## ROUND TABLE I

# UNESCO CHAIRS AS POLES OF EXCELLENCE: ASSESSMENT, PERSPECTIVES AND CHALLENGES



## **UNESCO** Chair in Technologies for Development

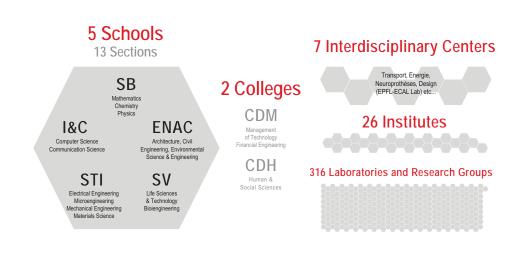




#### **EPFL** today



#### 13 Study Programmes, 316 Research Labs

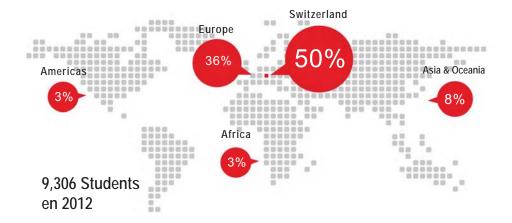


(PA) Overview

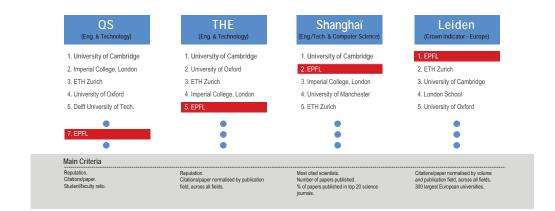
EPFL Presentation | 01.2013

EPFL Presentation | 01.2013

#### **Origin of Students** (Bachelor+Master+PhD)



#### **European Ranking 2012 – The EPFL is well-placed**



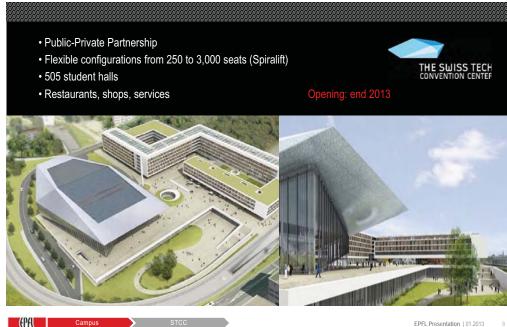
Présentation EPFL | 01.2013

Présentation EPFL | 01.2013 6

#### Some industrial partnerships...



#### **Swiss Tech Convention Center**



EPFL Presentation | 01.2013 7

Cooperation

Key message



## Cooperation and Development Center CODEV Key messages

- > A High level of **education** and **scientific excellence** are necessary prerequisites for sustainable development
- ➤ Innovation in appropriate technologies is a way to improve the situation in emerging and developing countries
- North South scientific partnerships contribute to adresseing the challenges faced by South countries

ODEV UNESCO Chair

## UNESCO Chair in Technologies for Development

In 2007, the *Cooperation & Development Center*, was recognised as a **UNESCO Chair in Technologies for Development**, becoming the 4<sup>th</sup> UNESCO Chair in Switzerland.

The aims of the Chair are:

- To promote research in the area of appropriate technologies for developing and emerging countries through partnerships with local institutions in order to apply innovative solutions to the problems affecting the most vulnerable populations.
- To contribute to the capacity-building of institutional partners through North-South and South-South scientific exchanges and knowledge-sharing in a spirit of solidarity.







#### **UNESCO Conferences**

1<sup>st</sup> UNESCO Chair International Scientific Conference on Technologies for Development: Technologies and Innovations for Development (2010)

2<sup>nd</sup> UNESCO Chair International Conference on Technologies for Sustainable Development: A Way to Reduce Poverty? (2012)

> 3<sup>rd</sup> UNESCO Chair in Technologies for Development: What is Essential? (4-6 June 2014)

The Conferences focus on the 4 priority fields defined by the UNESCO Chair:

- 1. Technologies for sustainable habitats and cities
- 2. Science and technology for disaster risk reduction
- 3. Information and communication technologies (ICT) for the environment
- 4. Technologies for sustainable energy production







280 articipants	48 Countries Represented		Top 15 Countries Represented
	Represented	Switzerland	139
156 stitutions/ ganizations	400 Abstracts Received	Italy India France United States Colombia	15 15 12 10 9
196 Abstracts hortlisted	82 Paper Presentations	United Kingdom Canada Brazil Nepal Germany	7 6 5 4
10 Poster esentations	246 Authors, Co- authors, etc.	Burkina Faso Malawi Belgium Korea	4 3 3 3





#### North / South



■ NORTH **■**SOUTH



**COOPERATION & DEVELOPMENT CENTER** 



#### Education (CAS = Certificate of Advanced Studies)

CAS « Management of Development Projects» – India (2010, 2012)

CAS «Disaster Risk Reduction» - EPFL and India/Bangladesh (2008, 2010, 2012)

For September 2013 : Development of a Bachelor Course « Cooperation and Development: the Challenges of the Countries of the South» at EPFL by CODEV







#### Research: Info4Dourou

« Water resources are key to any development plans in this region »

#### **Assisted irrigation for African Farmers**

#### Objective

Optimize the allocation of water resources in irrigated perimeters of selected local projects in Burkina Faso by providing an alert system when the soil humidity indicates a need for irrigation

This project contributes to sustainable water management by developing a low-cost technology that is managed locally.

Interdisciplinary team

Collaboration with the community

Research, action and education







#### **Urban research**

**Urban research** tackles complex development issues and requires interdisciplinary and transdisciplinary approaches often involving the expertise of several units and laboratories of EPFL

 Collaboration with the University of Shanghai Jiao Tong, China on urban issues (Sustainable Habitat & Cities)



#### Ongoing PhD theses in the field of urban development:

- Urban Planning and Social Participation: Open-source IC instruments for Participatory Urban Design and On-line Social Participation - Case Study of Belgrade, Serbia
- The governance and planning of intermediate cities in
   Haiti: lessons learned from a multi-dimensional crisis
- Within the limits and opportunities of informal rental housing: Tenants and livelihood in Brazilian favelas
- Densifying rural territories: China, from massive growth patterns to more sustainable urban planning



CODEV

ssential lech



#### **EssentialTech**

« 70% of medical equipment sent to Africa is never used »

#### Invent and deploy essential technologies for poverty reduction

**Essential technologies:** technologies that contribute to the Millenium Development Goals.

#### Methodology

- Develop robust, affordable solutions adapted to the context.
- Develop a complete value chain that goes from the need assessment to the technology development, industrial transfer, deployment, scale-up, evaluation of impact.
- Develop specific business models for long-term impact (start-ups, technology transfer, social entrepreneurariat).
- Collaborate with local stakeholders at each step of the process.

http://essentialtech.epfl.ch

#### Ongoing EssentialTech projects:

**GlobalDiagnostiX:** designing an appropriate diagnostic imaging system.

**Energy for health:** Stabilising electricity in hospitals. Joint laboratory **CURES** in Cameroun.

**GlobalNeoNat:** Appropriate incubator for developing countries.



CODEV

Researc



#### Research – CODEV projects

#### **Scientific diasporas**

Framed in a brain gain perspective, the research on scientific diasporas aims at finding alternative ways to address the mobility of scientists, professionals and students by promoting the potential of scientific diasporas and returned migrants to benefit home country development.

- 1. "Migration, scientific diasporas and development: Impact of skilled return migration on development in India", funded by the SNIS (2011-2012).
- 2. "Connecting the scientific diasporas from the Republic of Moldova to the scientific and economic development of the home country", funded by the SCOPES Program of the SNF-SDC (2010-2012).
- 3. "Tunisian Resident Community in Switzerland for Development", funded by Swiss Development Cooperation (2013 [2016]).



CODEV



#### **Achievements**

The strength of the UNESCO Chair in Technologies for Development lies in its dual capacity to orient EPFL laboratories towards specific development objectives and to conduct research and educational programs focused on sustainable development. Through the Chair, it is possible to promote interdisciplinary and transdisciplinary North-South scientific and educational partnerships and promote UNESCO values.

- Strong level of support from EPFL presidency for UNESCO Chair activities
- Being awarded the UNESCO Chair has allowed CODEV to be better positioned within EPFL.
- UNESCO conferences are becoming flagship events
- Successful branding of the UNESCO chair in Technologies for Development through conferences and research projects
- Postgraduate education courses are very successful (150 applications for 30 seats).

CODEV



#### **Challenges**

- Potential partner organisations are often attracted by the UNESCO label under the impression that the Chair comes with funding
- The UNESCO label can cause confusion regarding institutional affiliation (jungle of logos CODEV, EPFL, Programme and Project logos etc....)
- It is difficult to identify collaboration with other UNESCO Chairs from different scientific domains and even with those from similar domains, also due to a lack of information.
- In our experience the UNESCO label has not helped us specifically in our fundraising efforts. Finding funds for research and education activities remains difficult.
- The UniTwin network didn't lead to any concrete activities.
- The research line "sustainable energy production" has not yet led to a concrete project or education activity.



CODEV



#### **Opportunities**

- The UNESCO label lends credibility, visibility and possesses convening power.
- The UNESCO label is a quality label.
- The network of UNESCO Chairs constitutes a valuable platform but we have not yet used it.
- The mission of CODEV has significant overlap with the UNESCO mission therefore it is challenging to differentiate the Center (CODEV) and the UNESCO Chair however this also represents many opportunities for synergies.
- The UNESCO Chair helps to position EPFL within the international scientific community, pursuing the ideal of scientific exchanges and international solidarity.
- CODEV has also launched EssentialTech, a unique program bringing together
  companies and research institutions from the North and South with the
  common goal of developing innovative technologies that are custom-made for
  the basic needs of developing countries. This research activity represents
  many opportunities for synergies with the activities of the Chair.



# ROUND TABLE II ADVANCING UNESCO STRATEGIES FOR REGIONAL COOPERATION IN THE FIELDS OF SCIENCE AND CULTURE



**Cultural Organization** 





SCHOOL OF JOURNALISM AND PUBLIC RELATIONS

UNESCO Chair in Media, Dialogue and Mutual Understanding

#### Snezana Trpevska

<u>UNESCO Chair in Media, Dialogue and Mutual Understanding</u> at the School of Journalism and Public Relations, Skopje, Macedonia

The UNESCO Chair at the School of Journalism was established formally in June 2011. The main purpose of the Chair is to contribute toward fostering social cohesion, multicultural understanding and intercultural communication among different cultural groups in the Macedonian society.

For us, having this UNESCO Chair, means that almost everything that we work on is interwoven with the primary goal – to contribute toward sthrentghening the cultural diversity in our society. What are the primary areas of our activities:

(1) <u>Higher education for Journalism and Communications</u>: Our study programs at both undergraduate and postgraduate level are strongly infused with the topics of cultural diversity.

This means that the topics of intercultural communication, intercultural sensitivity, respect for human rights and diversity, management of diversity are infused throughout the overall curricula. Our approach is aimed at finding natural points of entry for diversity to be discussed across the curriculum. Students are introduced with diversity in a way that encourages them to cross their own boundaries in search for objectivity.

(2) <u>Research on media and cultural diversity</u>: We have started a series of basic and applied research projects aimed at studying the role of media in fostering intercultural communication and dialogue in the country. Let me briefly point out the most relevant projects we have conducted so far:

In 2011 and 2012 we have implemented two big research projects focused on media reporting on interethnic and interreligious topics. The <u>first research study</u> focused on the attitudes, perceptions, and practices of newsrooms in terms of diversity reporting. The research allowed to understand and describe the context, the processes and most important factors in reporting on diversity: (1) individual characteristics, attitudes and professional beliefs of reporters and editors, (2) professional rules and newsroom codes, (3) structural and organizational characteristics of the medium, (4) the market and audience influence, and (5) the influence of the owners, political parties and government.

The <u>second research project</u> was focused on Media reporting on interethnic and interreligious events in the country that happened in the first half of 2012. In general, the research showed that the media in Macedonia mostly report in an

ethnocentric manner, i.e. through the prism of their own ethnic groups which is primarily a consequence of their ethnic and political polarization. As a consequence of this division, part of the media outlets show "loyalty" or "ethnic solidarity" towards the political parties they are inclined to, instead of serving the interests of the entire public, regardless of the ethnic background.

In 2012, the UNESCO Chair team participated in a new regional research project focused on Media and Minorities in the Western Balkans. The project is conducted within the frames of the Regional Research Promotion Programme for Western Balkans, technically supported by the Swiss Agency for Development and Cooperation. The aim of this research was to assess the quality of media content and information published in the languages of national minorities in five countries of the West Balkan region. The main conclusion was that the programs of the public television and the commercial media act in the direction of social disintegration rather than cohesion. Ethnocentrism characterizes majority of the reporting and general professional reporting standards are at a low level.

From March-May 2013, we have conducted a <u>new research study</u> focused on media coverage on party-political and inter-ethnic issues during the pre-election period. The main aim was to systematically identify patterns of media "framing" on party-political and inter-ethnic issues, or the manner in which the media subtly select, highlight, exclude and process various aspects of a topic. Our main conclusion was that in the public debate, ethnic and party-political aspects were closely intertwined and leaded to the emergence of hidden or open hate speech, ethnic stereotyping, and even to forms of a crude nationalism, which sharpened the fragile interethnic relations.

As a result of the research studies undertaken within the UNESCO Chair, the School of Journalism, with several other European universities, has also apllied at the 7<sup>th</sup> Framework program on the call titled "*Media in conflicts and peace building*" (SSH.2013.4.2-1). The lead partner is Ludwig Maximilian University, from Munich Germany, and other partner institutions are: King's College London, Université Libre de Bruxelles, University Rey Juan Carlos Madrid, Hebrew University Jerusalem, Global Governance Institute Bruxelles, Interdisciplinary Center Herzliya Jerusalem, Hellenic Foundation for European & Foreign Policy Thessalonoki.

- (3) Educational resources, publishing and training. The School of Journalism is very active in working with the journalistic community, in order to build the capacities of active journalists for diversity reporting and inclusive journalism. We have published a range of toolkits, handbooks and textbooks for diversity reporting and intercultural communication. Also, we have started an edition of research monographs where all the research studies are made available to the academic community and wider public.
  - <u>"Principles of Diversity Reporting"</u> Training/workshop for journalists organized on March 28<sup>th</sup> 2011.
  - <u>Inclusive journalism and diversity reporting</u>, workshop organized on July 14-15<sup>th</sup> 2011.

- <u>Skills and standards for effective intercultural communication</u>, workshop organized for PR professionals on July 11-12<sup>th</sup> 2011.
- (4) Watchdog media mechanism to address cross-cultural tensions in the country. The watchdog mechanism is a system for monitoring and public reaction in all cases when media could fuel the fragile interethnic and interreligious relations among different communities in Macedonia. It is consisted of a group of trained analysts who monitor the media content, a research team of the School who makes the selection and conducts qualitative analysis of the texts, and a panel of experts who debates and decides on the reaction that the UNESCO Chair should release to the public.
- (5) <u>Outreach activites</u> A range of round tables, conferences and workshops have been organised in the last two years to raise the awareness among journalists, communication experts and wider community about the importance of cultural diversity and intercultural communication.
  - "Journalism Education, Professional Values and Cultural Diversity" 28/06/2011
  - "Media, Communication and Culture of Tolerance" 27/02/2012
  - "Principles of inclusive journalism in the reporting on interethnic and interreligious issues" 3/04/2012
  - <u>"Diversity Education in Communication and Journalism Programs</u>", 14/05/2012 with representatives from all universities/faculties in the country
  - "Media framing of the events related to the murder at Smiljkovci Lake", 29/05/2012
- (6) Other activites in the broader community A range of other projects have been also organised within the UNESCO Chair in order to contribute in different ways in the society for sthrentghening the cultural pluralism and for raising the awareness among younger generations about the values of interculturalism and diversity.

One of this projects is the one that is supported by the International Fund for Cultural Diversity – <u>Measuring the Economic Contribution of Audiovisual Industries</u> in Macedonia. The project is designed to create a national framework for developing strong and creative audiovisual industry in Macedonia in which the diversity of cultural expressions may be affirmed and promoted. It started with mapping the situation and identifying best experiences and practices to be incorporated into a national strategy which can bridge the cultural and creative industries with the other social sectors and economy. The results from the mapping studies will be presented to all stakeholders on workshops and on a conference where ideas and initiatives are expected to emerge regarding the basic elements of a national strategy that can strengthen all creative and cultural industries and specifically the audiovisual sector (that is film, television, multimedia and video games).

We have been working for several years now with the high school students. Since 2009 we have started organising competitions under the title <u>"Express yourself through the media."</u> Our goal is to encourage young people throughout Macedonia

to critically think and to engage in local and wider issues. Through the writing and creative process the students express their opinions on most relevant issues, and some of these topics are directly related to the cultural diversity. For example, the second competition was titled "I have the right to be different", the third was titled "We are all equal" and the fourth "Together against violence in the schools".

All the creative works are published on SJPR You tube channel and on several other Web sites, among which is the Web site <u>Multiviamedia</u>. The Web site contains a lot of creative works created by the high-school students during the one-week workshop held in Ohrid. <a href="http://www.multiviamedia.edu.mk/">http://www.multiviamedia.edu.mk/</a>

This is the Web site of the online <u>news magazine "Medium"</u> that is produced in cooperation with the journalistic clubs established in more than 40 high-schools around Macedonia. The online magazine has its companion print edition, published in cooperation with the daily newspaper Nova Makedonija.

The project is implemented in cooperation with the World Association of Newspapers. Its overall aim is to encourage young people to read more, to think critically and to become literate, civic-minded new generation of engaged citizens. Our long-term goal is to educate young people how to use online media to become influential citizens journalists.

Therefore, the Web site contains a virtual classroom with open learning resources, such as: The basics of Journalistic Writing, Writing for Web, How to get an idea, How to make a photo-story, Shooting a video clip etc. In the next year we intend to encourage all journalistic clubs to produce their own online school magazines that will be linked through the "Medium". <a href="www.medium.edu.mk">www.medium.edu.mk</a>

#### (7) Networks and cooperation with other universities and institutions

So far, we have developed a broad network of faculties, research institutions and non-governmental organisations that are partners of our UNESCO Chair. Our cooperation is mostly in the following areas: (1) development of curricula for intercultural communication and diversity reporting; (2) cooperation in the field of research on cultural diversity in the mass media; (3) exchange of academics, students and other staff.

#### Universities:

- *University of Applied Sciences*, Windesheim (NL) Campus 2-6, 8000 GB, Zwolle, Netherlands
- Danish School of Media and Journalism (DK) Olof Palmes Alle 11, DK-8200, Aarhus N, Denmark
- College of Arts and Sciences and Business at Western Carolina University ("WCU") Cullowhee, NC 28723, US
- School of Journalism, University of Lincoln, UK Lincoln LN67TS, United Kingdom
- DOBA Faculty of Applied Business and Social Sciences (SL) Presernova ulica 1, 2000 Maribor, Slovenia
- Faculty of Social Sciences, University of Ljubljana (SL) Kardeljeva ploscad no. 5, 1000, Ljubljana, Slovenia

- Department of Journalism and Communication, University of Tirana (ALB) Rruga e Elbasanit, nr. 89, Tirana, Albania
- Faculty of Philosophy, St Cyril and Methodius University, Skopje Bul. Krste Misirkov, bb PoBox567, Skopje, MK
- "Goce Delcev" University, Stip (MK) "Krste Misirkov" bb., Stip, Republic of Macedonia

#### Research institutes:

- Peace Institute, Institute for Contemporary Social and Political Studies Metelkova 6, 1000, Ljubljana, Slovenia
- Media Diversity Institute
   Victoria Charity Centre, 11 Belgrave Road, London, SW1V 1RB, UK
- Institute for Sociological, Political and Juridical Research, Ul. Partizanska b.b., 1000 Skopje
- *Media Plan Institute*Antuna Branka Simica Street no. 5, Sarajevo, Bosnia and Herzegovina
- Macedonian Institute for Media
   Ul. "Jurij Gagarin" No.17/1-1 1000 Skopje, R.Macedonia

#### Other organizations:

- Association of Journalists of the Republic of Macedonia Gradski zid No.13, 1000 Skopje
- *Alsat M* (private TV station on national level) Bul. Krste Misirkov No.7 DTC Mavrovka, Lam. C Floor 9, 1000 Skopje
- Channel 77 (private Radio station on national level)
   Ul. Josif Kovacev No18, Shtip
- *Nova Makedonija* (private daily newspaper on national level) Ul. Atinska No.12, 1000 Skopje







SCHOOL OF JOURNALISM AND **PUBLIC RELATIONS** 

Cultural Organization .

United Nations . UNESCO Chair in Media, Educational, Scientific and . Dialogue and Mutual Understanding

## **South East Europe (SEE) Regional Forum of UNESCO Chairs 12-13 June 2013, Istanbul**



Snezana Trpevska

**Head of the UNESCO Chair in Media, Dialogue** and Mutual Understanding

**UNESCO CHAIR in Media,** 

**Dialogue and Mutual** 

**Understanding** 

To foster social cohesion, understanding and intercultural communication among different cultural groups.



# **Primary areas**



- Development of higer education for Journalism and Communications
- Conducting research on the role of media in promoting cultural diversity
- Educational resources, publishing and training
- Rapid Response Media Mechanism
- Conferences, round tables
- Activities in the broader society
- Networking and cooperation

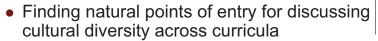
# **Higher Education**

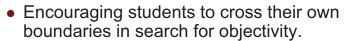
 Study programs in Journalism and PR infused with the topics of cultural diversity





# **Higher Education (2)**









# **Research Studies (1)**



2011 Nows

Newsrooms practices and views in terms of diversity reporting



**Research Studies (2)** 

2012

Media reporting on interethnic and interreligious tensions





# **Research Studies (3)**

2012-2013 Media and minorities in the Western Balkans





# **Research Studies (4)**

2013 Madi

Madia Framing of Party-political and interethnic topics during local elections



.

