

# International Geoscience Programme IGCP National Committee of the Federal Republic of Germany

**Annual Report 2015** 

### INTERNATIONAL GEOSCIENCE PROGRAMME (IGCP) National Committee of the Federal Republic of Germany

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### Annual Report 2015

### Report of the IGCP National Committee of the Federal Republic of Germany

Dr. Königshof welcomed the participants to the  $43^{nd}$  session of the IGCP National Committee of the Federal Republic of Germany. He conveyed the regrets of those participants for not beeing able to take part in this meeting. As in the past years this meeting is organized as a joint meeting of different National Committees (IUGS, IGCP and NKGG) in order to foster better communication and scientific exchange. This construction works in a perfect way and insures a reliable and continuous flow of information. The meeting took place on November  $5^{th} - 2015$  in Frankfurt (Senckenberg - Research Institute and Natural History Museum).

### IGCP / Geopark

The report will concentrate on IUGS / IGCP related activities. Also other reports were given by members of IUGS and NKGG. A short report was given on the state of the art of the National Geopark Activities.

As a result of long-lasting discussions it was suggested to bring IGCP and Global Geopark activities together under a new International Geoscience and Geoparks Programme. This new IGGP would have two distinct and mostly separate activities – the geoscience research projects (i.e. the existing IGCP projects) and the UNESCO Global Geopark. They would each have separate decision-making bureaux but would be linked by a non-decision making coordination unit that would explore possible synergies and areas of cooperation between both activities. In doing so IGCP would continue in the same way as it was over the last number of years but with the re-focussed priorities to be discussed in the near future. The idea of having a link between the geoscience projects and the Global Geoparks would help strengthen Earth Science in UNESCO.

In principle the IGCP National Commission supports the planned cooperation and concept but they stressed the fact that IGCP should act as a separate geoscience project. Peter Königshof, summarized the main goals of the IGCP projects gave a short overview on the running projects with participation of German scientists.

Germany is still active and scientists at universities and/or research institutes participated in in a number of IGCP projects in 2015 (and a new proposal – see below). Seven projects have been finished, thus the number isn't that high as in 2014:

- The projects cover a number of scientific disciplines and working areas. IGCP projects will facilitate the engagement of regions where stronger and more active participation is needed, such as Africa and Southeast Asia.
- Generally, all projects established an international network which enables geoscientists from countries not being actively involved in IGCP projects in the past to become members of the projects. Most IGCP's obtained additional funding from other resources.
- Websites of the projects are dynamic and updated regularly and generally provide a highly-visible hub of information of different research disciplines.
- International visibility of projects is guaranteed due to the sufficient number of publications in ISI-listed journals and organizing international conferences and workshops. Increasing visibility is also achieved by publications in "Episodes".
- Some projects have excellent links with the YES Network (Young Earth Scientists; such as the IGCP 596, 630). The number of students is increasing, particularly from developing countries and the students are involved in workshops and conferences.
- Some projects have established excellent public outreach projects, such as IGCP 596, 630. In the frame of this project a 45-minute TV documentation is planned for 2016. The first short trailer for funding purposes is ready. Two versions can be found on youtube:

german version:

https://www.youtube.com/watch?v=NHIeuQCfKUc&feature=youtu.be

englisch version: https://www.youtube.com/watch?v=KpRLx78U0ZM&feature=youtu.be

### Public Outreach – Example:

In the frame of the IGCP 596 a book entitled Planet earth in Deep Time was published by Schweizerbartsche Verlagsbuchhandlung.

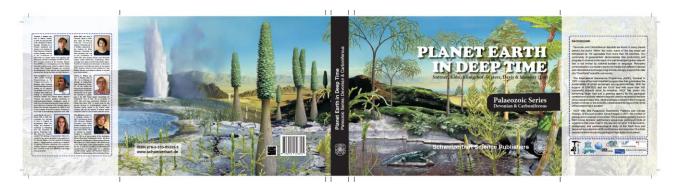


Fig. 1: the cover of the planned book – published in 2016

The book contains more than 25 contributions from 17 countries. The book is published multi-lingual which means that each contribution is published in the national language as well as in English. The book is very useful for students and teachers and provides an overview on

various geological and palaeontological themes. The book was sponsored by Auswärtiges Amt (AA) /Foreign Office and was distributed in all participating countries.