# **Research Studies (5)**

# Madia in Conflicts and Peace Building





# **Educational resources,** publishing and training









Skills and standards for effective intercultural communication 11

# **Watchdog Media Mechanism**

tensions in

the country

to address cross-



# **Conferences, round tables**

Journalism Education, Professional Values and Cultural Diversity

Diversity Education in Communication and Journalism Programs

Media, Communication and Culture of Tolerance





# Creative audiovisual industries as factor for economic growth



**Project supported by the International Fund for Cultural Diversity** 



#### Improving media literacy in education

www.mediumskapismenost.edu.mk





# "Express yourself through the media" Competition for high-school students

http://www.multiviamedia.edu.mk/





#### Online and print news magazine

www.medium.edu.mk





# **Networks and cooperation**



- (1) Development of curricula for intercultural communication and diversity reporting;
- (2) Cooperation in the field of research on cultural diversity in the mass media;
- (3) Exchange of academics, students and other staff.

#### **THANK YOU!**



- www.vs.edu.mk
- http://unescochair-vs.edu.mk
- http://respublic.edu.mk/

<u>Snezana Trpevska, Head of UNESCO Chair</u> <u>strpevska@vs.edu.mk</u>



United Nations • Educational, Scientific and • Cultural Organization •



SCHOOL OF JOURNALISM AND PUBLIC RELATIONS

UNESCO Chair in Media, Dialogue and Mutual Understanding





Architecture, Environment & Building Cultures (AE&CC) CRATerre-ENSAG | International Centre of Earthen Architecture Ecole Nationale Supérieure d'Architecture de Grenoble, France (ENSAG)

Hubert Guillaud | CRATerre Scientific Director, Chair Coordinator Bakonirina Rakotomamonjy | CRAterre, Project Specialist

Mariana Correia | Escola Superior Gallaecia President - Portugal, Partner



#### **UNESCO Chair - Earthen Architecture**

#### Introduction

The UNESCO Chair 'Earthen architecture, building cultures and sustainable development' was created at the initiative of UNESCO's Division of Higher Education. It was inaugurated in Oct. 1998 at the School of Architecture of Grenoble, France. CRAterre-ENSAG research laboratory, as a center of excellence, leads the Chair.

#### **General Aim**

Consistent with the objectives of the UNITWIN / UNESCO Chair Program, this chair and its network contributes "to strength higher education and research capacity through transfer of knowledge and share in a spirit of international solidarity. Thus it promotes North-South, South-South and triangular cooperation, as a strategy for institutional development."

http://unesdoc.unesco.org/images/0014/001439/143918F.pdf



## **Specific Aims**

To increase worldwide, the dissemination of scientific knowledge and technical know-how on earthen architecture, in three main areas:

(1) Environment, human settlements, habitat | (2) Earth as a material and other eco-materials | (3) World Heritage and Environment.





#### **UNESCO Chair - Earthen Architecture**

#### **UNITWIN Network of the UNESCO Chair**

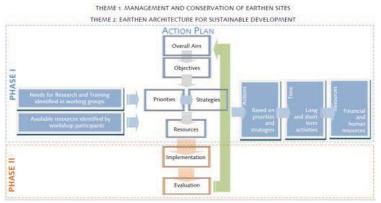


Location of the Chair UNESCO members - institutional partners | April 2013 © CRATerre

4 continents | 26 countries | 41 partners



# To identify key actors and resources



MEDITERRANEAN WORKSHOP, March 2009 | Key experts from 17 countries | Organised by:
UNICA - Univ. of Cagliary (Italy) | ESG - Escola Superior Gallaecia (Portugal) |
CRATerre-ENSAGrenoble (France) | GCI - Getty Conservation Institute (USA) |
UNESCO Chair of Earthen Architecture.



#### **UNESCO Chair - Earthen Architecture**

#### Strategy | under UNESCO Chair

Integrated approach	Transfer of knowledge (Who – How)
NATIONAL PLATFORMS	<ul> <li>National associations through seminars/ research/ workshops/ etc.</li> </ul>
INTERDISCIPLINARY PLATFORM	<ul> <li>Different Faculties of architecture, engineering, archaeology, etc. through workshops, research &amp; PhDs programmes.</li> </ul>
RESEARCH PLATFORM ————————————————————————————————————	► European Universities through funded research programmes.
TRANSREGIONAL PLATFORMS	PROTERRA - Iberian-American Network through research projects, publications, workshops, SIACOT seminars   TerrAsia through conferences   Mediterra through workshops and conferences.
INTERNATIONAL PLATFORM ————————————————————————————————————	<ul> <li>ICOMOS-ISCEAH - International Committee on Earthen Architectural Heritage - ICOMOS.</li> </ul>



## **Strategy**

#### | target public

#### Transfer of knowledge

#### Target public

REGIONAL EXPOSITIONS / SEMINARS	, ,
NATIONAL SEMINARS	stakeholders  Key Actors: Municipalities & National Institutions
WORKSHOPS	General public: other professionals &
CREDIT COURSES —	researchers from other disciplines  University students: Grad.+MSc +PhD
REFERENCE PUBLICATIONS ——————	Researchers: experts / PhD & Master students / interested public.
INDEX PAPERS IN JOURNALS	Interdisciplinary: Researchers & experts
POST-GRADUATE RESEARCH —————	Researchers: experts / PhD students
RESEARCH PROJECTS	Research Centers / Universities
TRAINING COURSES —	Interested people: Master Students / etc.



#### **UNESCO Chair - Earthen Architecture**

# Main recent achievements: Academy training

According to the activities of the UNITWIN / UNESCO Chairs, the earthen architecture Chair includes activities on training, research and academic exchanges and provides a framework for sharing information.

Main activities of the Chair	Number of activities undertaken by the Chairholder (CRATerre- ENSAG) in 2012	undertaken by UNESCO	Total of the production in 2012
Academic training	3 activities	13 activities	26 activities
Professional courses	3 Professional courses	33 Professional courses	36 Professional courses
Conferences	55 Interventions in conferences	34 Interventions in conferences	89 Conferences
Publications	152 paper publications	21 paper publications	173 paper publications

UNESCO'S Chair 2012 Annual Report (25% of members contributed to the report).



## Main recent achievements: Academy graduation



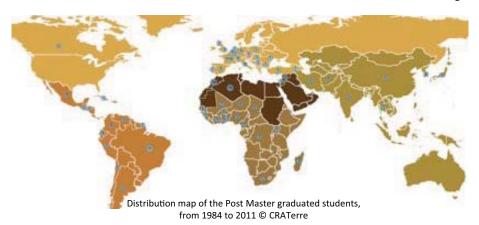
UNESCO'S Chair 2012 Annual Report (25% of members contributed to the report).

· Master, Postmaster, PHD



#### **UNESCO Chair - Earthen Architecture**

## Main recent achievements: Academic & Professional Training



. Post master « Architecture de terre » ENSAG, Grenoble, France, & its Network of 300 students from 54 countries.



#### Main recent achievements: Research + Conferences



- . **Research** | VERSUS: Vernacular heritage for Sustainable Architecture + Terra Incognita
- . Experts meetings | Disaster Resistant building culture: the ways forward + TerraEducation 2010
- . Conferences | WHEAP-UNESCO (Dec.2012) + TERRA 2012 World Conference (April 2012)



#### **UNESCO Chair - Earthen Architecture**

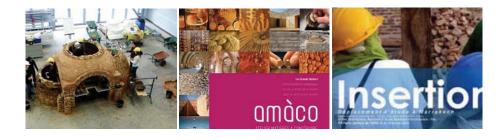
#### Main recent achievements : Research

WHEAP | World Heritage Earthen Architectural Programme





#### Main recent achievements: Experimentation



- Grands Ateliers de l' Isle d' Abeau (Great Workshops in the city of Isle d' Abeau, France)
- Amaco, Atelier Matière à Construire (Workshop Materials for construction)
- Chantiers de Paterre, ATCCDD / Maroc (Activities of the Moroccan partner)



#### **UNESCO Chair - Earthen Architecture**

# Main recent achievements: Professional training





PROJECT PIRATE: 18 partners / 8 countries.

Implementation of new standards of competence required to the earth construction material



# Main recent achievements: Awareness & Advocacy



The Grains d'Isere Festival (France) is a laboratory of ideas and experimentations, Which is reinterpreted by several UNESCO Chair institution members, at regional scale.



#### **UNESCO Chair - Earthen Architecture**

# Main recent achievements: International Impact

#### **INTERNATIONAL & ITINERANT EXHIBITION**



Ma terre première, pour construire demain (Cité des Sciences et de l'Industrie, Paris). 1 000 000 visitors

#### PUBLICATION





'Bâtir en terre' (2009, Edition Belin) 7 000 copies in French and Korean

#### **INTERNATIONAL PRICES**







Wang Shu | Pritzker 2012 Anna Heringer | Aga Khan Award Arch. 2007 Mu Jun | RIBA 2009



# Main recent achievements: Transfer of Knowledge through networking

- Site web de CRAterre : www.craterre.org
- Liste de diffusion : craterre-unesco@archi.fr
- Projet Pirate: http://pirate.greenbuildingtraining.eu
- Projet Versus 2012-2014 www.esg.pt/versus
- List of European Union key-actors and key-institutions working on earthen architecture: culture-terra-incognita.org







#### **UNESCO Chair - Earthen Architecture**

# Links between activities undertaken & the strategic orientation of UNITWIN 2007

According with the *Strategic Directions of the UNITWIN 2007*, activities include:

- Chair as "think tanks" and "bridge builders";
- Realignment with UNESCO's priorities (Medium Term Strategy for 2008-2013 (in pdf);
- To stimulate the triangulation North-South-South cooperation;
- To create regional/sub-regional poles of innovation & excellency;
- Closer cooperation with the <u>United Nations University (UNU)</u>.



#### **Chair's contribution to the Strategic Vision:**

#### **Mediterranean Platform**

Regional Approach

France, Portugal, Italy, Algeria, Morocco



Workshop Portugal-Italy in V. N. Cerveira | Portugal

Workshop Italy-Portugal in Cagliari | Italy

Workshops 2010-2013 in Algiers | Algeria

Workshop Italy-Portugal-Morocco in South of Morocco



#### **UNESCO Chair - Earthen Architecture**

#### **Chair's contribution to the Strategic Vision:**

Regional Approach

#### **National Platforms**

France, Chili, Mexico

#### THE CENTER FOR **EXCELLENCY in FRANCE**

**Ecole Nationale Supérieure** d' Architecture de Grenoble

LABoratoires d' EXcellence LABEX AE&CC N°ANR -10- LABEX-78

#### **FOUNDATION JOFRE & ARCOT UNIVERSITY PLATFORM**

- Fac. Arquitectura, Construcción y Diseño, Universidad del Bío-Bío
   Universidad de Concepción
   Escuela de Arquitectura, Universidad Católica del Norte

- 8. Universidad de Talca9. Universidad de Santiago

#### **MEXICAN PLATFORM**

CIPTEV, Centro de Investigación y Producción de Tecnología Ecológica para la Vivienda, Zapopan, Jalisco

- 2. Universidad Autónoma Metropolitana, Unidad Xochimilco, Mexico





## **Chair's contribution to the Strategic Vision:**

**Extending the Network** 

#### **Relying & contributing for existing International Platforms**

PROTERRA (Earthen Architecture Iberian-American Network) | ISCEAH (International Scientific Committee of Earthen Architecture) | Algerian Festival ArchiTerre | TerrAsia |



Construtierra 2006 | COLOMBIA 10° SIACOT | URUGUAY

Festival ArchiTerre | Exhibition, Workshop & Conference organised by the Ministry of Culture + Italian, French & Portuguese partners | ALGERIA



#### **UNESCO Chair - Earthen Architecture**

#### **International Conferences upcoming**

#### 2013

- CIAV 2013 | 7<sup>th</sup> Seminar on Earthen Architecture, Portugal
- 13<sup>th</sup> SIACOT, Iberian-American Seminar Earthen Arch., DUOC, Chile.

#### 2014

 2<sup>nd</sup> Conference TerrAsia 2014 in China with national partners (China Academy of Arts – Huangzhou, Dep. Arch. & Tech. of Xi'an, University of Tongi -Shangai)



• 2<sup>nd</sup> Conference Mediterra in Valencia, UPV, Spain.

#### 2016

TERRA 2016 LYON - 12<sup>th</sup> International Conference on the Study and Conservation
of Earthen Architectural Heritage, CRAterre & ISCEAH, 600 people expected.

#### 315 abstracts received from 57 countries

www.esg.pt/ciav2013 | info-ciav2013@esg.pt





International Conference and Annual Meeting of the Vernacular Architecture Scientific Committee of ICOMOS

7<sup>th</sup>Seminar of Earthen Architecture in Portugal

VERSUS 2013

Vila Nova de Cerveira, PORTUGAL

International Conference of the European Research Project "VerSus-Lessons from Vernacular Heritage to Sustainable Architecture"

Aegis:

**PROTERRA** ICOMOS-ISCEAH CHAIRE UNESCO - Earthen Architecture

16-20 Oct. 2013

**Organisers** 

Escola Superior Gallaecia ICOMOS-CIAV









Valencia Polythecnic University (SP) Escola Superior Gallaecia (PT) | UNICA (IT) CRAterre-ENSAG (FR) | | UNIFI (IT)





Mediterrangan

Conference

Architecture

on Earth









#### **Priority Principles**

Chair UNESCO members accept the Ethical Commitment and the Priority Principles contributing to qualified and active professionals in:

- Local human, social, economic and cultural development;
- Protection of the environment & its resources for sustainable development;
- Respect, protection and promotion of cultural diversity;
- The preservation and significance of tangible and intangible cultural heritage;
- The relationship between civil society, local communities, policy makers and the economic sector.



#### **UNESCO Chair - Earthen Architecture**

#### Short term perspectives to address challenges

#### The development of research

· Identifying priority areas of research.

#### **Networking**

- Sharing didactics, teaching methods, pedagogies.
- · Sharing expertise and experiences.
- Structuring patterns of national, regional and international collaboration.

#### **Capacity building**

- Contribute for project development and research in regional networks.
- Fund research to consolidate research and experimentation platforms.

#### Interdisciplinarity

- Strengthening transversal approach.
- Increasing the contribution of different disciplines to earthen architecture.





Architecture, Environment & Building Cultures (AE&CC CRATerre-ENSAG | International Centre of Earthen Architecture Ecole Nationale Supérieure d'Architecture de Grenoble, France (ENSAG

THANK YOU

# EARTHEN ARCHITECTURE, BUILDING CULTURES AND SUSTAINABLE DEVELOPMENT



This chair promotes the use of earth and local resources for habitat and heritage, integrated in higher education, research and dissemination of information.

Established in: 1998

Main Institution: Ecole Nationale Superieure d'Architecture de Grenoble (ENSAG)

**Head**: Prof.. Arch. Hubert Guillaud, HDR, Scientific Director, assisted by Arch. Bakonirina Rakotomamonjy Project Specialist Unesco Chair, Research Unit AE & CC-CRATerre (Labex).

Pilot Team Chair: CRATerre International Centre for Earth Construction

**Domain**: culture and local development (architecture, constructive cultures, environment, heritage, human settlements).

**Contact**: CRATerre ENSAG - Ecole Nationale Superieure d'Architecture de Grenoble - BP 2636-60 Avenue Constantine - 38036 Grenoble, Cedex 2, France.

Tel: +33 (0) 4 76 69 83 81 - Fax: +33 (0) 4 76 69 83 69.

#### **OBJECTIVES AND OUTCOMES**

- ➤ Organization of international conferences: Mediterra 2009 (Italy); TerraEducation 2010 (France); Terrasia 2011 (South Korea); WHEAP 2012 (WHC-UNESCO, Paris).
- ➤ Creation of regional platforms involving universities and professionals: Mediterra and Terrasia networks; national networks in Colombia, Mexico and Chile.
- > Winner of the bid LABEX (laboratory of excellence) and winner of the bid for IDEFI projects (innovative training) with Amaco (Workshop materials to build) in the "future investments" French national programme project.

#### **PARTNERS**

More than 40 international organisations, universities, vocational training centres and research centres in Europe, Asia, Africa and Latin America: **26 countries**.

# EARTHEN ARCHITECTURE, BUILDING CULTURES AND SUSTAINABLE DEVELOPMENT

- ➤ International Partners (6 countries): UNESCO ED / THE and the World Heritage Centre; UN-Habitat, Nairobi, Kenya; NGO Misereor Germany; Caritas Internationalis; Caritas Italy and Europe, Belgium; URD, France; IFRC (Red Cross and Red Croissant), Switzerland; PROTERRA Iberian-American Network; ISCEAH-ICOMOS (International Scientific Committee on Earthen Architectural Heritage); CIAV-ICOMOS (International Scientific Committee of Vernacular Architecture).
- ➤ Partners institutions in Europe (3 countries): UNICA, Italy; Escola Superior Gallaecia, Portugal; Universitat Politecnica Valencia, Spain.
- ➤ Other Partners: Ministry of Culture and Communication Directorate General of Heritage, Department of Architecture, France.
- ➤ Partners Institutions in South America, Asia, Africa (17 countries): DAU Lusiada, Angola; CECTech and ATBU Bauchi, Nigeria; Free State University, South Africa; Makerere University, Kampala, Uganda; CEPAB, Cameroon; AMICOR, Dem. Congo; ENA Rabat, Tetouan, Fes and Marrakech, Paterre, Morocco; CERKAS, Ouarzazate, Morocco; UNIMEP, Brazil; Fundacion Jofre Culturas de Tierra, Chili; Plataforma ARCOT, Chili; Universidad Nacional de Colombia, Colombia; Plataforma Colombiana (Terrarium Creative; San Gil; TierraTec, Bogota; Arcilla Acabados); CIPTEV, Zapopan, Mexico; UAM Xochimilco, México; FAU Montevideo and Salto, Uruguay; UNT and FAU-CRIATIC, Tucumán, Argentina; IAA Buenos Aires, Argentina; Auroville Earth Institute, India; School of architecture, China Academy of Art, Hangzou, China; ICHTO, Iran; University of Art, Tehran, Iran; TerraKorea and DOA-MNU, Mokpo, Korea; Architerre team Korea.

**Other partners**: Universidad Gran Colombia, Bogota, Colombia; UPB, Colombia; Medellin, Colombia.

#### **EDUCATION AND RESEARCH**

- ➤ **Field(s)**: materials and construction systems, architecture and building cultures, conservation and significance of earthen architectural heritage.
- ➤ Leading Research Project: Project Amaco, innovative training on building materials / Atlas of the risk mitigation building cultures (earthquakes).
- **▶ Diploma course**: DSA-Earth from ENSAG, France (post master).
- ➤ Other training: Master Architecture and building cultures (A&CC), ENSAG, France.
- > Number of degrees awarded per year (in France): 50 (DSA and master).
- > Number of completed Master dissertations / year: about 25 (2013).
- > Number of PhD's completed: 6 PhD's (the PhD program was created in 2010); 15 students enrolled.

# EARTHEN ARCHITECTURE, BUILDING CULTURES AND SUSTAINABLE DEVELOPMENT

- Number of students received, integrated in the Chair: about 75 / year in DSA-Earth and in Master 1 and 3 in A&CC. Two years for the DSA and two years for the Master in M1 and M2. Students coming from European countries and partner countries of the Chair.
- > Number of students trained and aware through the network impact (activity report 2012): 2500.

#### **FINANCING**

>> **Public** (2012): € 101,000 including € 15,000 (ENSAG), € 20,000 (MAEI / APD / MCC), 49,000 (APD / MCC Service Architecture) and 17,000 (LABEX AE & CC).

**> Private**: None

#### DISSEMINATION AND PROMOTION OF THE CHAIR'S WORK

- ➤ **Website**: www.craterre.org; Site in English and French (Spanish version being created). Documentation Centre of the Chair UNESCO head team and availability of documents for download from the website.
- ➤ **Alumni network**: The network of former students of CEAA, DPEA and now DSA-Earth was created since its launch in 1984. It has more than 300 graduates who have also joined other networks such as the Chair UNESCO-Earthen Architecture, the Iberian-American PROTERRA network and other national networks. The operative action of this alumni network is associated with activities, such as training, conferences and seminars, research projects, publications and festivals.
- ➤ **Conferences**: Organisation of conferences by the Chair UNESCO head team to define strategic paths for education and research.; presentation of the work of the Chair in different conferences, through guest-speaker presentations and paper proceedings publications.







Research and Transfer of knowledge at Escola Superior Gallaecia Member of the UNESCO Chair |

Earthen Architecture, Building Cultures and Sustainable Development |

Mariana Correia, PhD | marianacorreia@esg.pt President of the Direction Board | Escola Superior Gallaecia | CI-ESG Largo das Oliveiras, 4920-275 Vila Nova de Cerveira, Portugal | www.esg.pt

#### Witness of an UNESCO Chair university institution

In 2005, a Protocol for International Cooperation was signed between ESG | Escola Superior Gallaecia (Portugal) and CRATerre-Ecole Nationale Supérieure d'Architecture de Grenoble (France). This agreement recognised the school, as a member of the UNESCO Chair -Earthen Architecture, Building Cultures and Sustainable Development, and established the significance of pursuing scientific research and cooperation among involved partners. In 2012, the renewal of the Convention Agreement of the UNESCO Chair and Escola Superior Gallaecia brought a new reflection of the school's contribution to the disciplinary area of earthen architecture.

Different areas were encountered by ESG as essential to strength in the disciplinary area this was the case of Education, Scientific Research, and Transfer of Knowledge. Regarding Education, the strategy to support earthen architecture was to integrate it, in different courses of the architectural degree, rather than an isolated course. This would contribute for its comprehension in the distinctive dimensions of architecture and not as an alternative way of building. It was also important to approach earthen architecture through a progressive development of the disciplinary area complexity in the student's formation. The recent challenge to restructure the university degrees brought by the Bologna Process was also encountered, as an opportunity to review and update ESG's scientific and pedagogic strategy, and to strength its values and identity.

Scientific Research has been at the school's core, with a significant contribution in the school's strategy and impact. In 2011, the school's research centre was restructured and CI-ESG | Research Centre at ESG was created with 4 main research lines





de terre



(<a href="http://www.esg.pt/ciesg/">http://www.esg.pt/ciesg/</a>). Each included different fields of study and expertise. In what concerns Architecture & Heritage, four main field areas were identified: Earthen Architecture, Sustainable Architecture, Vernacular Heritage and Military Heritage. Scientific research is therefore addressed through formal projects integrated in financed programs, and through national and international consultancy.

Since 2005, the school won several research projects, funded by national and international research programmes. In the framework of earthen architecture, the most relevant at Iberian level is CADIVAFOR (2006-2008). At European level the most significant projects are: "Houses and Cities Built with Earth: Conservation, Significance and Contribution to Urban Quality" (2005-2006); "Terra Incognita – Conservation of European Earthen Architecture" (2006-2008); "Terra Incognita II – Earthen Architecture in Europe" (2009-2011). The fourth European Research Project with ESG, as Project Leader and in collaboration with Mediterranean UNESCO Chair Partners, is "VerSus – Lessons from Vernacular Heritage to Sustainable Architecture" (2012-2014). VerSus main purpose is to advance knowledge and good practices, regarding the integration of vernacular heritage principles in contemporary sustainable architecture, which will cross as well, earthen architecture contribution. European funded research on earthen architecture has been increasing. This interest is not just focused on unveiling and preserving the earthen heritage, but is also engaged at its sustainable approach, which illustrates the significance and awareness directed to the disciplinary area.

To consolidate the cross-approach between education, scientific research, impact and outreach, ESG regularly develops, supports and participates in scientific dissemination initiatives associated to **Transfer of Knowledge**. Conferences, Seminars, Publications and more recently Design Studio Workshops have joint experts, professionals, professors and students from a theoretical to a practice perspective.

Transfer of knowledge has been possible through **workshops** that are common amongst Earthen Construction organisations. However there are not many workshops that conciliate the apprenticeship of construction techniques with architectural design. Aimed at overcoming this challenge, Escola Superior Gallaecia co-organised workshops on Earthen Architecture Design Studio, with the University of Florence (Italy), the University of Cagliari (Italy) and Ecole National d'Architecture de Fez (Morrocos) and other Mediterranean UNESCO Chair partners. ESG also contributes annually for the International workshop organised by the Ministry of Algerian Culture, with students and professors.

**Scientific Dissemination** has been possible through the co-organisation by the school, of the ATP seminars (with the Foundation Convento da Orada and the Portuguese Association







Centro da Terra), MEDITERRA international conference (with CRAterre-ENSAG and UNIFI-Cagliari), two Iberian-American SIACOT conferences (with PROTERRA Iberian-American Earthen Architecture Network) and interdisciplinary events (in History, with the University of Porto; in Archaeology, with University of Coimbta; in Engineering, with University of Aveiro). The National Seminars ATP (Arquitectura de Terra em Portugal) coordinated by ESG and initiated in 2003, improve awareness, critical knowledge, excellence in research, and quality in architecture. ATP seminars contributed to a strategy of disseminating knowledge at a national and international level. The event became an active interdisciplinary platform, furthering reflection and strengthening the research across disciplines.

Escola Superior Gallaecia maintains a regular and relevant **publication** strategy, mainly articulated with research and development activities, either individual or through institutional projects. Since 2005, ESG co-published and/or supported the edition of 11 books in earthen architecture. Books have been published in Portugal, Spain, France, Belgium and Italy. In 2013, Taylor & Francis publishers will edit and distribute worldwide the proceedings of CIAV2013. In 2014, VerSus contribution to knowledge will be published as well.

ESG has been also actively contributing for the transfer of knowledge through the management of platforms of communication regarding earthen architecture. The main purpose is to make accessible and inclusive the selected databases, to promote integrated events and to encourage the network of authorities, institutions and key agents and the strength of the disciplinary area.

ESG created and manages the following databases:

- . PROTERRA Iberian-American Network on Earthen Architecture: http://redproterra.org
- . ICOMOS-ISCEAH International Scientific Committee on Earthen Architectural Heritage of the International Council on Monuments and Sites: http://isceah.icomos.org
- . TERRA (IN) COGNITA II | TERRA EUROPAE www.culture-terra-incognita.org

The integration of Escola Superior Gallaecia on the *UNESCO Chair of Earthen Architecture, Building Cultures and Sustainable Development* contributed to strength the focus of the university school on defining a strategy for the transfer of knowledge on earthen architecture.

#### ROUND TABLE III

## IMPROVING COORDINATION AND COOPERATION AMONG UNESCO CHAIRS: NEW AVENUES FOR ACTION

## Improving coordination and cooperation among UNESCO Chairs: new avenues for action

Prof. Roumen Nikolov

Chair on ICTs in Library Studies, Education and Cultural Heritage,
State University of Library Studies and Information Technologies, Sofia
Prof. Stoyan Denchev

Rector, State University of Library Studies and Information Technologies, Sofia

#### 1. The UNESCO Chair in ICT in Library Studies, Education and Cultural Heritage

#### 1.1. Official Establishment

On 20 November, UNESCO Director-General, Irina Bokova and the Rector of the State University of Library Studies and Information Technologies (SULSIT) in Sofia, Professor Stoyan Dentchev, signed an agreement establishing a UNESCO Chair on ICTs in Library Studies, Education and Cultural Heritage at the State University<sup>1</sup> (fee Fig 1).



UNESCO Interfaculty Chair

If it is leaves trades, that action and challed relating to the comment of the comme

Fig. 1. Signing of Agreement © UNESCO/Landry Rukingamubiri

Fig. 2. UNESCO Chair Web Site

However, the Chair started its activities since February 2011 (see and Fig. 2).

The main objectives of the Chair are:

- strengthening inter-university cooperation by facilitating exchange and share of learning methodologies, methods and technologies in education among the UNESCO Chairs and partners;
- Developing an appropriate infrastructure and new institutional relations;
- Enhancing universal access to information and knowledge for students by use of e-learning in addition to traditional face-to-face to and support the collaboration and mobility of librarians, teachers and heritage conservation professionals between SULSIT and other universities;
- Extending the collaboration and transfer of knowledge with other UNITWIN/UNESCO chairs;

Some of the activities of the Chair which are relevant to the South East Europe (SEE) Regional Forum of UNESCO Chairs, are mentioned bellow.

<sup>&</sup>lt;sup>1</sup> UNESCO Chair on ICTs in Library Studies, Education and Cultural Heritage at the State University, http://unesco.unibit.bg/

#### 1.2. QED: UNESCO International Workshop

On 14-16 June 2011 the Chair was host of QED<sup>2</sup> <sup>3</sup>: UNESCO International Workshop "Re-designing Institutional Policies and Practices to Enhance the Quality of Education through Innovative Use of Digital Technologies", which was under the Patronage of the Bulgarian National Commission for UNESCO. The event was organized as a regional follow-up event (for SEE) of the International Summit of ICT in Education (EDUsummIT 2011) organized by UNESCO (Teacher Policy and Development Section), the International Society for Technology in Education (ISTE), Society for Information Technology and Teacher Education (SITE), Kennisnet, International Federation for Information Processing (IFIP) WG 3.3 (Research on Education Applications of Information Technologies) W.G. 3.3, the Association of Teacher Education, (ATE) and the International Journal For Computer Assisted Learning. This meeting brought together 120 distinguished policy makers, educators, researchers, journal editors and private sector leaders - those key to the field of ICT in Education - to build on the outcomes of EDUsummIT 2009. The QED Workshop had the following objectives:

- to identify innovative institutional policies that define 21<sup>st</sup> century education systems and support new roles for teachers;
- to propose model strategies for addressing the needs of all learners by mainstreaming 21<sup>st</sup> century pedagogies and technologies such as collaborative, cross-disciplinary and inquiry-based learning projects into curricula and teacher professional development courses;
- to put forward exemplary national policies and initiatives that will help move the public education system into the 21<sup>st</sup> century;
- to develop recommendations on knowledge-sharing, collaboration and networking at regional/global level to drive forward ICT-enabled educational reform in the digital age.

The workshop included more than 80 attendees from Bulgaria, Germany, Hungary, Italy, Japan, FYROM, the Netherland, Russian Federation, Spain and USA - policy makers, researchers, professionals, teachers, educators and ICT specialists. In addition - a local satellite ICT teachers' workshop with about 40 participants was hold under the guidance of the Chair members. The QED Workshop proceedings<sup>4</sup> were published and could be used as a basis for further regional actions of the kind, e.g. for some regional follow-up events of the EDUsummIT 2013.

#### 1.3. Master Course for Teachers "History of Library Science and Information Literacy"

Master Course for Teachers "History of Library Science and Information Literacy" <sup>5 6 7 8 9</sup> (see Fig. 3) is supported by UNESCO IITE, Moscow. The course target groups are the teachers and pupils from the UNESCO ASPnet schools. The course aims at creating linkages and balance between the knowledge provided in academic settings and the demands from the labour market. Schools, Vocational Training Centres and Universities of today, as well as companies regarded as learning organisations, are responsible for preparing students and the labour force to function in knowledge and competence

<sup>4</sup> Sendova et al (Eds), (2012) Proceedings of the UNESCO International Workshop *QED: Re-Designing Institutional Policies and Practices, to Enhance the Quality of Education through Innovative Use of Digital Technologies*, 2012, http://qed.unibit.bg/docs/11\_06-14-16-QED-UNESCO\_Sofia.pdf

<sup>&</sup>lt;sup>2</sup> UNESCO International Workshop "Re-designing Institutional Policies and Practices to Enhance the Quality of Education through Innovative Use of Digital Technologies", http://qed.unibit.bg/

<sup>&</sup>lt;sup>3</sup> QED: UNESCO International Conference, http://www.youtube.com/watch?v=nn2-yU5GMWs

<sup>&</sup>lt;sup>5</sup> Kovatcheva, E. Shoikova E. and Nikolov, R., (2013), A Global Model for Competence Based ICT in Library Studies Course, in proceeding of European Conference on Information Literacy (ECIL), October 22-25 (in print)

<sup>&</sup>lt;sup>6</sup> Kovatcheva, E., Shoikova, E., Nikolov, R., (2013) Embedding Open Educational Resources in a Competence Based ICT in Library Art Course in proceeding of 10th IFIP World Conference on Computers in Education, WCCE 2013 Torun, 2–5 July (in print)

<sup>&</sup>lt;sup>7</sup> Denchev, S. (2012), Welcome address - History of Library Art and Information Literacy Course, UNESCO Chair, SULSIT, http://www.youtube.com/watch?v=JLj8u4iDJyc

<sup>&</sup>lt;sup>8</sup> Saunders, L.; Kurbanoglu, S.; Wilkins Jordan, Mary; Boustany, J.; Todorova, T. & al. (2013) *Culture and Competencies: A Multi-Country Examination of Reference Service Competencies*. In: Libri. International Journal of Libraries and Information Services, 2013; 63(1): 33–46.

<sup>&</sup>lt;sup>9</sup> Nikolov, R., Yankova, I. Todorova, T., Kovatcheva E. (2011). *New paradigm in libraries and learning*. //UNESCO IITE and UNESCO ASPnet International Conference "ICT and Quality of Education: UNESCO ASPnet On the Way Towards a School of the Future", Academy of Management "TISBI", Kazan, April 26-27, 2011, p. 48-57.

based society. The course applies the model of Competency Based Learning (CBL) - an approach for the development process of interrelated knowledge, skills and attitudes in the workplace and the ability to use and combine those to address new challenges. The UNESCO ICT Competency Framework for Teachers<sup>10</sup>is embedded in the course strategy as well. CBL is defined as an instructional system in which a performance based learning process is applied. CBL specifies the outcomes which individuals should be able to demonstrate upon completion of the study programme. CBL is a tool to design, manage and evaluate the curriculum and the learning practices. It also helps to mould the school and/or the working place as a learning organisation where an informal learning-environment is encouraged. CBL facilitates the learning paradigm shift from passive learning to active learning and fosters self-direction.

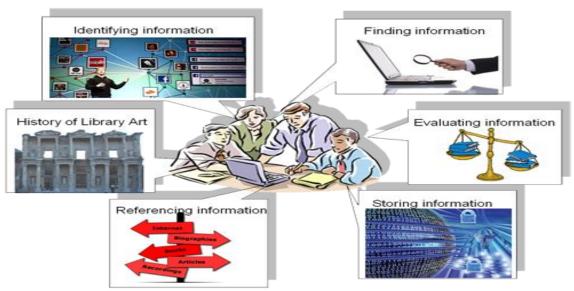


Fig. 3. Master Course for Teachers "History of Library Science and Information Literacy"

Upon completion of this course, the students are expected to be able to have the following competencies:

- The ability to explore the antique, classical and digital libraries;
- The ability to compare the antique, classical and digital libraries;
- The ability to identify and implement the innovative tools;
- The ability to determine the extent of information needed for a specific task;
- The skills needed to effectively access and evaluate information;
- The ability to transfer information into their knowledge base and use it to accomplish specific goals;
- The capability of grasping the legal, social and economic issues concerning information;
- The proficiency in utilizing technology associated with information.

The curriculum is intended to be sufficiently flexible and adaptable. In line with UNESCO's visions, the curriculum is grounded in a view of information literacy as fundamental to the ongoing development of the individual in both an academic and a social context. Active or inquiry-based learning is a vital part of developing e-literacy and history of library art. In addition, a variety of Open Educational Resources and Digital Repositories developed under a number of European Projects are provided for the needs of course<sup>11</sup>.

<sup>&</sup>lt;sup>10</sup> UNESCO ICT Competency Framework for Teachers, http://unesdoc.unesco.org/images/0021/002134/213475e.pdf

<sup>&</sup>lt;sup>11</sup> Stefanov, K., Nikolov, R., Boytchev, P., Stefanova, E., Georgiev, A., Koychev, I., Nikolova, N., Grigorov, A. (2011) *Emerging Models and e-Infrastructures for Teacher Education*. Proc. of the 10th Int. Conf. ITHET 2011, IEEE publisher, 2011, pp.1-8.

The course was extended with some video-lectures<sup>12</sup> dedicated to schools' teachers and 8-9 grade pupils in the context of the main features in the Learning for the Future (LFF) Project focused on effective integration of ICT in teaching and learning, reinforcement of education for sustainable development (ESD) and education for a new humanism. In addition, the course is intended to be part of the IITE International Master Program/Advanced Training Course ICTs in Teacher Professional Development<sup>13</sup>, a project proposal of the UNESCO Institute for Information Technologies in Education.

The UNESCO Chair at SULSIT is ready to provide both the Master Course "History of Library Science and Information Literacy" and the Master Program/Advanced Training Course ICTs in Teacher Professional Development for the needs of the UNESCO Chairs and schools in South East Europe. SULSIT already accredited an International Master Program in e-Learning designed and adapted to the needs of UNESCO. An advanced cloud based learning management platform which allows flexible and adaptive learning modes was implemented as well<sup>14</sup> <sup>15</sup>.

#### 2. ICT as a Driver for Global Educational and Research Reform.

The European universities are expected to identify the areas in which they have attained some excellence essential for Europe and to concentrate funding on them in order to support academic research. The commission supports not only intra-European academic mobility, but also mobility between universities and industry, thus opening up new career opportunities for young researchers. It is reported that the number of young technological (spin-off) companies created by universities has been on the rise in Europe<sup>16</sup>. Universities have an important role in stimulating the creation of knowledge- and technology-intensive SMEs and bridging the gap between public-sector research and the business world. However, their average density is far smaller than it is around the American campuses. A major obstacle to better exploitation of the university research results is the way intellectual property issues are handled in Europe. In addition, it was identified that the European universities still do not have well-developed structures for managing research results.

Another important measure is to open up universities to the outside world and increase their international attractiveness and thus - preparing them to a broader international competition, especially with the American universities which attract the best talents from all over the world. The regions of the EU are supposed to play a very important role through the development of technology centres, science parks, and other cooperation structures between the business sector and the universities, and thus - to catalyze development of university regional development strategies and stimulate regional networking of universities. In all mentioned priorities and actions the **effective use of Information and Communication Technologies** (ICT) is of vital importance.

Operating in a very complicated world, universities and other higher education institutions have to adjust themselves to handle concurrently contrasting trends, such as: globalisation versus national needs; government steering versus institutional autonomy; harmonisation versus diversity; public versus private sectors; basic versus applied research; competition versus collaboration; and intellectual property versus intellectual philanthropy<sup>17</sup>. They adopt some characteristics of the

<sup>&</sup>lt;sup>12</sup> Denchev, S, et. al., Learning for the Future - Meeting the Needs of the Present, UNESCO Chair, SULSIT, http://www.youtube.com/watch?v=aNlPcuKK26M

<sup>&</sup>lt;sup>13</sup> Piet Kommers, IITE International Master Program/Advanced Training Course ICTs in Teacher Professional Development, Project Proposal for the Development and Implementation of the International Master's Program by the UNESCO Institute for Information Technologies in Education. IITE, UNESCO

<sup>&</sup>lt;sup>14</sup> Kovatcheva, E., Adaptive Systems for e-Learning, PhD Thesis, SULSIT, 2012

<sup>&</sup>lt;sup>15</sup> Peshev, A. Integrated systems for education based on Software as a Service, PhD Thesis, TU Sofia, 2012

<sup>&</sup>lt;sup>16</sup> ECORYS, EU SMEs in 2012: at the crossroads Annual report on small and medium-sized enterprises in the EU, 2011/12, http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/supporting-documents/2012/annual-report\_en.pdf

<sup>&</sup>lt;sup>17</sup> Guri-Rosenblit, S. (2007), Higher Education in the 21st Century: Seven Pairs of Contrasting Trends, in: Enders, J., Vught, F. van (2007), Towards a cartography of higher education policy change. A Festschrift in Honour of Guy Neave, CHEPS, University of Twente

current and the emerging university models, such as Research University, Entrepreneural University, Digital University and Virtual University.

The technology environment that is related to higher education is changing very fast, especially with the advent of the Web 2.0 technologies and cloud computing. A Global Campus Model<sup>18</sup> that is based on some advanced ICT and incorporates the main characteristics of the Research, Entrepreneurial, Digital and Virtual University models have veen developed. As we can observe a clear trend of integration of all existing forms of education, we might expect that the ultimate result of the process of transformation of education - the whole world would become a Global Campus in the next few decades.

The global education movement gave rise the Open Educational Resources (OER), which demonstrate great potential to overcome the demographic, economic, and geographic educational boundaries and to promote life-long learning and personalised learning. The term "Open Educational Resources" was adopted at a UNESCO meeting in 2002 in order to refer to the open provision of educational resources, enabled by ICT, for consultation, use and adaptation by a community of users for non-commercial purposes<sup>20</sup>. For instance, the SULSIT UNESCO Chair members were involved in development of the Share.TEC digital library - an OER in teacher education, and OpenScout- a European OER in the field of management education and training<sup>21</sup>. According to OECD, there are more than 3000 open access courses (opencourseware) currently available from over 300 universities worldwide. For instance:

- MIT OpenCourseWare<sup>22</sup> is the most popular example of institutional OER model they published on the Web more than 2000 courses which are made available to educators and learners worldwide at no cost;
- OpenLearn initiative<sup>23</sup> was launched by the UK Open University to make a selection of their materials available for free use by anyone and to build communities of learners and educators around the content using a range of tools and strategies. Currently more than 600 free online courses are available;
- OpenCourseWare Consortium<sup>24</sup> is a collaboration of more than 250 higher education institutions and associated organisations from around the world creating open educational content using a shared model.

Building pan-European electronic libraries is among the main priorities of the EC. A typical example of such libraries is Europeana<sup>25</sup>. The global digital library of the future should be: multi-ethnic, multicultural and multi-lingual; a collaborative and global environment, which emphasises the ethical issues surrounding data; purposefully inclusive to different cultures.

Special cases of OER are the open textbooks<sup>26</sup>. The cost of textbooks in higher education is usually paid directly by the students and their parents, and it is now a substantial part of the total and rapidly increasing cost of higher education. At the same time the cost of textbooks has risen, their usefulness in the teaching and learning process in higher education is declining as more material is available for free on the internet and neither the pedagogical approach nor the learning assessment process is well tied to them. A model of a SmartBook based on the new technologies emerged:

 $<sup>^{18}</sup>$  Nikolov, R. (2010), The Global Campus: ICT and the Global Transformation of Higher Education,

Serdica Journal of Computing, Vol. 4, No. 2, pp 183-216

Nikolov, R (2009), The Global Campus, Avangard Print (in Bulgarian)

<sup>&</sup>lt;sup>20</sup> D'Antoni, S. ed. (2006), The Virtual University. Models and Messages. Lessons from Case Studies, UNESCO-IIEP

<sup>&</sup>lt;sup>21</sup> Stefanov, K., Nikolov, R., Boytchev, P., Stefanova, E., Georgiev, A., Koychev, I., Nikolova, N., Grigorov, A. (2011) Emerging Models and e-Infrastructures for Teacher Education. Proc. of the 10th Int. Conf. ITHET 2011, IEEE publisher, 2011, pp.1-8. <sup>22</sup> MIT OpenCourseWare, ocw.mit.edu

<sup>&</sup>lt;sup>23</sup> OpenLearn initiative, openlearn.open.ac.uk

<sup>&</sup>lt;sup>24</sup> OpenCourseWare Consortium, ocwconsortium.org

<sup>&</sup>lt;sup>25</sup> Europeana, europeana. eu

<sup>&</sup>lt;sup>26</sup> Frydenberg, J., Matkin, G. (2007), Open Textbooks: Why? What? How? When?, University of California, Irvine, Distance Learning Center, The William & Flora Hewlett Foundation

dynamic, interactive, regularly updated (including by users), localized, customized, remixed, etc<sup>27 28</sup>. Open courses available on the web can also be the center of communities of students and teachers. These books and communities could be employed in teacher professional development in ways not possible or not as easily attainable with static texts. The open textbooks, as well as all OER movement, are very important instruments to approach the educational gap in the developing countries.

Some recent OER developments are related to building open repositories of research publications and other research outputs, e.g. – Dspace at MIT<sup>29</sup>, the OpenAIRE initiative of the EC<sup>30</sup>, DSpace of the TENCompetence project<sup>31</sup>, TeLearn<sup>32</sup>, etc. Open access is critical to ensure fast and reliable access to EU-funded research results, in order to drive innovation, advance scientific discovery and support the development of a strong knowledgebased economy. Sofia University and other Bulgarian partners have established their open repositories of research publications and other research outputs<sup>33</sup> thatare linked to OpenAIRE and other European digital repositories.

The e-infrastructure (cyberinfrastructure) is a combination of hardware, software, services, personnel and organization, which provides a wide range of services for the global research communities, such as<sup>34</sup>: high performance computation services; data, information and knowledge management services; observation, management and fabrication services; interfaces and visualization services; collaboration service. The service layer is built upon base technology for computation, storage, and communication. E-infrastructures should enable research communities and projects to rely on an effective, application specific and interoperable knowledge environments for research and education. New types of scientific organizations and supporting environments are emerging, e.g "laboratories without walls", colaboratory, grid community, e-science community, and virtual community.