The following projects have been active in 2015 (some of them with OET status; with German participation/co-leader/leader):

### 587 ENTITY, FACIES AND TIME - THE EDIACARAN (VENDIAN) PUZZLE

#### http://www.geosci.monash.edu.au/precsite

**Countries involved:** Arabia, Argentina, Australia, Brazil, Canada, <u>Germany</u>, India, Iran, Iraq, Ireland, Italy, Japan, Namibia, Netherlands, People's Republic of China, Poland, Russian Federation, Spain, Sweden, South Africa, Taiwan (Republic of China), United Kingdom, Uruguay, USA

**Proposers:** Patricia Vickers-Rich (Australia), Mikhail Fedonkin (Russian Federation), Jim Gehling (Australia), Guy Narbonne (Canada)

Duration: 2010-2014

Project Leader: Patricia Vickers-Rich: pat.rich@monash.edu

## 591 THE EARLY TO MIDDLE PALAEOZOIC REVOLUTION

Web site in process

**Countries involved:** Argentina, Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, France, <u>Germany</u>, Iran, Italy, Lithuania, New Zealand, Norway, People's Republic of China, Poland, Portugal, Russia, Saudi Arabia, Spain, Sweden, Turkey, United Kingdom, USA

**Proposers:** Bradley D. Cramer (USA), Živile Žigaitė (Lithuania), Thijs R.A. Vanderbrouke (France), Kathleen Histon (Italy), Renbin Zhan (China), Guillermo L. Albanesi (Argentina), Michael J. Melchin (Canada), Mikael Calner (Sweden) **Duration:** 2011-2015

Project Leader: Bradley D. Cramer: <a href="mailto:cramerbd@gmail.com">cramerbd@gmail.com</a>

### 592 CONTINENTAL CONSTRUCTION IN CENTRAL ASIA

**Countries involved**: Algeria, Australia, Bangladesh, Belgium Botswana, Brazil, Canada, Chile China, Denmark, Egypt, France, Germany, India, Indonesia, Iran,Irland, Israel, Italy, Japan, Malaysia, Mongolia, Morocco, Myanmar, Nepal, Netherlands, Norway, Poland,Romania, Russia, South Africa, Spain, Sri Lanka, Taiwan, Thailand, Turkey, United Kingdom, USA, Uzbekistan, Vietnam.

Duration: 2011-2015

Project leader: Ina Safanova et al.: <u>inna@igm.nsc.ru</u>

## 596 CLIMATE CHANGE AND BIODIVERSITY PATTERNS IN THE MID-PALEOZOIC

### http://www.senckenberg.de/IGCP-596

**Countries involved:** Australia, Austria, Belgium, Bulgaria, Canada, Czech Republic, <u>Germany</u>, France, Italy, Iran, Japan, Mongolia, People's Republic of China, Poland, Portugal, Russia, Spain, Tajikistan, Thailand, Turkey, Ukraine, Union of Myanmar, United Kingdom, USA, Viet Nam

**Proposers:** <u>Peter Königshof (Germany)</u>, Thomas J. Suttner (Austria), Iliana A. Boncheva (Bulgaria), Nadezhda G. Izokh (Russian Federation), Phuong Ta Hoa (Viet Nam), Thasinee Charoentitirat (Thailand), Johny A. Waters (USA), <u>Wolfgang Kiessling (Germany)</u>, Erika Kido (Austria)

Duration: 2011-2015

Project Leader: Peter Königshof: <a href="mailto:peter.koenigshof@senckenberg.de">peter.koenigshof@senckenberg.de</a>

# 597 AMALGAMATION AND BREAKUP PANGÆA: THE TYPE EXAMPLE OF THE SUPERCONTINENT CYCLE

### http://www.wix.com/declan\_15/test#!

**Countries involved:** Argentina, Australia, Belgium, Brazil, Canada, Chile, Cuba, Czech Republic, France, <u>Germany</u>, India, Ireland, Italy, Japan, Korea, Mexico, Mongolia, Morocco, Namibia, Norway, People's Republic of China, Peru, Poland, Portugal, Romania, Russia, South Africa, Spain, Switzerland,