The recent developments in the area of e-science digital repositories and e-infrastructures in Europe aim at embedding them into "a single science information space that serves multiple stakeholders and permits multiple perspectives: for science, scientists, researchers, students, schools, the publishing community and industry"35. Such e-science repositories and e-infrastructures should embrace all EU countries and target their specific needs, and thus - to bridge differences between the well developed and less developed countries in the field. There are many examples of implementation of e-infrastructure projects, such as:

The **European Grid Infrastructure** - EGI<sup>36</sup> project is funded by the EC and aims to build on recent advances in grid technology and develop a service grid infrastructure which is available to scientists 24 hours-a-day. It was created (on the basis of several preliminary projects and initiatives) on 8 February 2010 to coordinate and maintain a sustainable pan-European infrastructure to support European research communities and their international collaborators. EGI is the largest multi-disciplinary grid infrastructure in the world, which brings together more than 140 institutions to produce a reliable and scalable computing resource available to the European and global research community.

6

<sup>&</sup>lt;sup>27</sup> Koychev, I., Nikolov, R., Dicheva, D. (2009), SmartBook – the future e-book and educational hypermedia, Proceedings of National conference "Education in Information Society", May, 11-12, Plovdiv, Peter Barnev (ed), ADIS & IMI-BAS, p.30-37, ISBN 978-954-8986-30-4

SmartBook Project, dse.fmi.uni-sofia.bg/SmartBook/index.htm

<sup>&</sup>lt;sup>29</sup> DSpace@MIT, dspace.mit.edu

<sup>&</sup>lt;sup>30</sup> OpenAIRE initiative of the EC, openaire.eu

<sup>&</sup>lt;sup>31</sup> TENCompetence, www.tencompetence.org,

<sup>32</sup> TeLearn, telearn.org

<sup>&</sup>lt;sup>33</sup> Research at Sofia University, research.uni-sofia.bg

 $<sup>^{\</sup>rm 34}$  Atkins, D. et al (2003), Revolutionizing Science and Engineering Through Cyberinfrastructure,

Report of the National Science Foundation on Cyberinfrastructure, NSF, January

<sup>35</sup> EC (2008), Towards a European e-Infrastructure for e-Science Digital Repositories, A report for the European Commission: "Harvesting and seeding the fruits of e-Science",

http://cordis.europa.eu/fp7/ict/e-infrastructure/docs/e-scidr.pdf

<sup>36</sup> European Grid Infrastructure – EGI, egi.eu

• nanoHUB.org was created by the NSF-funded Network for Computational Nanotechnology – NCN<sup>37</sup> (nanohub.org). NCN is a network of universities with a vision to pioneer the development of nanotechnology from science to manufacturing through innovative theory, exploratory simulation, and novel cyberinfrastructure. Many students, staff, and faculty are developing the nanoHUB science gateway while making use of it in their own research and education. nanoHUB.org is designed to be a resource to the entire nanotechnology discovery and learning community.

The **vision of Europe** is that by 2030 a scientific e-infrastructure that supports seamless access, use, re-use, and trust of data will exist<sup>38</sup>. The e-infrastructure allows the virtual research labs to conduct experiments "in silico", that enables new models of learning, teaching, doing research and business. Thus, the virtual research labs can become "real" – the researchers with different backgrounds could conduct global experiments remotely in real time and can collaborate on the same set of data from different perspectives.

Living Labs can be defined as "an environment for innovation and development where users are exposed to new solutions in (semi) realistic contexts, as part of medium- or long-term studies targeting evaluation of new solutions and discovery of innovation opportunities"39. Recently emerged, Living Labs represent an open innovation infrastructure including many innovation stakeholders - companies, universities, research organizations and community, developers, local and regional authorities and end-users, involved in early stage innovation processes for complex products and services development. Living Labs is an evolving concept, fast spreading around Europe supported by the European Network of Living Labs – ENoLL<sup>40</sup>. This is a form of user-driven open innovation ecosystem, based on a partnership which enables users to take an active part in the research, development and open innovation processes. Living Labs are organized on regional principle, enhancing local knowledge sharing by involvement of the main stakeholders in specific industry areas. ENOLL highlights the opportunities for increasing collaboration effect by sharing best practices and widely disseminating Living Labs success stories within European perspective. Many universities are active participants in these success stories. For instance, the Bulgarian Virtual Services and Open Innovation (VirtSOI) Living Lab<sup>41</sup> aims to integrate a broad vision for virtual services development and implementation within the society related to different sectors, such as: e-Learning, e-Government, e-Health, e-Content, e-Inclusion, etc. In this respect the VirtSOI plays the role of a regional living lab and an active innovation platform for regional development. The VirtSOI Living Lab started incubating a set of service-oriented living labs targeting different industrial and public sectors. The first pilot living labs are: the Multilingual e-Content and e-Library (MLeCeL) Living Lab<sup>42</sup>, the Serious Games Living Lab<sup>43</sup> and the Internet of Things (IoT) e-Health Living Lab - in the framework of the EC FP7 ELLIOT Project "Experimental Living Lab for the Internet of Things" 44.

#### 3. The Role of the UNESCO Chairs in Europe

The UNESCO Chairs in Europe could play a **tripple role**. From one side, they could play the role of **poles of excellence** which might be used as a model for implementing the European Research Area (ERA) Chairs - a new measure proposed by the European Commission under Horizon 2020 to help close the research and innovation divide in Europe<sup>45</sup>. The ERA Chairs initiative will support

October 2010, http://cordis.europa.eu/fp7/ict/e-infrastructure/docs/hlg-sdi-report.pdf

<sup>&</sup>lt;sup>37</sup> Network for Computational Nanotechnology – NCN, nanohub.org

<sup>&</sup>lt;sup>38</sup> EC (2010), Riding the wave. How Europe can gain from the rising tide of scientific data, Final report of the High Level Expert Group on Scientific Data, A submission to the European Commission,

<sup>&</sup>lt;sup>39</sup> Folstad (2008), Living Labs for innovation and development of information and communication technologies: a literature review, The Electronic Journal for Virtual Organizations and Networks, Volume 10, "Special Issue on Living Labs", August 2008.

40 European Network of Living Labs – ENoLL, openlivinglabs.eu

<sup>&</sup>lt;sup>41</sup> Virtual Services and Open Innovation (VirtSOI) Living Lab, http://www.openlivinglabs.eu/livinglab/virtual-services-and-open-innovation

 $<sup>^{\</sup>rm 42}$  Multilingual e-Content and e-Library (MLeCeL) Living Lab, livinglab.itd-bg.eu

<sup>&</sup>lt;sup>43</sup> Serious Games Living Lab, seriousgame.it.fmi.uni-sofia.bg

 $<sup>^{44}</sup>$  ELLIOT Project "Experimental Living Lab for the Internet of Things", elliot-project.eu

<sup>&</sup>lt;sup>45</sup> ERA Chairs, http://ec.europa.eu/research/era/era-chairs\_en.html

universities and other eligible organisations to achieve the level of research excellence needed to be competitive at international level<sup>46</sup>. They will have to demonstrate that they can provide the facilities and environment for excellent research in line with ERA. Once selected, the institutions will award ERA Chairs to outstanding academics who have the capacity to raise standards and attract more high level staff as well as money from other sources, such as EU research funding or Regional funds. In addition, the UNESCO Chairs in Europe could successfully apply for ERA Chairs grants since they have already proved they are competitive at international level.

From the other side, the UNESCO Chairs could support the implementation of several European policies and initiatives, e.g. the ones related to research, development and innovation in the area of technology enhanced learning, open educational resources, digital repositories, electronic infrastructures, living labs, smart cities, regional clusters and regional innovation strategies based on Smart Specialization, etc. Smart Specialisation is a strategic approach to economic development through targeted support to research and innovation<sup>47</sup>. Smart Specialisation will be the basis for Structural Fund investments in research and innovation as part of the future Cohesion Policy's contribution to the Europe 2020 jobs and growth agenda.

Third, the UNESCO Chairs in Europe could play the role of gateways for access to European educational, research and innovation achievements and best practices which might strongly support the UNESCO global goals and initiatives.

In order to more effectively utilize the capacity of UNESCO Chairs in Europe, a **new coordination and cooperation model** should be developed. This model should be embedded into a collaborative ICT based platform which will turn the UNESCO Chairs network into a **virtual organization**. The Virtual Organization (VO) is a fast-growing phenomenon. It could be defined as "a group of individuals whose members and resources may be dispersed geographically and institutionally, yet who function as a coherent unit through the use of e-infrastructure" A VO is typically enabled by, and provides shared and often real-time access to, centralized or distributed resources, such as community specific tools, applications, data, and sensors, and experimental operations. Quite often, these resources use high-performance computing as a core capability. Such VOs are for instance EGI<sup>49</sup> and nanoHUB.org<sup>50</sup>. The term VO can encompass, at least in part, systems known by other names such as collaboratories, e-science or e-research, distributed workgroups or virtual teams, virtual environments, and online research communities. VOs include a broad range of operational options, e.g they can be formal or informal, planned or unplanned, transient or long lived. They share several common characteristics:

- distributed across space, with participants spanning teritories and institutions;
- distributed across time, with asynchronous as well as synchronous interactions;
- dynamic structures and processes at every stage of their lifecycle, from initiation to termination;
- **computationally enabled**, via collaboration support systems including e-mail, teleconferencing, telepresence, awareness, social computing, group information management tools, etc.;
- **computationally enhanced** with simulations, databases, and analytic services that interact with human participants and are integral to the operation of the organization.

The UNESCO Chair on ICT in Library Studies, Education and Cultural Heritage at SULSIT is ready to take a leading role in development and establishment of such VO platform, as well as in the further actions related to coordination of the activities of the UNESCO Chairs in Europe.

<sup>&</sup>lt;sup>46</sup> EC Press Reliese, Commission to fund top research chairs in less-developed regions, http://europa.eu/rapid/press-release\_IP-12-1374\_en.htm?locale=en

<sup>&</sup>lt;sup>47</sup> EC, Smart Specialization Platform, http://s3platform.jrc.ec.europa.eu/home

<sup>&</sup>lt;sup>48</sup> NSF (2007), Cyberinfrastructure Vision for 21st Century Discovery, National Science Foundation, Cyberinfrastructure Council, March

<sup>&</sup>lt;sup>49</sup> European Grid Infrastructure – EGI, egi.eu

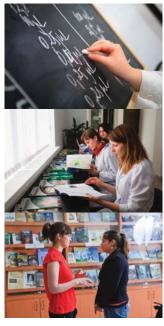
<sup>50</sup> Network for Computational Nanotechnology – NCN, nanohub.org



#### PERSPECTIVE OF THE UNESCO CHAIR IN SUSTAINABLE DEVELOPMENT THROUGH EDUCATION AND RESEARCH AT THE UNASM

Ph.D., dean Daniela ELENCIUC

South East Europe (SEE) Regional Forum of UNESCO Chairs 12-13 June 2013, Istanbul



#### **MISSION**

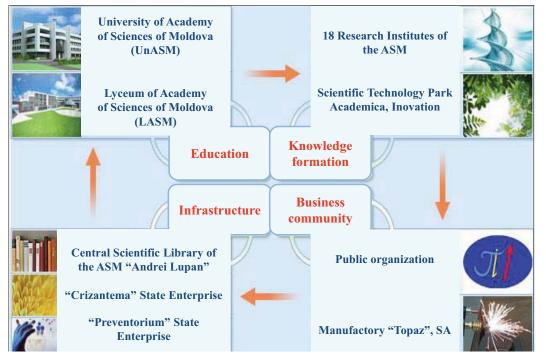
The University of ASM is the unique institution to promote excellence in science by educating talented students with focusing on strengthening research into higher education.

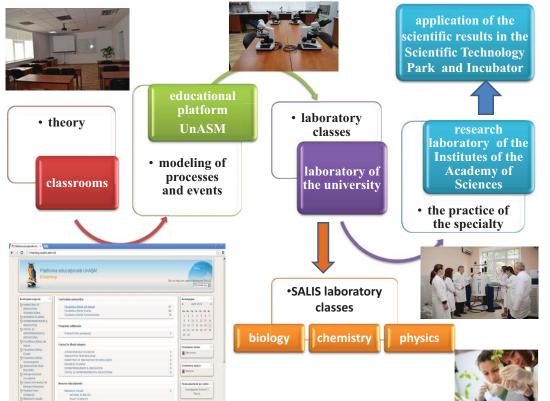






## The Educational Scientific Cluster UnivER SCIENCE (University of Education and Research Science)





#### **FACULTIES AND DEPARTMENTS**

FACULTY
OF NATURAL SCIENCES

**Department** of Biology

Department of Environmental Sciences FACULTY OF EXACT SCIENCES

> Department of Physics and Chemistry

Department of Mathematics and Computing FACULTY
OF HUMANITIES
AND SOCIAL SCIENCES

Department of Languages and Literature

Department of Philosophy, History and Research Methodology

#### **DEGREE PROGRAMS**

LICENSE PROGRAMME (3 years) According to the principles of the Bologna process, Bachelor

• *Offered diplomas* - first cycle studies are focuses on developing fundamental knowledge and general research skills in a field of professional training.

MASTER'S DEGREE PROGRAMME (2 years) Masters degree studies provide depth specialization in a particular area of research.

 Offered diplomas - University studies at cycle II, conducted over two years and focused on developing of in depth basic knowledge in a fundamental specialization or applied specialization in various fields of professional training.

PhD DEGREE PROGRAMME

(3 years)

Ph.D. is a form of postgraduate education, which is achieved through scientific research and organized with the purpose of training of highly qualified scientific staff.















#### ADDITIONAL CURRICULA

Communication Program Teaching and Learning Program

Innovation entrepreneurship **Technology** and **Society** 



#### RESEARCH MAKING A DIFFERENCE



## Centre for Molecular Biology (CBM)

The Centre for Molecular Biology is a premier research University Centre in frontier areas of modern biology.

The objectives of the Centre are to conduct high quality basic research in Genomics, Proteomics and Bioinformatics and training in frontier areas of modern biology, and promote centralized national facilities for new and modern techniques in the inter-disciplinary areas of biology.









#### INTERNATIONAL COOPERATION

- ♣ International project with the *Tempus program* "Entrepreneurial University as a model for the Proper Managerial Interrelation between Education, Science and Innovation";
- ♣ International project with Belarus "Fingerprinting of sunflower genotypes using molecular markers";
- ♣ International project with Germany "Evaluation of pharmaceutical potential of medicinal plants from spontaneous flora in the Republic of Moldova"

### As the legal basis for international cooperation we can list the following cooperation agreements:

- ♣ Memorandum of Understanding signed with Instituto Superiore Calabrese di Politiche Internazionali (ISCaP) (Higher Institute for International Policy, Calabria, Italy);
- ♣ East european educational and cultural center, Praga, Cehia
- ♣ St.John Internațional University, Concord, USA; Vinovo-Italy.
- ♣ General Convention of International Cooperation co-signed with the University Mohammed Premier Oujda, Maroco;
- ♣ Inter-academic partnership in environmental science and technical information for research, education and computerization activities signed with St. John International University, Concord, SUA;
- **↓** University of California, Riverside Compus, USA







## IX International Scientific Congress of Geneticists and Breeders Society from Moldova











UNESCO Chair

in Sustainable
development through
education and
research
at the UnASM



Moldovan

scientific Diaspora









## Why UNESCO Chair in Sustainable development through education and research?

- To provide the access to information and sharing and creation of knowledge contributes significantly to strengthening **economic**, **social** and cultural development.
- To set a direction for education and learning that is based on **values**, **principles and practices** so students can take their places as environmentally, socially and economically literate citizens, consumers and leaders.
- To support initiatives and partnerships that open up spaces for youth-led ideas and innovative approaches, in collaboration with a variety of international, regional and local organizations.





#### UNESCO CHAIR IN SUSTAINABLE DEVELOPMENT THROUGH EDUCATION AND RESEARCH

#### **OBJECTIVES**

- ✓ To explore better ways to promote sustainable development and world place through the system of higher education;
- ✓ To support dialogue and experience sharing between high level internationally recognized researchers and teaching staff of the University and other institutions in Moldova and other institutions of the region, in order to improve the quality of teaching;
- ✓ To promote an integrated system of research, training, information and documentation in the fields of sustainability for university education and its implementation in research and education;
- ✓ To facilitate the exchange of best practices among universities through networking activities;
- ✓ To contribute to the improvement of the quality of higher education through the encouragement of debates, publications on issues, organization, management, funding, research, the use of technology, teaching and learning in higher education institutions.

## UnASM AND THE RESEARCH COMMUNITY OF THE RESEARCH INSTITUTES OF THE ASM

Promote excellence in teaching and research

- Modernize curricula applying most efficient teaching programs and methods;
- Integrate education with academic science;
- Attract best professorial staff (local &foreign);
- Attract and recruit most talented youth;
- Provide the best possible facilities, libraries and teaching aids.

Prepare highly qualified researchers and specialists

- Involve Moldovan Academicians into the process of educating new generation of researchers;
- Develop research management skills and capacities.

Engage in technology transfer and economic development activities

- Promote knowledge chain: education-research-innovation;
- Enhance students' entrepreneurial skills;
- Closely cooperate with industry and private sector;
- Closely cooperate with Business Incubator

Develop international cooperation

- Initiate visitors exchange programs;
- Introduce long-distance learning.

#### **MOLDOVAN SCIENTIFIC DIASPORA - SUCCESS STORIES**

Prof. Vladimir Arion is currently Associate Professor at the Faculty of Chemistry of the University of Vienna. Within the University of the ASM he is involved in the educational process

Prof. Adriana Birca - from 2007 she has the current position - University Professor in the Brasov University "George Bariţiu" (Romania).

**Dr. Dorin Dusciac** is a Research in the national Laboratory Henri Becquerel at the Atomic Energy Commission (CEA), Saclay, France
During the visit to Moldova, Dr.
Dusciac was involved both in the research and education process.

**Dr.-Habil. Andrei Bologa** is engaged at the Institute for Technical Chemistry (Germany). Within the visit to the Academy of Sciences of Moldova there was developed the research plan and discussed the extension of perspectives for scientific cooperation in the framework of bilateral competition recently announced by Federal Ministry of Education and Science of Germany (BMBF)-ASM.

**Dr. Nistor Grozavu** - Associate Professor, with the Institut Galilee, Paris 13 University. During the visit, N.Grozavu developed collaboration with the Institute of Mathematics and Informatics of ASM and the Institute of Pedology, Agrochemistry and Soil Protection 'N. Dimo'.





#### **REGIONAL COOPERATION**

As the legal basis for international cooperation we can list the following cooperation agreements with regional educational and research institution:

- ♣ Inter-Academic Cooperation Agreement signed between Lomonosov Moscow State University, Chemistry, Innovations and High Technologies department;
- ♣ Cooperation agreement with United Nuclear Research Institute, Dubna;
- ♣ Cooperation agreement with the University of Bucharest, in name of Francophone Doctoral School of Social Sciences, signed in November, 2008
- ♣ The National Institute of Research and Development for Biological Sciences is the Romanian
- ♣ National Agricultural Research and Development Institute Fundulea, Romania,
- **♣** University Alexandru ioan Cuza, Iasi, Romania
- **♣** "P. Poni" Institute of Macromolecular Chemistry, Iasi Romania
- ♣ National Institute of Economic Research 'Costin C. Kiriţescu', Bucurest, Romania.

#### Thank you for your attention !!!



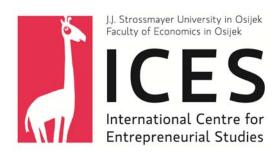
#### **Contact us:**

3/2, Academiei Street, MD-2028, Chisinau, Republic of Moldova

**Telefon:** (+373-22) 738016

E-Mail: personal.univer@asm.md

Web site: edu.asm.md





June 2013, Osijek, Croatia

## UNESCO Chair in Entrepreneurship Education – its role, profile and activities at the J.J. Strossmayer University in Osijek

(short note for the UNESCO Chairs SEE Regional Forum - Istanbul meeting, 12-13 June 12-13, 2013)

#### **Identity card:**

Established: 2008

Chairholder: Professor Slavica Singer

Members of the Chair: 13 full time + 12 part time

Major activities: education (undergraduate, graduate, post-graduate); research;

consultancy

#### Role:

UNESCO Chair in Entrepreneurship Education already achieved its stable permanent status in the organizational and financial structure of the J.J.Strossmayer University in Osijek, Faculty of Economics, which provides human resources, space and financial support for the activities of the UNESCO Chair.

It is important to emphasize that eastern part of Croatia (location of the Chair) was one of the most devastated region in Croatia during the 1991-1995 war which consequences are present even now. War devastation coupled with devastation which resulted from corrupted privatization led to extremely high unemployment (up to 50 % in eastern Croatia). It was a main driver for a group of professors at the J.J. Strossmayer University in Osijek, Faculty of Economics, led by Professor Slavica Singer, to start a university

based entrepreneurship education in 2000, with the first Master degree program in Entrepreneurship in Croatia and South East Europe. Rational behind this initiative was expectation that building entrepreneurial competences among young people will enable them for self-employment and keep them in the region, but later it showed that entrepreneurial competences have much broader importance to other target groups, like businesses with growth potential, banks interested to deal with small businesses, local government in order to build its capacity for pro-activeness and innovativeness, teachers in educational sector.

From year 2005 a specialization in entrepreneurship has been offered on undergraduate level, and in 2011 the PhD program Entrepreneurship and Innovativeness was started.

Along this process of introducing entrepreneurship education programs, primarily to students in economy and business programs, the programs attracted students across campus (arts, medicine, agriculture).

The UNESCO Chair in Entrepreneurship Education proved to be an important contributor to the University portfolio of educational programs, as well as to research activities focused on entrepreneurship in its broadest definition.

#### **Profile:**

UNESCO Chair in Entrepreneurship Education at the J.J. Strossmayer University in Osijek, Croatia profiled itself as a hub of education, researching and consultancy work in the field of entrepreneurship, innovativeness, competitiveness, regional development, as well as on Triple Helix concept of collaboration among business sector, academia and government, with a special focus on building an entrepreneurial university.

From its establishment in 2008, the UNESCO Chair in Entrepreneurship Education succeeded in developing a strong core team of educators, researchers and consultants, as well as a strong international network.

There are 25 *academic posts* contributing to the activities of the UNESCO Chair (full + part time professors and lecturers, researchers and visiting staff):

o Full time: 13 (9 professors + 4 lecturers)

o Part time: 12 (7 professors + 5 lecturers)

*Visiting staff* (from academia and business sector) are important part of the UNESCO Chair in Entrepreneurship Education. In 2011, following experts contributed to postgraduate educational programs (many of them on annual basis):

- Antti Paasio, University of Turku, Finland - Theoretical Perspectives of Entrepreneurship; Innovation and Entrepreneurship

- Saras Sarasvathy, Darden School of Business, University of Virginia, USA module on effectuation
- Henry Etzkowitz, Stanford University, USA Triple Helix
- Marina Ranga, Stanford University, USA Triple Helix
- Pasi Malinen, University of Turku, Finland Business Development Laboratory: Turning Ideas into Business
- Timothy Baye, University of Wisconsin –Extension, Financial Management
- Karl McCracken, Client Magnet, Whitley Bay UK, Operational Management

Important role have *guest speakers*, both from academia and business sector, like Isac Adizez

Besided academic staff, there are *other human resources* contributing to activities of the UNESCO Chair in Entrepreneurship Education, like cconsultants (3) and collaboration with two NGOs (Center for Entrepreneurship Osijek, CEPOR – SMEs and Entrepreneurship Policy Center, Zagreb).

Three *administrative and technical staff* members support the UNESCO Chair's activities (maintaining web site, administration of enrollment in educational programs, programming).

#### **Activities and outcomes:**

Direct outcomes of activities of the UNESCO Chair in Entrepreneurship Education are graduated students, research projects and consultancy contracts.

#### Education:

- undergraduates program in entrepreneurship has been delivered from 2005, and there are 30 to 50 students enrolled in the whole program, and more than 100 students taking some electives, on yearly basis;
- master's degree program enrolls in average 30 students yearly, from year 2000
- postgraduate program (specialization enrolls yearly in average 25 students, from 2008; doctoral program ENTREPRENEURSHIP AND INNOVATIVENESS, from 2011 enrolled 43 students till now).

Many of our master's degree students and postgraduate students are now leading respectable number of small business service providers (like centers for entrepreneurship, regional agencies) or filled positions in banks which work with small businesses, or work as lecturers in education sector, or are active members of local governments. On this way educational programs are contributing to the development of professional infrastructure for boosting entrepreneurial activities around Croatia, especially in eastern Croatia.

Specifically, the UNESCO Chair fulfilled first three objectives, as specified in Article 2 of the Agreement for establishing the Chair:

- (a) PhD program <a href="www.ices.hr">www.ices.hr</a> has been developed as joint venture with four partnering universities (Turku, Klagenfurt, Durham, Maribor) and second cohort of students was enrolled in 2013 (43 students in both cohorts). Enrolled doctoral students are from all over Croatia, with few foreign students taking part either in a whole program, or in some modules (Finland, South Africa, the Netherlands, Belgium, UK, Norway, Bosnia and Herzegovina, Germany, Spain, Italy, US) what will have national impact on strengthening research and education capacity related to understanding and building enterprising society.
- (b) Continuous activities on developing pedagogical skills of the faculty in entrepreneurship, based on experiential classroom approach outreached the location of the UNESCO Chair, through participation in the EU funded project European Entrepreneurship Educators Programme 3EP. Through this project, three summer academies for lecturers of entrepreneurship on tertiary educational level were organized (2010 academy, held in Turku, with 38 participants; 2011 in Aarhus, with 48 participants; 2012 in Osijek, with 52 participants, hosted by UNESCO Chair in Entrepreneurial Studies).
- (c) with introduction of doctoral program INNOVATIVENESS AND ENTREPRENEURSHIP in 2011, the UNESCO Chair succeeded in developing and legitimizing entrepreneurial studies on undergraduate, graduate and postgraduate level in the portfolio of university based educational and research activities.

#### Research:

- o Global Entrepreneurship Monitor (GEM) survey, on annual basis, as Croatian team in GEM consortium <a href="www.gemconsortium.org">www.gemconsortium.org</a>, from 2002, financed by the Ministry of Economy, labor and entrepreneurship
- Entrepreneurship mobilizer of social integration, from 2007, financed by the Ministry of Science, Education and Sport

#### **Short term plans:**

In the 2013 and 2014, UNESCO Chair in Entrepreneurship Education will continue with present educational and research activities, but will expand into new activities and new geographical cooperation:

#### Educational activities:

- o To outreach more students across campus, especially in engineering departments
- To introduce some modules on postgraduate level specialization as only distance learning module, in English, which will enable the program to outreach worldwide – in 2013

- o To introduce executive program, jointly with CEPOR Policy Center for SMEs and Entrepreneurship in Zagreb and Center for Entrepreneurship in Osijek, as a part of life-long learning activities in 2013 (it is related to the fourth objective of signed agreement for establishing the UNESCO Chair (some programs were delivered, like on growing businesses, family businesses, business intelligence...) but it is a challenge to outreach more widely.
- To continue with training activities for tertiary level lecturers in order to build their capacity in teaching for getting entrepreneurial competences in 2014
- o To continue with training activities for lecturers in secondary level educational institutions, in order to build their capacity in teaching entrepreneurship (for building entrepreneurial competences of pupils) in 2013
- o Consultancy activities of postgraduate students and lecturers, as educational extension of learning from practice and in practice.

#### Research activities:

- o To continue with Global Entrepreneurship Monitor (GEM) survey, on annual basis, as Croatian team in GEM consortium <a href="www.gemconsortium.org">www.gemconsortium.org</a>.
- o To start research activities on entrepreneurial education indicators, with international partners.

**Promotion of entrepreneurial competence** through participation on various events related to education, university, competitiveness, innovativeness – on-going activity.

#### Long term

 To strengthen its international outreach, especially in countries in the neighborhood (Slovenia, Austria, Bosnia and Herzegovina, Montenegro, Serbia, Hungary) as well as to strengthen already developed collaboration with the University of Turku, Finland

#### **Contact details:**

Prof. Slavica Singer, Ph.D.
UNESCO Chair in Entrepreneurship
J.J. Strossmayer University in Osijek
Gajev trg 7
HR-31000 Osijek
Croatia

tel: +385 31 224 444 fax: +385 31 211 604 mob: +385 91 22 44 061 e-mail: <u>singer@efos.hr</u>

www.ices.hr

#### "Conservation of natural resources: air, water, soil, vegetation, and fauna"

- enhance our understanding of natural or human-induced dynamic processes which shapes ecosystems;
- provide management tools for dealing with societal challenges, such as the mitigation of the effect of global changes, a comprehensive framework for sustainable environmental management, by adopting an ecosystem based approach;
- enhance biodiversity knowledge, promote conservation and recovery in natural and semi-natural ecosystems.
- physical Oceanography for assessing the environmental state of coastal systems and their changes and thus for enabling efficient preservation policies. Theories and phenomenology concerning water composition, motions and exchanges with atmosphere and coastal environments.

#### "Green and sustainable chemistry"

Pietro Tundo, Fabio Aricò, Department of Environmental Sciences, Informatics and Statistics, Cà Foscari University of Venice, Italy

#### Green syntheses and products

Chemists have always put enormous effort into designing chemicals with various applications ranging from medicines and cosmetics to materials and molecular machines. However, for the most part, their work demonstrated a lack of interest in taking hazards into consideration in the design process. Also in the organic syntheses on a large scale (*i.e.*, manufacturing polymers, pharmaceuticals, pesticides, paints, artificial fibers, food additives, etc.), compared to the laboratory scale, there are many problems of health and safety for workers in addition to the environmental problems caused by their use and waste disposal. The design of a safer chemicals is a need for future generations.

In this context, the Interdepartmental Centre of Green Chemistry (ICGC) of Ca' Foscari University is particularly involved in studying and developing new green syntheses in several fields of interest such as chlorine-free chemistry, green solvents, green methylation and methoxycarbonylation agents, carbohydrates derivative, etc.. As part of our research we are aiming to changes and improve the conventional ways for making synthetic organic chemical substances employing less toxic starting materials and solvents. Our purpose is to increases the efficiency of synthetic methods, to use less toxic solvents, reduce the stages of the synthetic routes and minimize waste. By changing the organic synthesis methodologies, health and safety will be improved in small scale laboratory level and in the industrial large scale processes as well, thus taking part of the effort for sustainable development.

#### Green solvents and products and their application for the preservation of the historical and cultural heritage

Organic solvents are widely utilized in the commercial products for varnishes, glues, etc., which are used also for the preservation of the historical and cultural heritages. In general, these compounds are volatile, flammable, and hazardous to humans, to the environment, or to both. For this reason replacing petrochemical solvents with greener solvents is a field of research which is gaining high attention in the last ten years.

In this sector we aim to develop a new kind of green solvent that can be prepared from abundant, inexpensive, innocuous, biorenewable components and can be reused or recycled. Examples are the solvents derived from organic carbonates that have already found several applications in the field of varnishes and glues. These products are being investigated also for the preservation of the historical and cultural heritage, graffiti removal, solvents or components of glues and consolidants.

#### • Exploitation of natural resources and bio-based products

The importance of employing bio-based products (renewable biological raw materials) can substitute fossil-based products hopefully maintaining the competitiveness of the product while improving their sustainability aspects. In this context the ICGC aims to explore the use of natural resources which are known to have low toxicity, high bio-degradability and require less resource intensive production. Lately one of the research group of the ICGC reported a greener synthetic pathways to isosorbide and dimethyl isosorbide, both extensively investigated cyclic carbohydrates as components of pharmaceuticals (isosorbide) or as possible high boiling bio-based solvent (dimethyl isosorbide).

#### New agrochemical strategies

Since the evolution of molecular, combinatorial and green chemistry techniques, the approach to new discoveries in agrochemicals has fundamentally changed. The availability of biopesticides, transgenic crops, natural products, pest control agents with innovative modes of action and structures that allow rapid conversion to nontoxic metabolites have issued in a new generation of pest control based on human safety, environmental stewardship, and resistance management. The research groups of ICGN has reported new green strategies for the synthesis of agrochemicals, *i.e.* 1,3-oxazinones. The main aim in this field is to investigate the potentiality of these compounds as agrochemicals as well as studying new efficient agrochemical strategies.

1. Pietro Tundo CV http://www.unive.it/nqcontent.cfm?a\_id=86656&persona=000789&vista=curr

**Pubblications** 

http://www.unive.it/nqcontent.cfm?a\_id=86656&persona=000789&vista=pubb\_anno

2. Fabio Aricò Pubblications

http://www.unive.it/ngcontent.cfm?a id=86656&persona=007922&vista=pubb anno

#### **ADDITIONAL INFORMATION**

#### **UNESCO Chair in Intercultural Dialogie, Institute of Cultural Studies,**

#### Iv. Javakhishvili Tbilisi State University

As far as the UNESCO Chair is based on the Institute of Cultural Studies at Iv.Javakhishvili Tbilisi State University, *research* and *education* form two main directions of its activities.

UNESCO Chair participates in the local and international projects supported by different organizations and foundations.

#### **Running Projects**

1. EU TEMPUS project "Development of the International Model for Curricular Reform in Multicultural Education and Cultural Diversity Training (DOIT)", 2012-2014. Together with our Chair, HEI and NGOs busy with the problems of intercultural relations from Georgia, Israel, Austria, Germany, and Estonia participate in the project which is aimed at designing, piloting and implementing curricular reform which promotes Multicultural Education and Cultural Diversity Training, facilitating the exchange and sharing of knowledge among professionals involved in education.

Two syllabi were elaborated by our Chair during the first year of the project: *Identity through Memory; Multiethnic and Multicultural Georgia*. Piloting process of the abovementioned as well as other syllabi prepared by the participants of the project will start from 2013-2013 academic year, later on, piloted programs will be integrated into the curriculum of the Israeli and Georgian participating universities and colleges that specialize in teacher-training and education.

- 2. EuroClio program "Sharing History, Cultural Dialogues". Participants Associations of History Educations from Georgia, Armenia, Azerbaijan, Ukraine, Moldova. 2012-2014. The project aims at development of the educational materials which will be included in a cross-border source-based innovative teaching tool to be commonly used in the countries involved in the program.
- **3.** GAHE project (supported by the embassy of Switzerland in Georgia) "Cultural Education" (2013). Trainings for the school teachers in different regions of Georgia are foreseen by the project. The first two trainings were conducted by Nino Chikovani in the multiethnic region of Kvemo Kartli cities Marneuli and Bolnisi (May-June 2013).
- **4.** DAAD project aimed at the **creation of regional E-portal** for overcoming conflicting memories through exchange of information between the young historians of Georgia, Armenia, Azerbaijan (2012-2013).

#### **Implemented Projects**

1. EuroClio/MATRA project "Teaching Tolerance through History Education", 2008-2010. The UNESCO Chair collaborated with the Georgian Association of History Educators for preparing the teaching tool "How we Lived Together in Georgia in the 20<sup>th</sup> Century" which was published in 2012.

- 2. Under the initiative of the Ministry of Education and Science of Georgia, in 2011 the new subject "World Culture" was introduced as an elective sourse to the 10-12th grade students of the secondary schools. The course will contribute to make the students aware of the culture as the basis for the similarities and differences; to develop the positive attitude towards the cultural diversity, elaborate the skills of tolerance and successful communication in multicultural environment. The textbook for the new subject was created by the members of the Chair in cooperation with the school teacher and psychologist. In 2012-2013, the subject was selected by more than 1000 public and private schools of Georgia.
- 3. Trainings for the teachers of the secondary schools of Georgia were conducted by the members of the UNESCO Chair. In the 25 training centers of Georgia the teachers of public and private schools from the regions of Kakheti, Kvemo Kartli, Shida Kartli, Imereti, Guria, Adjara, Racha-Lechkhumi, Svaneti, Mtskheta-Mtianeti, Samtskhe-Javakheti and Tbilisi were trained.
- 4. In cooperation with the Ministry of Education and Science of Georgia, essay competition for the secondary schools' students in the subject "World Culture" was organized. On 28 December 2012, 22 winners students of 10-12<sup>th</sup> grades of secondary schools of Georgia were awarded with diplomas and prizes.
- 5. Cultural Diversity Laboratory (CDL) was established in 2011 on the basis of the Institute of Cultural Studies and UNESCO Chair in Intercultural Dialogue. The aim of the Laboratory is to deepen relationships between Tbilisi State University and Secondary Educational Institutions of Georgia. The laboratory will contribute to the interest of students in the new subject "World Culture". Activities of Laboratory will stimulate perception of cultural diversity as a value which should be respected and facilitated.

During 2011-2012, the following activities were implemented by CDL:

- Regular meetings with the teachers and students of secondary schools of Tbilisi and regions. Topics discussed at the meetings: "The Role of the Environment in the Development of Thinking" (professor Malkhaz Makashvili); "Urban Lifestyle" (professor Lado Vardosanidze); "Culture and Politics" (professor Malkhaz Matsaberidze); Cultural Universals (professor Giorgi Nijaradze); Culture Shock" (professor Giorgi Lobjanidze), etc.
- Meeting of the teachers and students of Tbilisi, Rustavi and Sagaredjo secondary schools with professor Pal Tamas, director of the Institute of Sociology, Academy of Sciences, Hungary. Professor held the speech on the topic "The image of the World you will live in".
- Film screenings and following discussions;

#### **International Conferences**

Members of the Chair participate in different local and international meetings on the problems of intercultural/interreligious relations and dialogue:

- International Workshop "Citizenship, Language and Language Conflicts in the Context of European Integration" (Chisinau, Moldova State University, September 9-14, 2012). The paper "Ethnic Minorities and the State Language in Georgia" was presented by professor Nino Chikovani.
- 2nd International Symposium on History Education (Trabzon, Turkey, June 14-16, 2012). Stuff members of the Institute of Cultural Studies, assistant professor Ivane Tsereteli and PhD student Irakli Chkhaidze participated in the symposium. The paper "Towards Multiethnic Georgian Nation? Key Aspects of History Teaching in the Post-Soviet Georgia" was presented, discussing the main stages of transformation of history teaching and future perspectives in Georgia.
- 2nd International Forum of Culturologists "Role of Cultural Policy in the State Development" (Baku, Azerbaijan, June 11-12, 2012). Professor Nino Chikovani presented the paper "Cultural Policy and the Problems of Civic Integration in Georgia".
- International Symposium on "Narrative and Reconciliation in the South Caucasus" (Washington University in St. Louis, USA, April 30, 2012). The paper "The Georgian Historical Narrative: From pre-Soviet to post-Soviet Nationalism" was presented by professor Nino Chikovani.
- International conference "Role and Responsibility of Religious Communities and Civil Society for Conflict Resolution in South Caucasus" (Vienna, September 2011. Professor Nino Chikovani and associate professor Ketevan Kakitelashvili participated in the conference.

#### **Other Activities**

- **1.** Students' scientific conferences on the problems of intercultural relations are held on the annual basis.
- 2. Teaching courses "Foundations of Intercultural Dialogue" and "Cultural Police" are included in the curriculum of the BA and MA programs in Cultural Studies. Field practice aimed at familiarization of the students with the ethnic/religious/cultural diversity of Tbilisi will start from 2013-2014 academic year.
- **3.** Tours for students in the different regions of Georgia (Batumi, Adjaritskhali gorge, Borjomi, Dmanisi, Bolnisi, Shiomgvime, Ananuri, Stephantsminda, Racha, etc.) are organized by the Chair. They are aimed to introduce ethnographic and ethnic diversity of the country as well as the experience of intercultural dialogue and problems existing in this sphere. Exhibitions of students' photographs reflecting results of these tours are organized at the end of academic year.
- **4.** Annual scientific journal "Civilization Researches" has been published by Tbilisi University Press since 1999. According to the agreement achieved at the meeting organized by UNESCO in 2007 at Iv.Javakhishvili Tbilisi State University, the journal was transformed into the international edition.
- **5.** News regarding the activities of the UNESCO Chair are reflected on the bilingual website of the Institute of Cultural Studies <a href="https://www.culturedialogue.com">www.culturedialogue.com</a>, section UNESCO Chair.



# Director/Chairholder: Paraskevi Naskou-Perraki, Professor of International Law and International Organizations University of Macedonia Department of International and European Studies Thessaloniki Greece

#### A. Introduction

The UNESCO Chair in Intercultural Policy for an Active Citizenship and Solidarity was inaugurated on 2004 at the Department of International and European Studies, University of Macedonia following the decision ED/HED/ICE/CP 22/03/2004 of the Secretariat and the Division of Higher Education, and after the special agreement signed by Mr. Tsiotras, former Rector of the University of Macedonia and former Director of UNITWIN Mr. Georges Haddad.

The goal of the UNESCO Chair is the promotion of research, education, dissemination of information and vocational training in the field of intercultural policy. The term "Intercultural Policy" is a term that appears in the every activity of UNESCO. This term indicates that all members must use every means to promote the respect of the cultural heritage of each person or group of persons, the respect of human rights, the promotion of equality of opportunities and the best possible integration for each person or group of persons within the society, the elimination of racial discrimination with the ultimate purpose of peaceful cohabitation of all people who live in a country, but also between states in a peaceful globalized environment.

The outcomes of the work of UNESCO Chair have been to promote the protection of human rights, with emphasis on the right to education, and the promotion of human rights education, intercultural policy, intercultural dialogue and intercultural education at all levels of our society (academic, civil, etc.). The UNESCO Chairholder has established a network between the UNESCO Chair and the museums in Thessaloniki and cooperate with the Municipality of Thessaloniki and the Direction of Secondary Education in order to promote the goals of UNESCO. The outcomes include a remarkable contribution to research, publications, raising awareness and distribution of information concerning the protection of human rights and cultural diversity in order to achieve an active citizenship, in other words, a democratic citizenship. Another aim for the UNESCO Chair is to establish cooperation with NGO's, and particularly with the ones involved with the protection of vulnerable groups, such as immigrants, refugees, disable etc.

The UNESCO Chair progressively appeals to more and more students every year who wish to be involved in various aspects of the work of the Chair as internees. At the same time Professor P. Naskou-Perraki, the UNESCO Chairholder is invited to numerous events and conferences to lecture on human rights and the promotion of intercultural dialogue, and has contributed significantly to nurturing and establishing networks and links across academic disciplines as well as other social, public policy and civil society areas.

The work of the UNESCO Chair has contributed significantly to raising awareness on the protection of human rights; this is evidenced in the collaboration with schools of primary and secondary education; receiving funding from public bodies on UNESCO Chair's publications; as well as in publishing leaflets and books which are distributed for free to schools and University students. For example, following a conference with representatives of primary education, UNESCO Chair undertook the preparation of a leaflet on the Rules of Behaviour towards people with disabilities. The publication costs for this leaflet were initially provided by the General Secretariat of the Ministry Press. The leaflet was distributed to all public sectors and schools. Currently, the UNESCO Chair is in talks with the Greek-German School of Athens with regard to the reproduction of this leaflet. The UNESCO Chair intends to distribute electronically this leaflet on the rules of behaviour towards people with disabilities in order to reach out to the general public and disseminate information on the protection of the rights of people with disabilities. UNESCO Chair has uploaded this leaflet on the website of UNESCO Chair (http://afroditi.uom.gr/chaireunesco/) so that it can be accessible to any one. The value of this leaflet is further attested by the fact that the Library of the Ministry of Press has requested for the electronic version of this leaflet in order to upload it on the website of the Library.

The UNESCO Chairholder, Professor P. Naskou-Perraki, and the scientific collaborator to the UNESCO Chair, Dr. K. Chainoglou, have been invited to teach in English at postgraduate level the module of "UNESCO and Culture" which is part of the MA in Law, Arts and Economy of the International Hellenic University (October 2012-January 2013). For the preparation of the module, all teaching materials and legal instruments on the protection of culture were prepared by the collaborators of the Chair.

#### **B.** Education

Various courses are taught at the University which aim in human rights education and the promotion of cultural diversity and intercultural dialogue as a means to gain an active/democratic citizenship.

At the Department of International and European Studies, the courses of "International Protection of Human Rights" and "Cultural Diplomacy" are offered at undergraduate level. The course of "International Protection on Human Rights" is taught to undergraduate Erasmus students in English. On postgraduate level the course of "Human Rights and the Rights of the Child" is taught at the Master on European Youth Policies.

Moreover, for the academic year 2012-2013, the UNESCO Chairholder, Professor P. Naskou-Perraki, which is part of the MA in Law, Arts and Economy of the International Hellenic University (October 2012-January 2013).