Taiwan (of China), Turkey, United Kingdom, USA

**Proposers:** J. Brendan Murphy (Canada), J. Duncan Keppie (Mexico), Cecilio Quesada (Spain), Bill Collins (Australia)

Duration: 2011-2015

Project Leader: J. Brendan Murphy: <u>bmurphy@stfx.ca</u>

# 598 ENVIRONMENTAL CHANGE AND SUSTAINABILITY IN KARST SYSTEMS http://igcpkarst.com

**Countries involved:** Albania, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Croatia, Czech Republic, Cuba, Egypt, France, <u>Germany</u>, Greece, Hungary, Indonesia, Iran, Ireland, Italy, Japan, Lebanon, Lithuania, Malaysia, Mexico, Netherlands, New Zealand, People's Republic of China, Philippines, Poland, Puerto Rico, Romania, Russia, Serbia and Montenegro, Slovenia, South Africa, South Korea, Spain, Switzerland, Tasmania, Turkey, Ukraine, United Kingdom, USA, Venezuela, Viet Nam

**Proposers:** Zhang Cheng (China), Augusto Auler (Brazil), Jiang Yongjun (China), Martin Knez (Slovenia), Bartolome Andreo-Navarro (Spain), Yuan Daoxian (China), Chris Groves (USA)

Duration: 2011-2014

Project Leader: Zhang Cheng: <a href="mailto:chzhang@karst.ac.cn">chzhang@karst.ac.cn</a>

### 609 CRETACEOUS SEA-LEVEL CHANGE

Countries involved: Australia, Austria, Bangladesh, Belgium, Brazil, Bulgaria, Canada, China, Czech Republic, Denmark, Egypt, France, Georgia, Germany, Hungary, India, Iraq, Iran, Italy, Japan, Nepal, New Zealand, Pakistan, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tanzania, Turkey, UK, USA

Duration: 2013 - 2017

**Project leader**: Michael Wagreich (Austria), Xiumian Hu (China), Julleh Jalalur Rahman (Bangladesh), Silke Voigt (Germany), İsmail Ömer Yılmaz (Turkey), Svetlana Zorina (Russia). <u>http://www.univie.ac.at/igcp609/</u>

### 624 ONE GEOLOGY

### http://onegeology.org

**Countries involved:** Afghanistan, Albania, Algeria, Andorra, Argentina, Armenia, Australia, Austria, Azerbaijan,Bangladesh, Belgium, Bhutan, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, BurkinaFaso, Burundi, Cambodia, Cameroon, Canada, Central African Republic, Chile, China,Colombia, Democratic Republic of Congo, Costa Rica, Croatia, Cuba, Cyprus, CzechRepublic, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, Estonia, Ethiopia, Finland,France, Gambia, Georgia, <u>Germany</u>, Ghana, Greece, Guinea, Hong Kong, Hungary, Iceland,India, Indonesia, Islamic Republic of Iran, Iraq, Ireland, Israel, Italy, Japan, Kenya, Republic ofKorea, Kosovo, Lao People's Democratic Republic, Latvia, Lesotho, Lithuania, Luxembourg,The Former Yugoslav Republic of Macedonia, Malawi, Malaysia, Mali, Mexico, Mongolia,Mozambique, Namibia, Nepal, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan,Papua New Guinea, Peru, Philippines, Poland, Portugal, Romania, Russian Federation,Rwanda, Senegal, Serbia, Sierra Leone, Singapore, Slovakia, Slovenia, South Africa, Spain,Sri Lanka, Suriname, Sweden, Switzerland, United Republic of Tanzania,

Thailand,Democratic Republic of Timor-Leste, Turkey, Uganda, Ukraine, United Arab Emirates, UnitedKingdom, United States of America, Uruguay, Uzbekistan, Republic of Vanuatu, Venezuela,Vietnam, Yemen, Zimbabwe.