#### C. Training/Interships

Training and research at the UNESCO Chair are materializing through internship at UNESCO Chair. The main purpose of offering an internship to undergraduate and postgraduate students from all universities of the North Greece at the UNESCO Chair is to familiarize students with the purposes and the programmes of UNESCO at global and regional level. Under the supervision of the UNESCO Chairholder the students are encouraged to study the international instruments under which the protection of human rights is guaranteed. This year's research and training is focused on culture, cultural rights and cultural heritage.

Furthermore, the previous years UNESCO Chair's research areas were on the right to education and Intercultural Education (2010 - 2011), the Elimination of Racism and Xenophobia, Intolerance (2011 - 2012).

#### **D.** Conferences/Seminars

Since 2004 the Director of the UNESCO Chair has participated in several conferences and has delivered lectures on diverse issues concerning the protection and the promotion of human rights. Emphasis was given on the rights of women and children, the protection of refugees, the rights of disable people, the right to intercultural education, the social integration of Roma women and children, the right to religion and intolerance, the context of EU citizenship, the freedom of expression etc.

Moreover, the scientific collaborator to the UNESCO Chair, Dr. K. Chainoglou has participated in conferences on the rights of disable people and the European framework on freedom of expression.

Also, Mr. Tsiftzis, LLM in Public International Law and collaborator to the UNESCO Chair, has given lectures on the context of the UN convention on the rights of Disable Persons and on the Intercultural Dialogue.

#### E. Conferences organized by the UNESCO Chair

As mentioned above emphasis was given at UNESCO's priorities and at Intercultural Diplomacy. Thus the last year UNESCO Chair has organized two conferences on the matter of Diplomacy. The one was upon "The Role of Diplomacy in Inter-religious Relations" and the other on "Diplomacy in the 21<sup>st</sup> Century".

Moreover, UNESCO Chair has invited several experts of the field of education and cultural diversity. For instance,

Mrs. K. Stenou, Director of Intercultural Dialogue of UNESCO,

Mr. K. Tararas, Programme Specialist, Sector for Social and Human Sciences of UNESCO,

Dr. Mr. Stavros Kamaroudis, Assistant Professor of the University of Western Macedonia,

Dr. Mrs. P. Adam-Veleni, Director of Archaeological Museum of Thessaloniki,

- Dr. Mr. A. Chatzinikolaou, from Secondary Education, on Intercultural Education and Intercultural Policy,
- Dr. Mr. B. Pissalides, on Intercultural Communication,
- Mr. G. Anastasopoulos,
- Ms. Magka, Representative of the Roma Women of Dendropotamos in Thessaloniki,

#### F. Publications

- 1. P. Naskou-Perraki, D. Bachtsevanidou (eds.)- Preface: A. Tzitzikosta, *UNESCO Conventions*, No. 1 Publications of UNESCO Chair University of Macedonia- Director: P. Naskou-Perraki (Ant. N. Sakkoulas, Athens-Komotini, 2008) [in english and greek]
- 2. P. Naskou-Perraki, K. Chainoglou, and M. Tsakiri (eds.), *The protection of the rights of women: International Instruments at universal and regional level*, No. 2 Publications of UNESCO Chair University of Macedonia- Director: P. Naskou-Perraki (Ant. N. Sakkoulas, Athens-Komotini, 2008) [in Greek]
- 3. P. Naskou-Perraki (with the contribution of K. Chainoglou, M. Vagias), *Protection mechanisms of human rights: International Instruments, theory and practice*, No. 3 Publications of UNESCO Chair University of Macedonia-Director: P. Naskou-Perraki (Ant. N. Sakkoulas, Athens-Komotini, 2008) [in Greek]
- 4. Children's etiquette in everyday contact with disabled people, (The Secretary General of Communications and Ministry of Press, Athens-Komotini, 2008) [in Greek]
- 5. P. Naskou-Perraki, (with the contribution of K. Chainoglou, M. Vagias, S. Katsoulis), *International Mechanisms Protecting Human Rights: Texts, comments and case law*, No. 4 Publications of UNESCO Chair University of Macedonia- Director: P. Naskou-Perraki (Ant. N. Sakkoulas, Athens-Komotini, 2010) [in English]
- 6. Antonia Zervaki, "The concept of world cultural and natural heritage: The contribution of UNESCO", No. 5 Publications of UNESCO Chair University of Macedonia- Director: P. Naskou-Perraki (Ant. N. Sakkoulas, Athens-Komotini, 2010) [in Greek]
- 7. P. Naskou-Perraki, Th. Chiou-Maniatopoulou, "The protection of women's rights in the European Union", Ant. N. Sakkoulas, Athens-Komotini, 2010) [in english]
- 8. Childern's Rights and Duties in School, Thessaloniki, 2011 (booklet with the cooperation of Hellenic College of Thessaloniki) [in greek]
- 9. P. Naskou-Perraki, *Collection of International Legal Instruments on the Protection of Human Rights at Global and Regional Level* (Publications of the University of Macedonia, Thessaloniki, 2012) [in Greek]
- 10. P. Naskou-Perraki, Collection of International Legal Instruments on the International Humanitarian Law and International Criminal Law (Publications of the University of Macedonia, Thessaloniki, 2012) [in Greek]

11. P. Naskou-Perraki, K. Tararas, K. Chainoglou (eds.), "Human Rights: Answers and Questions", (Ant. N. Sakkoulas, Athens-Komotini, 2013), Translation of the UNESCO Book "Human Rights: Answers and Questions" [in Greek]

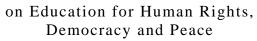
Also, a number of books are in preparation:

1) Professor P. Naskou-Perraki and a group of young academics under her supervision are preparing a book on the right to education and intercultural education [in Greek]. The purpose of this book is to present how the right to education is implemented at global, regional and national level, especially with regard to vulnerable groups, i.e. immigrants, refugees, repatriated Greeks, and Roma. The book benefits from intriguing analysis of various dimensions of the right to education.



#### ARISTOTLE UNIVERSITY OF THESSALONIKI

#### UNESCO CHAIR





#### **UNESCO/UNITWIN Award 2002**

Thessaloniki, 30<sup>th</sup> May 2013

Ms Rosanna Santesso
Programme Specialist, Science Unit
UNESCO Regional Bureau
for Science and Culture in Europe, Venice (Italy)

Dear Ms Santesso,

Thank you very much for your prompt reply and for being so kind as to send us all the information regarding the South East European Regional Forum of UNESCO Chairs (Istanbul, June 12-13, 2013) on May 28<sup>th</sup>. I would also like to thank you for the information you provided to the secretary of the UNESCO Chair during our telephone conversation with your Office.

On behalf of the UNESCO Chair of the Aristotle University of Thessaloniki, I would like to congratulate you on the initiative of the UNESCO Regional Bureau (Venice) to organize this important Forum.

We would wish that the Forum of UNESCO Chairs had the possibility to include as well UNESCO Chairs active in fields other than Culture and Science, so that the UNESCO Regional Bureau could utilize their long experience in widely interdisciplinary subjects.

It is my pleasure on this occasion to send you some information regarding the UNESCO Chair of A.U.Th. (founded in 1997), which I am honored to direct. I would like to add that the aforementioned UNESCO Chair of A.U.Th. participates as the Coordinating Academic Unit for Greece in the *European Master Program* 

for Human Rights and Democratization, which is administrated by the "European InterUniversity Centre" of the same name (seated in Venice).

I hope that I will have the chance to visit the UNESCO Regional Bureau and to meet you in person during one of my future visits to Venice within the framework of the aforementioned Master Program.

I heartily wish you a lot of success for the proceedings of the Forum of the UNESCO Chairs and I hope they will lead to creative future collaborations.

Yours sincerely,

Dimitra Papadopoulou

Prof. Emer., School of Psychology, A.U.Th.

Director of the UNESCO Chair of A.U.Th.

#### Information:

UNESCO Chair on Education for Human Rights, Democracy and Peace

Director: Dr. Dimitra Papadopoulou

Professor Emeritus, School of Psychology/A.U.Th.

Aristotle University of Thessaloniki

Address: P.O. Box 48 541 24, Thessaloniki

Tel.: +30 2310.99.5311, 99.7361 Fax: +30 2310.99.5311, 99.7361 E-mail: dipeace@psy.auth.gr



#### ARISTOTLE UNIVERSITY OF THESSALONIKI

#### UNESCO CHAIR



on Education for Human Rights, Democracy and Peace

#### **UNESCO/UNITWIN Award 2002**

The UNESCO Chair of the Aristotle University of Thessaloniki on Education for Human Rights, Democracy and Peace was established in 1997, based on a Joint Agreement signed between UNESCO and A.U.Th. It was the first UNESCO Chair to be created in a Greek University. This "Chair" is the product of the development and institutionalization of two earlier initiatives: a) the Peace and Human Rights Education Programme which was introduced by Professor Dimitra Papadopoulou in the School of Psychology/A.U.Th. in 1986, and expanded in 1993-94 to an interfaculty interdisciplinary programme, and b) the educational activities of the Institute of Education for Peace, founded by Prof. D. Papadopoulou in 1986.

The aim of the UNESCO Chair is to promote the values of a Culture of Human Rights, Peace and Non Violence within the University, as well as to the other two educational levels (primary and secondary education) in order to increase the awareness and sensitivity of academics, students and public opinion to them.

At the undergraduate level, the UNESCO Chair organizes and runs an interfaculty interdisciplinary programme on Education for Human Rights and Peace (entitled: "Contemporary world problems and the scientist's responsibility: an interdisciplinary approach"), in which students as well as professors come from all Schools of the Aristotle University. In this Programme more than 100 academics have taught until now (1994-2010), coming from about 35 Schools of A.U.Th (Schools of Psychology, Philosophy, Pedagogy, Law, Medicine, Veterinary Medicine, Physics, Chemistry, Biology etc.) as well as from other Universities of Greece (University of Thessaly, University of Ioannina, University of Aegean, etc.)

Over 4000 students have already taken this course, attending lectures on more than 100 different subjects, such as:• various aspects of global environmental problems, •issues related to natural resources and their distribution, •international organizations and their contribution to the solution of international problems, •international efforts for the protection of human rights, •positive and negative uses of nuclear power, •chemical and biological warfare, •AIDS, •drugs, •child neglect and abuse, •illiteracy, •social exclusion, •a culture of peace and non-violence, •homeless children, •racism and xenophobia, •refugees, •the UNESCO programmes towards a culture of human rights and peace, •intercultural dialogue, etc.

At the postgraduate level, the UNESCO Chair participates in the *European Master Programme on Human Rights and Democratization*, which is co-organized by 41 Universities from all Member-States of the European Union. The UNESCO Chair of the Aristotle University is one of the founding Universities of this M.A. Programme and serves as the coordinating University for Greece. Within the framework of this M.A. Programme a wide exchange of graduate students takes place at a pan-European level. Thirty one (31) Master Theses have been elaborated so far by our foreign M.A students, many of which have won distinctions on a pan-European level.

Thirty-six (36) professors from 10 Schools of A.U.Th., as well as representatives of International Organisations (UNESCO, UNICEF), have taught and supervised students' theses in this postgraduate course offered every year by the UNESCO Chair/A.U.Th.

The Chair cooperates also with primary and secondary school teachers of all scientific fields throughout the country, with the aim of promoting and cultivating the values of a Culture of Peace in schools. For this purpose, the "Chair" has created the *National Network of Schoolteachers for a Culture of Peace and Non Violence*, which enjoys the active participation of a large number of teachers.

The UNESCO Chair links the University of Thessaloniki with International Intergovernmental Organisations (UNESCO, UNICEF etc.), with the Global Network of about 700 UNESCO Chairs and 70 UNESCO/UNITWIN Networks (in 800 Universities and Institutions located in 128 countries), with the Network of 41 European Universities which co-organize the *Master's Programme on Human Rights and Democratization*, as well as with many International and Greek NGOs.

All the activities of the UNESCO Chair, as well as its administration, are carried out by volunteers (University professors, teachers of primary and secondary education, students, members of NGOs, etc.) who offer their time and knowledge for free.

In 2002, UNESCO awarded the UNESCO Chair / A.U.Th. the UNESCO UNITWIN International Award for its educational / academic work because, in the wording of the Awarding Decision, "...the UNESCO Chair at Aristotle University of Thessaloniki in Greece, illustrates the great potential of Higher Education to contribute to attaining the constitutional mission of UNESCO: "to construct peace in the minds of men and women".

Professor Emeritus Dimitra Papadopoulou

May 2013

#### Information:

UNESCO Chair on Education for Human Rights, Democracy and Peace

Director: Dr. Dimitra Papadopoulou

Professor Emeritus, School of Psychology/A.U.Th.

Aristotle University of Thessaloniki

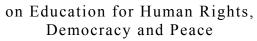
Address: P.O. Box 48 541 24, Thessaloniki

Tel.: +30 2310.99.5311, 99.7361 Fax: +30 2310.99.5311, 99.7361 E-mail: <u>dipeace@psy.auth.gr</u>



## ARISTOTLE UNIVERSITY OF THESSALONIKI.

#### **UNESCO CHAIR**





## 2013

Academic Year 2012-2013, spring semester

# **Interfaculty Interdisciplinary Programme** on Education for Human Rights and Peace

Course title: Contemporary World Problems and the Scientist's Responsibility: an interdisciplinary approach

Organisation and coordination of the programme: Prof. Dimitra Papadopoulou, Director of the UNESCO Chair

Seminar title	Lecturer
1. Introduction and discussion on the programme (13/2/2013)	D. Papadopoulou, Professor Emer. School of Psychology UNESCO Chairholder
2. UNESCO – Education for a Culture of Human Rights and Peace (20/2/2013)	D. Papadopoulou, Professor Emer. School of Psychology UNESCO Chairholder
3. UNESCO – Education for a Culture of Human Rights and Peace (27/2/2013)	D. Papadopoulou, Professor Emer. School of Psychology UNESCO Chairholder
4. The freedom of religion at the national and international level (6/3/2013)	D. Nikolakakis, Lecturer School of Pastoral and Social Theology
5. The Question of Peace in the relations between the different Religions (13/3/2013)	A. Ziaka, Assistant Professor School of Theology
6. Environment, quality of life and human rights (20/3/2013)	A. Kamarianos, Assoc. Professor, Faculty of Veterinary Medicine

7. Biodiversity of Greece. National and European policy for the conservation of a global heritage (27/3/2013)

G. Korakis, Assistant Professor, Department of Forestry and Management of the Environment and Natural Resources Democritus University of Thrace

8. The Right to "Our" family life: utopia or reality in modern society?

(3/4/2013)

D. Kogidou, Professor of Psychology School of Primary Education Dean of the Faculty of Education

9. Children's Rights and the attribution of justice (10/4/2013)

A. Pitsela, Associate Professor School of Law

10. The cinema of migration as an instrument of anti-racist education

(17/4/2013)

P. Pantazis, Associate Professor School of Film Studies

11. Child labor and Children's Rights (24/4/2013)

T. Koutroukis, Assistant Professor Department of Financial and Management Engineering University of the Aegean

12. Round Table:

Educational actions in schools towards a culture of Peace and Non Violence

(15/5/2013)

Secondary School Teachers

13. Discussion with students and evaluation of the Programme

(22/5/2012)

Lecturers of the Programme

The course (4 hours weekly, 6 ECTS) is part of the academic / educational Programme of the UNESCO Chair of A.U.Th.

It is offered by the School of Psychology as an Elective Course to students of all Schools in the Aristotle University of Thessaloniki.

Lecturers are members of the faculty of **A.U.Th.**, unless otherwise noted.

Lectures take place every **Wednesday**, **5-9 p.m.**, in Room 106 (New Building of the School of Philosophy).

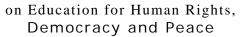
Course code number: Ψ-678

Course start date: Wednesday, February 13, 2013



#### ARISTOTLE UNIVERSITY OF THESSALONIKI

#### UNESCO CHAIR





#### **UNESCO/UNITWIN Award 2002**

#### 2011

#### **International Year for Volunteers**

(UN General Assembly Resolution A/RES/63/153 – 18/12/2008)

Academic Year 2010-2011, spring semester

# **Interfaculty Interdisciplinary Programme On Education for Peace and Human Rights**

Course title: Contemporary World Problems and the Scientist's Responsibility: an interdisciplinary approach

Organisation and coordination of the programme: Prof. Dimitra Papadopoulou, UNESCO Chairholder

Seminar title			Lecturer	
1.	Introduction and discussion	on the programme (16/2/2011)	D. Papadopoulou, Prof. Emeritus, School of Psychology UNESCO Chairholder	
2.	UNESCO – Education for a GRights and Peace	Culture of Human (23/2/2011)	D. Papadopoulou, Prof. Emeritus, School of Psychology UNESCO Chairholder	
3.	Human rights: a philosoph	ical perspective (2/3/2011)	F. Paionidis, Associate Professor School of Philosophy and Pedagogy	
4.	"Synthetic Life" and life as a Moral and social challenges	3	C. Tsironis, Lecturer School of Theology	
5.	Human rights: Basic conce	pts and developments (16/3/2011)	L. Papadopoulos, Lecturer School of Law	
6.	Cultural diversity, schools a an intercultural education	and the challenge of (23/3/2011)	A. Kesidou, Assistant Professor School of Philosophy and Pedagogy	

7. Child labor and Children's Rights T. Koutroukis, Assistant Professor (30/3/2011)Department of Financial and Management Engineering University of the Aegean 8. Children's Rights and the attribution of A. Pitsela, Associate Professor School of Law justice (6/4/2011)9. The rights of mentally ill individuals E. Georgaka, Assistant Professor (13/4/2011)School of Psychology 10. Human rights and penal courts A. Papadamakis, Professor (4/5/2011)School of Law 11. Theorists of non-violence: Thoreau, Tolstoy A. Georgopoulos, Professor School of Early Childhood Education Ghandi, Martin Luther King (11/5/2011)12. The contribution of Psychology to the building D. Papadopoulou, Prof. Emeritus of a Culture of Peace School of Psychology (18/5/2011)**UNESCO** Chairholder 13. Volunteerism. The identity and work of ARSIS (N. Gavalas, Founding Non-Governmental Organizations member of ARSIS) (25/5/2011) Doctors of the World (M. Hahamidou, Psychiatrist)

The course (4 hours weekly, 4 credits) is part of the academic / educational Programme of the UNESCO Chair of A.U.Th.

It is offered by the School of Psychology as an **elective course** to students of all Schools in the Aristotle University of Thessaloniki.

Lecturers are academic members of A.U.Th., unless otherwise mentioned.

Lectures take place every **Wednesday**, **5-9 p.m.**, in Room 106 (New Building of the School of Philosophy).

Course code number: 463

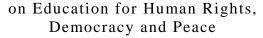
Course start date: Wednesday, 16 February 2011

August 2010 – August 2011 International Year for Youth



# ARISTOTLE UNIVERSITY OF THESSALONIKI

#### **UNESCO CHAIR**





# 2010 UNESCO – International Year for the Rapprochement of Cultures

Academic Year 2009-2010, spring semester

# **Interfaculty Interdisciplinary Programme** on Education for Peace and Human Rights

Course title: Contemporary World Problems and the Scientist's Responsibility: an interdisciplinary approach

Organisation and coordination of the Programme: Prof. Dimitra Papadopoulou, UNESCO Chairholder

Seminar title	Lecturer
1. Introduction and discussion on the Programme (17/02/2010)	D. Papadopoulou, Professor Emeritus, School of Psychology, UNESCO Chairholder
2./3. UNESCO – Education for a Culture of Human Rights and Peace (24/02/2010 & 03/03/2010)	D. Papadopoulou, Professor Emeritus, School of Psychology, UNESCO Chairholder
4. Human Rights Education for/with young people. Training, Modules, Initiatives of the Council of Europe and NGO's  (10/03/2010)	C. Tsironis, Lecturer, School of Theology
5. Human Rights. Basic concepts and developments (17/03/2010)	L. Papadopoulos, Lecturer, School of Law
6. Women: subject of multiple discrimination (24/03/2010)	C. Deliyianni-Dimitrakou, Assoc. Professor, School of Law

7. Cultural Diversity in Schools and the Challenge of Intercultural Education School of Philosophy and Pedagogy (14/04/2010)8. Children's rights and their implementation in P. Naskou-Perraki, Professor, Department of International and Greece. (21/04/2010) European Studies, University of Macedonia 9. Child Labour and Children's Rights Th. Koutroukis, Assist. Professor, Department of Financial and Management Engineering, (28/04/2010) University of the Aegean 10. Theorists of non-violence: Thoreau, Tolstoy, A. Georgopoulos, Professor, Gandhi, Martin Luther King School of Early Childhood Education (05/05/2010)11. The ethics of preserving cultures: the impact of E. Ginou, PhD,

12. Discussion with students and evaluation of the Programme

Lecturers of the Programme

Educator of French Language,

(12/05/2010) Centre of Foreign Languages

A. Kesidou, Lecturer,

(19/05/2010)

The course (4 hours weekly, 4 credits) is part of the academic / educational Programme of the UNESCO Chair of A.U.Th and is offered to students of all Schools in the Aristotle University of Thessaloniki.

Lecturers are academic members of A.U.Th., unless otherwise mentioned.

Lectures take place every Wednesday, 5-9 pm, Room 106 (New Building of the School of Philosophy).

Course code number: 463

acculturation

Course start date: Wednesday, 17 February 2010

2001-2010 - International Decade for a Culture of Peace and Non-Violence for the Children of the World









UNESCO Chair in Sustainable Development and Territory Management

of Torino

## UNESCO Chair in Sustainable Development and Territory Management (900)

Established in 2010 at the University of Torino, Italy

#### Fields/Disciplines

Urban and rural development, environmental policies and conflicts, environmental health and environmental sustainable innovation.

#### Aims

Promote an integrated system of research, training, information and documentation in the field of sustainable development and territory management; facilitate collaboration between high-level, internationally recognized researchers and teaching staff of the University and other institutions in Italy and other regions, with special focus on Latin America and Euro-Mediterranean region.

#### **Objectives**

The specific objectives of this Chair are to train experts, professionals and consultants in:

- monitoring environmental and social quality of life at the local, regional, national and international levels, preventing natural and hazardous risks, and promoting sustainable development in consumption;
- preserving and promoting bio-cultural diversity by enhancing the local knowledge, traditions and heritage that are crucial aspects of sustainable development;
- leading the ecological transition at social, economic and production levels, guiding civil society, the private sector and public sector organizations towards new ways of production, distribution and consumption of energy, commodities and services;
- increase and improve international cooperation for research on environmental issues such as consumption, urban and rural development, environmental policies and conflicts, environmental health and environmental sustainable innovation, as well as scientific and technological strategies; increase and improve the international dissemination of research outcomes on environmental-related topics.

#### **Contact us:**

UNESCO Chair in Sustainable Development and Territory Management

University of Torino

Via Po 18, 10124 Torino, Italy Phone: +39.011.6702733 Email: unescochair@unito.it

Web site: www.unito.it/page/unescochair and Facebook UnescoChairTurin

#### **Strategy**

#### High education

Organize courses to form public and private experts, consultants and professionals capable of leading sustainable strategies at local and global level.

The objectives of the course is to train experts in scientific policies and sustainable development for local, regional, national and global bodies, providing them with the necessary skills to:

- cope with greenhouse gas emissions and other environmental risks;
- implement the "green job" transition;
- preserve and promote biological and cultural diversities;
- identify sustainable management for strategic resources such as water and energy;
- promote sustainable consumption;
- lead the environmental transition promoting bottom-up participation

•

#### Research

The main research topic

- Eco-Efficiency and rebound effect. Assessing models and socio-cultural determinants;
- Green Economy Scenarios in the Mediterranean Region;
- Sustainable Consumption Space and Time for sustainable lifestyles;
- Sustainable politics and environmental Governance;
- Socio-economic adaptation to climate change;
- Low energy and labour intensive economic process.
- Urban metabolism
- Social practices and sustainability

#### Networking/Dissemination

International links between research institutes, departments and universities guarantee high standards of research and education.

Such interlinking favours the knowledge flow, with the aim of accompanying and facilitating the decisions of policy makers and stakeholders.

Knowledge can be shared through forums, seminars, conventions aimed at assessing the educational and research processes and improving the training proposal.

#### **Ongoing activity**

#### Research Projects:

- DIMMER aims to create a District Information Modelling and Management system for Energy Reduction (DIMMER) able to collect, process and remotely visualize district level energy usage. The system will collect information provided by users using their personal devices and represent in real-time information collected by sensors installed in the buildings and along the distribution networks. At the core of the system, a processing engine will compute user-feedback actions in terms of suggestions where possible in real-time, about energy-positive and economically convenient actions. A number of client applications will be developed that are able to interact with the core system to collect and visualize district information remotely to end users.
- METAPOLIS aims to develop a roadmap for a reduction of GHG emissions by 2050 by revisiting the concept of urban metabolism moving beyond a mechanical input-output model to focus on conflicts among urban actors over its governing. On the basis of existing GHG emissions inventories, urban metabolism will be accounted in terms of direct and indirect energy consumed in order to evaluate future improvements. Special attention will be paid to food, mobility and housing (water and waste included) as urban sectors that account for most of urban energy consumption. Urban metabolism implies a range of socio-spatial practices brought by different agents: households, social actors, institutions and corporations. These interrelated practices will be investigated for understanding their potential for fostering post-carbon strategies.

- SMILE is the smart city model that will help Turin in the key projects definition of the Master Plan for Torino Smart City Planning. The UNESCO Chair is involved in the Energy Workgroup leading two specific research project, already approved by the Steering Committee and currently waiting to be funded:
  - o defining socio-environmental indicators for the detection of thermal comfort in indoor environments;
  - o accounting of indirect energy consumption through Energy Analysis Program (EAP) methods to evaluate the Urban Metabolism.

#### Summer School

- National summer school (23-27th July 2013, Certosa 1515, Avigliana): Punto e capo. Cibo, energia, mobilità, lavoro. Modelli e sperimentazioni per una società diversa, sostenibile e resiliente (Food, energy, mobility, work. Models and experiments for a diverse, sustainable and resilient society) organized by Turin Unesco Chair in collaboration with Università della Strada del Gruppo Abele, Città di Avigliana, Associazione per la Decrescita
- International summer school (summer 2014): Strategies and Tools for Mediterranean Governance towards Sustainable Development organized by Turin Unesco chair in collaboration with Parliamentary Assembly of Mediterranean and the UNITWIN/UNESCO Chairs network

#### Past activity

#### Summer School

- Science Communication Society SCS, National School for PhD candidates on "Science and Democracy". Bardonecchia, Villaggio Olimpico, December 9<sup>th</sup> -14<sup>th</sup> 2012;
- Science Communication Society SCS, National School for PhD candidates on "Science for the future.Innovation, sustainability, uncertainty". Turin, Museo Regionale di Scienze Naturali, July 3rd-8 th 2011.

#### Research:

Green Economy Scenarios in the Mediterranean Region (Germe): the main goal of the project is to study the relationship between socioeconomic (supply and demand level and composition, water and energy consumption, pollutants emissions, demographic trends, environmental policies) and environmental dynamics (pollution, CO2 concentration and climate change, water availability, etc.), with a specific focus on feedbacks existing between the two dimensions. Our primary focus will be on energy production and CO2 emissions. This implies to analyze, on the supply side, the dynamics of the energy sector and the spreading of low-carbon activities; and to study, on the demand side, the factors influencing consumer behaviour. A secondary focus, whose feasibility will be evaluated on the grounds of the results of first phase of the project, is related to water use, including water availability and management. The project has had a very interdisciplinary character involving economists, sociologists, natural scientists.

#### International conference

- Food security and climate change. Exploring and Planning Mediterranean Sustainability, Marrakech, Morocco, June 9<sup>th</sup> 2013 (side event of the 7<sup>th</sup> World Environmental Education Congress WEEC 2013);
- Knowledge and Policies for the Mediterranean Environmental Transition and climate change effects mitigation, Turin, Circolo dei Lettori, June 2nd 2012;
- Beyond North-South. For a sustainable development and a New Mediterranean Renaissance, Turin, La Venaria Reale. November 26<sup>th</sup> -27<sup>th</sup> 2011.

For further information on past activity see <a href="www.unito.it/page/unescochair">www.unito.it/page/unescochair</a>

#### Partners of previous activity

UNESCO, Paris

Italian National Commission for UNESCO, Italy

UNESCO/Cousteau Ecotechnie Chair for Sustainable Development, Future University of Khartoun, Sudan;

UNESCO Chair on Eremology; Ghent University, Ghent, Belgium;

UNESCO Chair Education, training and research for sustainable development; Université Michel de Montaigne, Bordeaux, France;

UNESCO Chair on World Food Systems, Institut des régions chaudes, Montpellier SupAgro, Montpellier, France:

UNESCO Chair in Technologies for Development, Lausanne, Switzerland

Chaire UNESCO d'Innovation pour le développement durable – 651, Ecole Centrale Marseille, France;

Chaire UNESCO in Mediterranean Studies – 528, Cadi Ayyad University of Marrakech, Morocco;

Chaire UNESCO Eau, Femmes et pouvoir de décisions – 706, Université Al Akhawayn d'Ifrane, Marocco;

UNESCO Chair in Social and Spatial Inclusion of International Migrants: Urban Policies and Practice – 816, University of Venezia, Italy;

Wise Coastal Practices for Sustainable Human Development, Europe Region (WICOP-EUROPE) Network – 588, Universadad de Cádiz, Spain

Chair Unesco in Education for Sustainable Development – 799, University of Crete, Greece

Parliamentary Assembly of the Mediterranean (PAM)

International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM)

Community of Mediterranean Universities (CMU) – 333, University of Bari

Tanta University, Egypt

University of Neuchâtel, Swizerland

Laboratoire "Patrimoine" - Université de Manouba, Tunis

IDEMEC - Institute d'Ethnologie Méditerranéenne, Européenne et Comparative d'Aix-en Provence

NTNU-Norwegian University of Science and Technology, Industrial Ecology Program/Department of Product Design; Business Line Manager Societal Innovation & Economy, TNO)

University of Geneve

Facultad de Agronomía, Universidad Central de Venezuela

University of Pisa

University of Gastronomic Sciences of Pollenzo

University of Napoli, "L'Orientale"

University of Palermo

ICAR Department, Politecnico di Bari

Mohammed VI Foundation for Environmental Protection, Morocco;

Jardin Botanico de Bogotà José Celelstino Mutis, Bogota, Colombia;

Fondazione IDIS - Città della Scienza di Napoli / EuroMediterranean Observatory, Napoli, Italy;

Scholé Futuro ONLUS, Torino, Italy;

Kyoto Club, Roma, Italy.





# UNESCO Department in Inter-cultural and Inter-religious Exchanges University of Bucharest, Romania

Bvd. Schitu Măgureanu nr 1, etaj 2, birou nr. 14, 050025, București, România Telefon: +40 21 310 84 08; Fax: +40 31 810 58 32; Mobil: +40.744.48.13.26 E-mail: office@interculturel.org; Web: www.interculturel.org

#### INTERNATIONAL COLLABORATION

This Department began its activity as an UNESCO Chair in 1999. Thanks to its importance it became Department in 2002. The main target of the Chair has been from its very beginning, firstly, to create an academic relationship within Europe and to promote the transfer of Know How from one place to the other in Europe. The full involvement of Swiss, German and French professors in the teaching staff of this Department realizes exactly that academic relationship. Furthermore, students of the Department or PhD candidates related to it were or are offered study periods in Swiss and German universities or other institutions of higher education. The three Master programs organized by the Department UNESCO are the following ones:

- Intercultural Communication
- Intercultural Management
- Business Administration (MBA)

The research projects in which the Department UNESCO Chair has been involved or is involved are the following ones:

- 2005-2008: Are there essential differences between East and West? South Eastern and Western Europe in a comparative framework (project supported by the SNFNS, Switzerland)
- 2006-2009: Welfare and Values in Europe: Transitions related to Religion, Minorities and Gender (project supported by the European Commission)
- 2009-2013: Violence and repression as discourse and practice in South Eastern Europe: an historical and comparative perspective (project supported by the SNFNS, Switzerland)
- 2010-2014: Translating God(s): Intercultural Theology and Interreligious Studies (project supported by the European Commission)

These research projects may even demonstrate that the interest of the Department goes till the border lines of the EU and beyond. This is also obvious, given the fact that Romania with its Black Sea cost is one of the open windows of the EU towards the Black Sea region and Central Asia. The Bucharest Department UNESCO is so, secondly, a natural bridge builder between Europe and Central Asia. Presently it is especially involved in that task.

When so, in September 2001, the Bucharest UNESCO Chair on the study of intercultural and interreligious exchanges became the initiator of the (worldwide) UNITWIN network for intercultural understanding that was in some way obvious given its existing or future possible relations with the UNESCO Chairs in Europe and eastwards. The Department UNESCO of Bucharest University, in strong collaboration with Fribourg University, Switzerland, organized the following conferences, in which the eastern and Central Asian UNESCO Chairs were, every time, especially invited:

2001, Bucharest, Romania	1st Meeting of the UNESCO Chairs in intercultural and interreligious Dialogue "Towards New Paradigms of Cross-Cultural and Inter-Religious Dialogue"	
2004, Bucharest, Romania	International Conference " Droits à l'éducation et à l'information interculturelles "	
2005, Fribourg, Switzerland	International Conference "Méthodologie du dialogue inter- culturel et interreligieux au regard des droits culturels "	
2006, Paris, France	Meeting of the UNESCO Chairs in intercultural and interreligious Dialogue.	
	Ceremony of signature of the UNITWIN/ UNITWIN Network on Inter-Religious Dialogue for Intercultural understanding	



Prof. Martin Hauser and Director General Köichirö Matsuura

2006, Kishinev, Moldova	International Conference "Globalisation et identité culturelle"
2007, Almaty, Kazakhstan	<ul> <li>Participation of the Chairholder/Network Coordinator at the International Conference "Central Asian Round Table on Intercultural Dialogue"</li> </ul>
Moscow, Russian Federation	- Participation of the Chairholder/Network Coordinator at the International Conference "Dialogue interculturel et interreligieux pour la paix et le développement durable "
2008, Lyon, France	<ul> <li>Participation of the Chairholder/Network Coordinator at the Ceremony of creation of the UNESCO Chair " Mémoire, Cultures et Interculturalité"</li> </ul>
Kiev, Ukraine	- Participation of the Chairholder/Network Coordinator and his assistant at the "FORUM ON HEIGHER EDUCATION" - Congress of the Black Sea Universities Network (BSUN)
2009, Sarajevo, Bosnia-Herzegovina	Participation of the Chairholder at the International Conference "Alliance of Civilizations first South-East European Regional Conference"
2010, Bucharest, Romania	Participation of the Chairholder at the International Conference "LE LIVRE. LA ROUMANIE. L'EUROPE."
2011, Bucharest, Romania	International Conference "Eurasian Inter-university Dialogues on Cooperation for Higher Education Development"
2012, Fribourg, Switzerland	<ul> <li>Participation of the Chairholder with a team at the International Conference "Improving the contribution of social sciences to minority issues in multicultural post-socialist societies"</li> </ul>
Kishinev, Moldova	- International Conference "La Violence dans le Sud-Est européen, discours, pratique et message. Société. Politique. Culture. Religion "

Actually, a number of approximately 150 students take the courses given by some 30 professors from Romanian, Swiss, German and French academic institutions. More than 130 students are graduates of the Department UNESCO / Bucharest University. Several PhD candidates related to the UNESCO Chair obtained their doctoral diploma.

# UNESCO CATEGORY II CENTER WATER FOR SUSTAINABLE DEVELOPMENT AND ADAPTATION TO CLIMATE CHANGE

On April 24<sup>th</sup>, 2013, in Paris, UNESCO's Director-General Irina Bokova and Serbian Minister of Education, Science and Technological Development, Žarko Obradović, signed an agreement on the founding of a new UNESCO Category II Centre **Water for Sustainable Development and Adaptation to Climate Change (WSDAC)**.

The Jaroslav Černi Institute for the Development of Water Resources (JCI) from Belgrade, Serbia, the leading national organization in the field of water, will provide the resources and expertise necessary for the operation of the WSDAC.

The overall scope of activities to be undertaken by the WSDAC is as follows:

- 1. Foster scientific coordination and exchange of information among various organizations involved in sustainable management of water resources and development of adaptation strategies due to climate change in collaboration with partner institutions in Serbia and South East Europe:
- 2. Disseminate, generate and provide scientific and technical information on water resources management issues for the formulation of sound policies leading to sustainable and integrated water resources management at the local, national, regional and global levels;
- Promote development of regional research programs, linking with regional and global initiatives, particularly focusing on the problem of sustainable water resources management under climate change conditions, within the framework of the relevant ongoing UNESCO initiatives, in particular the International Hydrological Programme (IHP), Water Chairs and Centers;
- Undertake effective capacity-building activities at institutional and professional levels to enhance human and institutional capacity in assessing the socioeconomic and climate change impact on water resources management applying advanced methods and technologies;
- 5. Organize an awareness raising program for various audiences, including policy-makers and the general public at the national and regional levels;
- 6. Disseminate results of research through seminars, workshops, training courses, conferences and periodic publications for the wider scientific community and IHP networks.

#### Major JCI and WSDAC activities:

#### 1. Organizing conferences

The organization of leading conferences in various water-related areas has been and will continue to be an important JCI and WSDAC activity. Over the past several years, JCI has organized a number of important international conferences, including:

- UNESCO XXIII Conference of the Danubian Countries on Hydrological Forecasting and Hydrological Bases of Water Management (2006)
- IWA Regional Conference: Groundwater Management in Large River Basins (2007)
- Planning and Management of Water Resources Systems (2008)

- IWA Balkans Regional Young Water Professionals Conference (2010)
- IWA Specialist Groundwater Conference (2011)
- Contemporary Issues of Adaptive Water Management (2012)

Most important planned conferences:

- UNESCO Symposium-cum-Expert Meeting "Emerging Substances in Water" on 9-11 July 2013 in Belgrade, which will gather leading global experts in the field of water;
- A thematic conference on water management in transition countries to be held in 2014, which is briefly discussed below; and
- 3<sup>rd</sup> IWA Specialist Groundwater Conference in 2015.

#### 2. Participation in capacity building activities

Partnering with the Delft University of Technology, under the auspices of UNESCO and supported by the governments of Yugoslavia and The Netherlands, in the 1980's JCI offered advanced courses for specialists from developing countries.

Apart from national activities, JCI and WSDAC have recently become involved in UNESCO capacity building efforts in African countries, such as:

- Training courses in flood protection and water management in Namibia;
- Training courses in flood protection in Benin;
- Training courses in water resources management in South Sudan and other countries; and
- Collaboration with the International Institute for Water and Environmental Engineering (2iE) in Burkina Faso on master's and doctoral programs.

JCI and WSDAC are particularly interested in generating water management plans in developing countries, given that they have the needed expertise and long-term experience.

#### 3. Development of top training courses in the field of water

Within the scope of JCI and WSDAC activities, special attention is being devoted to the development of outstanding training courses in various areas related to water, such as groundwater, management of water resources and the like.

#### 4. Institutional networking

Networking of institutions engaged in water-related activities has a special place among JCI and WSDAC efforts. Several agreements on collaboration and joint action in the field of water have recently been signed, including:

- Capital Normal University, Key Lab of 3D Acquisition and Application, Beijing, China (25 September 2012);
- International Institute for Water and Environmental Engineering (2iE), Ouagadougou, Burkina Faso (21 March 2013); and
- RC-IRBM Regional Centre on Integrated River Basin Management (represented by NWRI-National Water Resources Institute), Kaduna, Nigeria (23 May 2012).

#### 5. Water Management in South East Europe (SEE)

Most SEE countries are undergoing socioeconomic transition and have water management issues. They are basically transitioning to sustainable water management. In virtually all these countries heavy investment and considerable water sector adjustments are needed.

In general, SEE countries are moderately rich in water resources. It is important to note that there is an uneven distribution of well-watered and dry areas in the region; water resources generally decrease from the west to the east and from the north to the south.

It is likely that the situation will become even more complex in the future. According to most climate change predictions, the upward temperature gradient is expected to increase and, consequently, runoff and river discharges will likely decrease, as a result of natural processes and increasing water demand (particularly for irrigation/food production). It is expected that certain regions in SEE will become semi-arid and experience considerable water deficits.

Therefore, water awareness needs to be raised and the overall socio-economic system related to water improved through capacity and efficiency enhancements. The influence of global institutions needs to be adjusted to the specific needs of the SEE countries.

In developing the right approach to water management improvement, particular care needs to be exercised to properly address the economic situation of a given country and its richness in water.

Additionally, the rate of socioeconomic changes in transition countries requires a highly specific approach to this issue, which needs to be taken into account at the global level by UNESCO and other international organizations, such as the World Bank and similar institutions.

The desirable UNESCO strategy for transitional SEE countries includes:

- Popularization of thematic consideration of water sector issues (thematic conferences, enhancing local scientific capacities, contact with governments, etc.);
- Networking of research organizations and institutions of higher learning;
- Networking of organizations engaged in monitoring of changes (standardization of methods, exchange of data and experience, regional, etc.);
- Advising on advancement of national water funds and finding ways of ensuring their cooperation with international financial institutions
- Influence of global and regional institutions on local capacity building in the water sector

Regarding North-South cooperation in general, it is necessary to enhance cooperation and the transfer of transition experience.

As a first step, in May 2013 the Director of our new UNESCO Category II Center, Prof. Dr. Milan Dimkic, proposed at the 7<sup>th</sup> WWF Kick-off Meeting in Daegu to host a thematic conference on water management in transition countries in Belgrade in the spring of 2014. The aim of the conference is to provide guidance on water management in transition countries as one of the topics of WWF7. The conference will target countries like those of SEE and Africa.



# UNESCO Chair in Technologies for Development Cooperation and Development Center (CODEV) at EPFL

07.06.2013

Dr. Silvia Hostettler, Deputy Director CODEV, EPFL, Lausanne, Switzerland

#### **Executive Summary**

The Ecole Polytechnique Fédérale de Lausanne (EPFL) is persuaded of the importance of scientific cooperation with developing and emerging countries. For more than 30 years, EPFL specialists have been active in research, training, knowledge exchange with scientists of the South in a spirit of solidarity, specifically in the development of appropriate technologies for the South. In 2007, the Cooperation and Development Center (CODEV) has been awarded the UNESCO Chair in Technologies for Development with the following thematic fields: 1) Technologies for Sustainable Development of Habitat and Cities; 2) Information and Communication Technology for the Environment; 3) Science and Technology for Disaster Risk Reduction and; 4) Technologies for Sustainable Energy Production. Research and education activities conducted under the UNESCO Chair in Technologies for Development have developed rather successfully, especially the biennial conferences. The first UNESCO Conference focusing on "Technologies for Development" was organized in 2010 followed by the second UNESCO conference in 2012. These conferences are turning into flagship events attracting over 300 participants leading to a publication of the best papers presented at the conference. The next UNESCO conference will take place in June 2014 with the title "UNESCO Chair in Technologies for Development: What is Essential?" In terms of education, two postgraduate courses in the fields of management of development projects as well as in disaster risk reduction have been. The participants of these courses from developed, developing and emerging countries are trained at the theoretical as well as at the practical level. Furthermore, a number of workshops and conferences are organized in particular on the topic of sustainable development of habitat and cities. With regard to research activities conducted under the UNESCO Chair, the research project focusing on information and communication technology for the environment in Burkina Faso, "Info4Dourou", has received additional funds and is in the process of branching out to Niger. Being a UNESCO Chair allows a better positioning of our center within EPFL and lends credibility and visibility. The UNESCO logo also has a strong convening power which could be well observed during the organization of the UNESCO conferences. Regarding the challenges, on the one hand there is often the misconception that the UNESCO Chair comes with significant funding and on the other hand exchange among UNESCO Chairs is still very limited at the national as well as at the international level.

## **Table of contents**

## **Executive Summary**

1.	Background	3
2.	Objectives of the UNESCO Chair in Technologies for Development	3
3.	Activities of the UNESCO Chair in Technologies for Development 3.1 UNESCO Conference on Technologies for Development	3
	3.2 Research projects	5
	Research project "Info4Dourou": Assisted irrigation for African farmers	5
	Technologies for sustainable development of habitat and cities	5
	EssentialTech	6
	3.3 Education	6
	Certificate of Advanced Studies in Disaster Risk Reduction	6
	Certificate of Advanced Studies in Management of Development Projects	6
4.	Achievements and challenges	7
	4.1 Achievements and opportunities	7
	4.2 Challenges	8

#### 1. Background

Science and technology are a core basis for the development of nations. Science and technology provide innovative solutions to cope with the basic needs of populations and to sustain economic development. The Ecole Polytechnique Fédérale de Lausanne (EPFL) is persuaded of the importance of scientific cooperation with developing and emerging countries, notably to achieve the Millennium Development Goals (MDGs). Cooperation partnerships contribute to an increase in the capacities of research institutions in the South, to a reinforcement of their economic, social and institutional structures and to finding innovative solutions to development priorities.