**Proposers:** Kankeu Boniface (Cameroon), <u>Reinhard O. Greiling (Germany)</u>, <u>Jürgen Runge</u> (Germany)

Project Leader: Gareth Jenkins: gjenkins@bgs.ac.uk

# 630 PERMIAN-TRIASSIC CLIMATE AND ENVIRONMENTAL EXTREMES AN BIOTIC RESPONSE

Countries involved: Argentina, Armenia, Australia, Australia, Bangladesh, Burma, Canada, China, Croatia, Czeck Republic, Denmark, France, Germany, Hungary, India, Iran, Israel, Italy, Japan, Madagascar, Malaysia, New Zealand, Norway, Poland, Romania, Russia, Slovenia, Spain, Switzerland, Thailand, Turkey, United Kingdom, United States of America. **Duration**: 2014-2018

**Project leader**: Prof. Zhong-Qiang Chen et al.: e-mail: zhong.qiang.chen@cug.edu.cn <u>http://igcp630.cug.edu.cn</u>

# 632 CONTINENTAL CRISES OF THE JURASSIC: MAJOR EXTINXTION EVENTS AND and ENVIRONMENTAL CHANGES WITHIN LACUSTRINE ECOSYSTEMS

Countries involved: Argentina, Australia, Belgium, Brazil, Bulgaria, Canada, China, Egypt, Germany, France, India, Japan, Korea, Mexico, Morocco, New Zealand, Norway, Parkistan, Poland, Romania, Russia, Souith Africa, Spain, Swizerland, Thailand, United Kingdom, Uruguay, United States of America, Vietnam.

Duration: 2014-2018

Project leader: Prof. Dr. Jingeng Sha (China), <u>http://www.igcp632.org</u>

#### New Project in 2015: 640 SIGNIFICANCE OF MODERN AND ANCIENT SUBMARINE SLOPE LandSLIDES Duration: 2015-2020

**Project leader**: Dr. Lorena Moscardelli et al (USA)email: lorena.moscardelli@utexas.edu, Co-leader: Dr. Sebastian Krastel (Kiel)

New Proposal for 2016:

### 639 SEA LEVEL CHANGES FROM MINUTES TO MILLENNIA

Argentina, Australia, Chila, China, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Lithuania, Morocco, Oman, Pakistan, Poland, Singapore, South Africa, Spain, Taiwan, United Kingdom, USA **Project leader**: Dr. Simon Engelhart (USA), engelhart@uri.edu

### IGC 2014 – German Bid

Concerning the German Bid for IGC in 2024, several meetings of the Steering Committee took place. The Polish Geological Survey (PGI) and the Polish Academy of Sciences as well as the French National IUGS Committee, The Academie des Sciences, and the BRGM accepted to be official European partners within the Bid.

In the meantime, the Claim ("One Earth – Our Challenge"), the Logo and the design has been fixed and as well as other necessary elements to promote the Bid. As a novum, Germany tries to organize the IGC as a joint World Geoscience Congress in the time frame 2013/2014 with IUGG. The initiative was presented at the IUGG Assembly in Prague end of June as well as at the GeoBerlin in October 2015. It was also agreed that the scientific

programme will follow the traditional format, but also provide interfaces to the IUGG in view of a possible new congress format. Besides the Variscan Orogeny many other themes and topics were considered, such as Marine Geology, Global Change, hazards, Deep Earth, Modern Geosciences Technologies, Sedimentary Basins, Cratones, Deltas and Coasts and others. The date of the conference if in 2024 has been fixed on 18.-26. July 2014. In case the conference will take place in 2023 the proposed dates can currently not extended to 9 days.

Finally, on behalf of the IGCP Peter Königshof thanks for the long-lasing financial support by the Auswärtiges Amt (AA)/Foreign Office, DFG and German Academic Exchange Service, particularly the financial support by the Auswärtiges Amt (AA)/Foreign Office for the book project is acknowledged. Without this support it wouldn't be possible to initiate new projects and new collaborations, particularly in countries not being involved in IGCP projects in the past.

February 08<sup>th</sup>, 2015

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Dr. Peter Königshof