In 2007, the Cooperation & Development Center (CODEV) at EPFL was awarded the UNESCO Chair in Technologies for Development. The UNESCO Chair contributes to the reinforcement of scientific and technological capacities in developing countries, thus impacting on various priorities of development such as: education, health, poverty reduction, sustainable development, among others. The Chair involves EPFL laboratories and partner institutions in the South with the objective of enabling technology for development in the following fields: Technologies for sustainable development of habitat and cities; information and communication technologies for the environment, science and technology for disaster risk reduction and technologies for sustainable energy production.

#### 2. Objectives of the UNESCO Chair in Technologies for Development

The objectives of the UNESCO Chair are to:

- Promote research in technologies and innovations that are suited to the context in developing countries through partnerships with local institutions in order to develop innovative solutions to the specific problems affecting the most vulnerable sections of the population;
- Contribute to the capacity-building of institutional partners through scientific exchange and knowledge-sharing in a spirit of solidarity;
- Support and strengthen international educational schemes related to technology for development, and to encourage exchange between students and teachers from North and South.

#### 3. Activities of the UNESCO Chair in Technologies for Development

The Chair pursues the following activities:

- Initiating research projects;
- Coordinating research programmes and encouraging new projects;
- Organizing international continuing education courses, facilitating exchange between students from the North and the South;
- Events and publications.

#### 3.1 The UNESCO Conferences on Technologies for Development

The Cooperation & Development Center (CODEV), under the direction of Prof. Jean-Claude Bolay, organized its first major international event in 2010 after being recognized as a UNESCO Chair in Technologies for Development in 2007. The conference attracted 185 people from 36 nations and covered the four topics of the UNESCO Chair for technologies for development, namely, urban sustainability, ICTs for the environment, disaster risk reduction and sustainable energy production. The particular focus of this conference was on how innovative, yet appropriate, technologies can benefit emerging and developing countries.

A Scientific Committee composed of experts from EPFL and external institutions evaluated over 100 papers and ultimately selected 60 for presentation at the conference. Thirty posters were also exhibited. Thanks to financial support from the Commission for Research Partnerships with Developing Countries (KFPE), the Swiss National Science Foundation (SNSF) and UNESCO, 25 people from developing countries were able to travel to EPFL to attend the event and present their papers. UNESCO organized a special session to provide knowledge sharing and reflection on how to promote technology and development in research and academic institutions through networks and partnerships.

In 2012 the second UNESCO conference was held at EPFL attracting 280 participants from 48 countries. This conference set out to boost the role of science and technology as an agent of social transformation and change. It aimed to meet this challenge by encouraging researchers and practitioners to share their experiences in the following areas: defining appropriate technologies that respond to social needs and realities; establishing cross-disciplinary partnerships; and improving technology transfer and supporting the co-creation of technologies. Additional sponsors including Landolt & Cie, Swiss Private Bankers, Cleantech Alps and the Swiss Agency for Development and Cooperation (SDC), Ville de Lausanne and Canton de Vaud allowed us to invite 35 participants from developing countries to this second conference.

Both conferences were highly successful in promoting research in technologies and innovation for developing countries. It created a platform for lively discussions and scientific exchange and increased awareness of state-of-the-art technologies and their potential for the South. North-South research partnerships were promoted and the event encouraged diverse stakeholders and actors to engage in cooperation projects.

These conferences are an international platform where scientists and practitioners can exchange results gained from transdisciplinary research projects. The UNESCO conferences in 2010 and 2012 focused on innovation and poverty reduction while the conference in 2014 will examine essential factors for successful technology development, implementation and impact. An essential technology has been defined as a technology that has the potential to significantly contribute to the Millennium Development Goals. The past two conferences have shown that this biennial event, with over 400 abstracts submitted, is quickly becoming a key event for the science and practitioner community in Switzerland and abroad.

2010: UNESCO Chair International Scientific Conference on Technologies for Development.
 Publication: Technologies and Innovations for Development: Scientific Cooperation for a Sustainable Future, Springer-Verlag

 2012: UNESCO Chair International Conference on Technologies for Sustainable Development: A Way to Reduce Poverty?

**Publication**: Technologies for Sustainable Development: A Way to Reduce Poverty, Springer-Verlag

2014: UNESCO Chair in Technologies for Development: What is Essential?

#### 3.2 Research Projects

The objective of the UNESCO Chair at EPFL is to support and conduct research in collaboration with laboratories of the EPFL and with research institutes abroad. The activities are mainly joint research projects, scientific exchange, and support to scientific publications. Research priority themes are the following:

#### a) Research Project "Info4Dourou": Assisted Irrigation for African farmers

EPFL, Sensorscope Sàrl, ACERD Sàrl, the Velux Foundation, and the Swiss Agency for Development and Cooperation (SDC) work together in Burkina Faso to develop assisted irrigation systems, in collaboration with the national agency for meteorology and micro-irrigation farmer associations. The project uses a wireless sensors technology adapted to the savanna environment that allows automatic collection of ecohydrologic data and data exploitation through the soil-water-plants-atmosphere model. The newly developed technology is numeric and uses the cell phone network (GPRS) to send data to a server through the Internet. The technology, developed in EPFL labs and startups, has been tested for the past three years in savanna conditions, with very stable results.

#### Objectives

- To test the technology and the sensors with the Burkina Faso National Agency for Meteorology and compare the results to those obtained by conventional meteorological stations
- To use the technology to optimize the allocation of water resources in irrigated perimeters of selected local projects by providing an alert system when the soil humidity indicates a need for irrigation
- To analyze possibilities of setting up a small company in Burkina Faso that will maintain and assemble the technological components at low cost

#### Highlights

- Development of a low-cost meteorological station, modular and adapted to the savanna conditions
- Water saving in irrigated perimeters, through an irrigation that responds precisely to the plant needs
- Successful Private-academic partnership for research and development

#### b) Technologies for Sustainable Development of Habitat and Cities

The rapid evolution and the mutations of urban environments in developing and emerging country contexts are responsible both for strong social and economic development and for major challenges in attaining sustainable development and fighting poverty. We try to understand challenges related to

urban development and to develop adapted technologies and methodologies in partnership with a wide range of international partners. CODEV, in collaboration with eight partner organizations, is also working on the project *Innovative Urban Planning: a Response to Social Conflicts in Intermediate Cities from Developing Countries*.

Furthermore, we have four ongoing PhD theses in the field of urban development:

- Urban planning and social participation: Open-source IC instruments for participatory urban design and on-line social participation Case Study of Belgrade, Serbia
- The governance and planning of intermediate cities in Haiti: Lessons learned from a multidimensional crisis
- Within the limits and opportunities of informal rental housing: Tenants and livelihood in Brazilian favelas
- Densifying rural territories: China, from massive growth patterns to more sustainable urban planning

#### c) EssentialTech

CODEV has also launched *EssentialTech*, a unique program bringing together companies and research institutions from the North and South with the common goal of developing innovative technologies that are custom-made for the basic needs of developing countries. This research activity was not developed specifically under the UNESCO Chair in Technologies for Development but represents many opportunities for synergies with the activities of the Chair. <a href="http://essentialtech.epfl.ch">http://essentialtech.epfl.ch</a>

#### 3.3 Education

#### **Certificate of Advanced Studies in Disaster Risk Reduction**

Since 2008, CODEV offers a postgraduate course on Disaster Risk Reduction (CDRR). This six-month program is aimed at professionals from Southern and Northern countries who wish to deepen their knowledge of disaster risk reduction. The program is structured around four main modules: Disaster Risk Management, Climate Change, Vulnerabilities & Capacities, and Sciences & Technologies for Disaster Risk Reduction. Following two editions of the CDRR that were partly organized in India, the third edition was launched in September 2012 with fieldwork taking place in Bangladesh. A contribution from the Swiss Agency for Development and Cooperation of CHF 150'000 has been negotiated. Furthermore, the partnership with the Bangladesh Disaster Preparedness Center was established for the fieldwork of this course. http://cooperation.epfl.ch/CDRR 2012 Edition

#### **Certificate of Advanced Studies in Management of Development Projects**

In 2011, CODEV launched the first edition of the Certificate of Advanced Studies in Management of Development Projects (MaDePro). This program proposes an integrated and interdisciplinary approach and targets professionals in both Northern and Southern countries who wish to pursue a career in development or international cooperation and/or individuals from various organizations who want to broaden their understanding of development issues. The course is based on a North-South scientific partnership. It gives participants an opportunity to improve their knowledge in such aspects as development, technology and project management directly linked to the reality and actual experience in the field in such a "heterogeneous" country as India where poverty co-exists with vast scientific

expertise and local know-how. The training provides a chance to share the different standpoints and experiences of Europe and Asia. <a href="http://cooperation.epfl.ch/madepro">http://cooperation.epfl.ch/madepro</a>

#### 4. Achievements and Challenges

#### 4.1 Achievements and Opportunities

- Through the UNESCO Chair, EPFL can further utilize its know-how in partnership with developing and emerging countries. EPFL is at the cutting edge in many scientific domains and can therefore function as a relay to developing countries; its expertise brings it into contact with many projects funded by development cooperation organizations and EPFL has close links with national and scientific networks and can thus express its point of view on various development issues.
- The strength of the UNESCO Chair in Technologies for Development lies in its dual capacity to orient EPFL laboratories towards specific development objectives and to conduct research and educational programs focused on sustainable development. Through the Chair, it is possible to promote interdisciplinary and transdisciplinary North-South scientific and educational partnerships and promote UNESCO values.
- The UNESCO Chair also represents added value for positioning EPFL within the international scientific community, pursuing the ideal of scientific exchanges and international solidarity.
- The UNESCO Conference on Technologies for Development has become a flagship event and serves as: 1) A platform for partner institutions to exchange; 2) Showcases successful technologies and lessons learnt; 3) Facilitates the formation of new partnerships; 4) Contributes to increase the visibility of the UNESCO Chair in Technologies for Development.
- There is strong support at the level of EPFL presidency for the UNESCO Chair in Technologies for Development. For instance a total of 560% of working time of a total of 11 persons is allocated to the activities conducted under the UNESCO Chair. The salaries are covered either by EPFL or by third party funds obtained for specific projects. EPFL also contributes substantially to the organization of the UNESCO Conference on Technologies for Development by allocating financial and human resources.
- The UNESCO logo is a means for positioning a center within an institution such as CODEV within EPFL – but it is also a high-level UN recognition and membership in a global network of higher education institutions in support of UNESCO's mission. Being a UNESCO Chair lends visibility and credibility to our research and education activities. It also has convening power as can be illustrated through the UNESCO Technologies for Development conference we are organizing every second year.
- CODEV has launched the Seed Money Programme to encourage EPFL researchers to develop scientific cooperation projects with partner institutions in developing and emerging countries. This programme provides grants on a competitive bases through an annual call open to all scientific units at EPFL.

#### 4.2 Challenges

- The UNITWIN Program did not lead to any concrete activities for our UNESCO Chair. There are few other UNESCO Chairs working in domains similar to ours so that close collaboration would come naturally. The Chairs in Switzerland work on very different topics (Ethics and Human Rights, International Law, Telemedicine) and exchange with other Chairs at the international level has so far not gone beyond a general discussion. One of the obstacles for exchange with other Chairs is the funding. There is no funding available for "just" exchanging without any concrete research or education activity planned.
- It is challenging to differentiate the Center (CODEV) and the UNESCO Chair. This often leads to interrogations: Are we hosting the UNESCO Chair? Are we the UNESCO Chair? Are we a Research Center and a UNESCO Chair? Which activities are specifically conducted under the UNESCO Chair and which ones do we pursue under CODEV? Activities under the UNESCO Chair coincide with our CODEV activities which is advantageous and confusing at the same time.
- There is often the misconception that the UNESCO Chair comes with allocated funding through UNESCO which is not the case. Our center is regularly approached for funding of activities under the UNESCO Chair.
- The research line "renewable energy" has not yet led to a concrete project or education activity.





# 12<sup>th</sup> International Conference on

# Information Technology Based Higher Education and Training ITHET 2013



10-12 October 2013, Antalya, TURKEY http://www.ithet.boun.edu.tr

#### Organized by:

UNESCO Chair on Mechatronics, Turkey Antalya International University, Turkey

#### **Technically Co-sponsored by:**

IEEE Education Society
EAEEIE
IGIP
SEFI

#### **General Chair**

Okyay Kaynak, UNESCO Chair on Mechatronics, Bogazici Univ. TR

#### **International Advisory Board**

Hidenori Akiyama (Kumamoto Univ., JP)
Michael E. Auer (IGIP)
Russ Meier (IEEE Education Soc., US)
Wim Van Petegem (SEFI)
Imre Rudas (Ouda Univ. HU)
Hamadou Saliah-Hassane (U. Quebec, CA)
Jean-Marc Thiriet (UJF, FR)
Tony A. Ward (EAEEIE, UK)

#### **Invited Speakers**

Shirley Alexander (UTS, AU) Stephen Downes (NRC, CA) Michel Haddad (NI, LB)

#### **Program Chair**

Robin Braun (UTS, AU)

#### **Local Arrangements Co-Chairs**

Kadim Tasdemir (Antalya Int'l Univ., TR) Hazer Inaltekin (Antalya Int'l Univ., TR)

#### **Finance Chair**

Aynur Özmen (BÜTEK, TR)

#### **Special Session Chair**

Okyay Kaynak (Bogazici Univ., TR)

#### **Publicity Chair**

Hidenori Akiyama (Kumamoto Univ., JP)

#### **Publication Chair**

Cisel Aras (Bogazici Univ., TR)

#### **Address for Correspondence**

Okyay Kaynak Bogazici University, Bebek, 34342 Istanbul, Turkey Phone: +90-212-2872475 Fax: +90-212-2872465

e-mail: okyay.kaynak@boun.edu.tr

Objectives: The convergence of current technologies provides the infrastructure for transmitting and storing information faster and cheaper. For information to be used in gaining knowledge, however, environments for collecting, storing, disseminating, sharing and constructing knowledge are needed. Such environments, knowledge media, brings together the telecommunication, computer and networking technologies, learning theories and cognitive sciences to form meaningful environments that provides for a variety of learner needs. The World Wide Web is one such technology that provides access to valuable educational resources such as e-mail, e-groups, bulletin board services, audio conferencing, video conferencing, e-journals, search engines and databases. ITHET 2013 will have a special theme as well as all the traditional themes of previous events. This year we want to explore both the opportunities and the challenges of Massive Open Online Courses (MOOCS). The university world is abuzz with this phenomenon which has come to visit all of us. Will they change the university business model forever? Will they eventually revolutionize university education as information technology has promised to do for many years? Will they threaten our jobs, or will they help us to ensure that our students really do "get it"? We want to explore all of this at this year's ITHET. Please join us. (For some background just put MOOCS into your search engine.)

**Location**: The organizing committee of ITHET 2013 extends a cordial invitation to you to come to Antalya to meet renowned scholars and practitioners not only from the region but also from many different parts of the world, at a place that is reputed to be one of the most attractive cities of the Mediterranean. The venue is a beautiful hotel Rixos Downtown (formerly Sheraton) with exceptionally good rates (Single €60, Double €80).

**Topics**: The scope of the conference will cover but not be limited to:

Massive Open Online Courses	WWW education tools
Asynchronous learning	Multimedia tutorials
Distance leaning	Intelligent training technology
Blended learning	Authoring technology
Virtual student laboratories	Second language education
Virtual classroom, virtual universities	Industry-university partnership
Creating courses on-line	Learning and Assessment
Network based education and training	Accreditation issues
New strategies for higher education	Role of information society and
and training	global communication systems
Development and use of IT Tools and	Quality management in higher
Environments	education
Interactive learning modules	

Paper Submission: Prospective participants are invited to electronically submit an extended abstract (min. 500 words, as PDF file), following the instructions available on the Conference web site. Accepted and presented papers will be copyrighted to IEEE and published in conference proceedings, which will be eligible for inclusion in the IEEE Xplore® Digital Library, once it meets the requirements of an IEEE quality review. It will then be customarily indexed by EI Compendex. Some papers will be selected for expansion into journal papers and invited to participate in the normal peer review process of IEEE Transactions on Education or IEEE Transactions on Learning Technologies.

**Special Sessions**: Prospective participants of ITHET 2013 are encouraged to organize special sessions (5-6 papers) in a particular area within the conference topics. Those interested should contact Okyay Kaynak at okyay.kaynak@boun.edu.tr for details.

#### **Submission deadlines:**

Deadline for electronic submission of one page abstracts	June 28, 2013
Notification of acceptance	July 27, 2013
Submission of full papers	Aug.23, 2013



## **Background of ITHET Conferences**

The recent advances in technology have significantly changed the educational scene. The convergence of information and communication technologies has enabled the creation and implementation of computer aided and/or multimedia based techniques. It is recognized that traditional, mass-produced, highly controlled static and rigid educational and training methods cannot cope with the greatly increased demand for higher education and with the need to bring ever-increasing amounts of information, knowledge and expert reasoning to students who may find it difficult to be a part of a traditional classroom. As a result, the use of IT in teaching and learning has increased tremendously.

In view of the developments briefly described above, the UNESCO Chair on Mechatronics of Bogazici University, Istanbul, Turkey initiated in the year 2000 a conference series, under the title; Information Technology Based Higher Education and Training -ITHET. Below is a list of the conferences held to date.

ITHET 2000: Istanbul, Turkey, July 3-5, 2000

ITHET 2001: Kumamoto, Japan, July 4-6, 2001

ITHET 2002: Budapest, Hungary, July 4-6, 2002

ITHET 2003: Marrakesh, Morocco, July 7-9, 2003

ITHET 2004: Istanbul, Turkey, May 31-June 2, 2004

ITHET 2005: Santo Domingo, Dominican Republic, July 7-9, 2005

ITHET 2006: Sydney, Australia, July 10-13, 2006

ITHET 2007: Kumamoto, Japan, July 10-13, 2007

ITHET 2010: Cappadocia, Turkey, April 29 – May 1, 2010

ITHET 2011: Kusadasi, Turkey, August 4-6, 2011.

ITHET 2012: Istanbul, Turkey, June 21-23, 2012

Almost all of these conferences enjoyed the technical co-sponsorship of IEEE IES and the proceedings appeared on IEEE Xplore. Many prestigious institutions, such as ASEE (American Society of Engineering Education), SEFI (European Society for Engineering Education), IGIP (International Society for Engineering Education) and EAEEIE (European Association for Education in Electrical and Information Engineering) have extended their technical co-operation to the conference and encouraged their members to participate. Because of the involvement of the UNESCO Chair on Mechatronics of Bogazici University, UNESCO logo was also proudly carried.



#### **PROGRAMME**

# South East Europe (SEE) Regional Forum of UNESCO Chairs and UNITWIN Networks

# Hotel Information Armada Hotel, Istanbul

Ahirkapi Sok, No. 24, Cankurtaran, Istanbul Phone. +90-212-455-4455, Fax. +90-212-455-4499

E-mail: info@armadahotel.com.tr website: www.armadahotel.com.tr

# Turkey/Turquie

(264)

# **UNITWIN/UNESCO Chairs Programme**

# **UNESCO** Chair in Computer-Integrated Manufacturing

## **Address and Contacts**

	Address of the Co-Chairholders	
Name	Ethem Tolga	
Function/Title	Professor & Rector	
Name	E. Ertugrul Karsak	
Function/Title	Professor & Vice Rector for Academic Affairs	
	Dean, Faculty of Engineering & Technology	
University/Institution	Galatasaray University	
Faculty/Department/Centre	Faculty of Engineering & Technology	
Street	Ciragan Caddesi No: 36, Ortakoy	
Postal Code	34357	
City	Istanbul	
Country	Turkey	
Phone	+90-212-259-1064	
Fax	+90-212-259-5557	
E-mail	ekarsak@gsu.edu.tr / etolga@gsu.edu.tr	
Website	www.gsu.edu.tr	



**United Nations** Educational, Scientific and Cultural Organization





UNESCO Chair in

Computer-Integrated Manufacturing Galatasaray University, Turkey

## **Available Resources**

## **Human Resources**

The UNESCO Chair in Computer-Integrated Manufacturing at Galatasaray University has a dynamic research environment. It possesses affiliated academics with international research experience. The members of the research group (MRG) and their e-mail addresses are as follows:

<u>Title</u>	Name Surname	E-mail address
Prof.	E. Ertuğrul Karsak	ekarsak@gsu.edu.tr
Prof.	Ethem Tolga	etolga@gsu.edu.tr
Prof.	Gülçin Büyüközkan Feyzioğlu	gbuyukozkan@gsu.edu.tr
Prof.	H. Ziya Ulukan	zulukan@gsu.edu.tr
Assoc. Prof.	Esra Albayrak	ealbayrak@gsu.edu.tr
Assoc. Prof.	Mevlüde Ebru Angün	eangun@gsu.edu.tr
Assoc. Prof.	Orhan Feyzioğlu	ofeyzioglu@gsu.edu.tr
Assoc. Prof.	S. Emre Alptekin	ealptekin@gsu.edu.tr
Assoc. Prof.	Y. Temel Öncan	ytoncan@gsu.edu.tr
Asst. Prof.	Abdullah Çağrı Tolga	ctolga@gsu.edu.tr
Asst. Prof.	Murat Levent Demircan	ldemircan@gsu.edu.tr
Asst. Prof.	Müjde Erol Genevois	merol@gsu.edu.tr
Asst. Prof.	S. Şebnem Ahıska	sahiska@gsu.edu.tr
Asst. Prof.	Tuncay Gürbüz	tgurbuz@gsu.edu.tr
Asst. Prof.	Zeynep Şener	zsener@gsu.edu.tr
Res. Asst.	Elif Alaybeyoğlu	ealaybeyoglu@gsu.edu.tr
Res. Asst.	İlke Bereketli	ibereketli@gsu.edu.tr
Res. Asst.	M. Emre Demircioğlu	edemircioglu@gsu.edu.tr
Res. Asst.	Mehmet Hakan Akyüz	mhakyuz@gsu.edu.tr
Res. Asst.	Mehtap Dursun Usta	mdursun@gsu.edu.tr
Res. Asst.	Orhan İlker Kolak	oikolak@gsu.edu.tr
Res. Asst.	Ufuk Bahçeci	ubahceci@gsu.edu.tr
Res. Asst.	Yeşim Kop	ykop@gsu.edu.tr