January 2015 Issue n. 36

## **CNR-IUGS-IGCP** Italian Report

2014

#### Contents:

- Guidelines for submitting IGCP project proposals
- Summary report of the IGCP Italian National Committee
- Summary report of the IUGS Italian National Committee
- Ongoing and new IGCP Projects
- Review of Italian participation in IGCP projects

### Birth of the IGGP?

After 40+ years of IGCP (International Geoscience Programme) major changes are in sight. Over the past few years UNESCO has been facing a severe financial crisis and detailed priorization of all UNESCO activities has resulted in the definition of the Earth Sciences as low priority. In an effort to strengthen the Earth Sciences in UNESCO, after a series of meeting between the International Union of Geological Sciences, some of UNESCO Member States, and the Global Geoparks Network (GGN), it was proposed that the IGCP and Global Geopark activities would come together under a new International Geoscience and Geoparks Programme (IGGP). For details, see p.12.

### Italy restores full participation in ICSU

Following a meeting in Rome on Nov 10<sup>th</sup>, 2014, between Enrico Brugnoli (Director of the Department of Earth System Science and Environmental Technologies of C.N.R.) and Gordon McBean (President of the International Council of Sciences – ICSU), with the participation of members of the Italian scientific community, the Italian National Research Council announced the intention to restore full participation in ICSU, the umbrella organization comprising all major scientific unions.

### **IGCP Scientific Board Meeting**

The IGCP Board meeting calendar 2015 will take place at UNESCO headquarters in Paris with the following tentative schedule:

Wednesday 25 February -

Morning & afternoon reserved for IGCP Scientific Board project evaluation meeting (closed session for IGCP Theme leaders)

Thursday 26 February -

Morning reserved for IGCP Scientific Board project evaluation meeting (closed session for IGCP Theme leaders)

Afternoon session brainstorming on the IGGP (IGCP Board, IUGS, IGCP NatComs, UNESCO)

Friday 27 February -

Morning session IGCP open session with UNESCO Member States etc.

Afternoon session (if necessary - to continue the brainstorming session between IGCP Board, IUGS, IGCP National Committees and UNESCO)

### **IGCP Projects with Italian leaders in 2014**

Project No.591 – "The Early to Middle Paleozoic Revolution". Leader: Kathleen Histon. For details, see p.11.



### **Preface**

This newsletter serves a double purpose: (i) it reports to the IGCP Headquarters at UNESCO what is the current status of the Italian involvement in the IGCP and (ii) provides the Italian geological community with information on ongoing IGCP projects and activities, in order to promote participation and dissemination of information. For these reasons, the newsletter has wide distribution within the Italian geological community.

This issue contains, among other items:

- 1. the Summary Report 2014 of the IGCP Italian National Committee;
- 2. the Summary Report 2014 of the IUGS Italian National Committee;
- 3. an outline of the new IGCP projects;
- 4. the complete list of IGCP projects active in 2014, with contact addresses of leaders and Italian coordinators.

If you have suggestions for improving this newsletter do not hesitate to get in touch with William Cavazza (william.cavazza@unibo.it).

### **Summary of IGCP guidelines**

(full set of guidelines available online)

### 1. Purpose and objectives of the IGCP

The International Geoscience Programme (IGCP) - formerly International Geological Correlation Programme - is a joint endeavor of UNESCO (United Nations Educational, Scientific and Cultural Organization) and IUGS (International Union of Geological Sciences). The primary aims of IGCP are to facilitate international collaboration amongst scientists from around the world in research on geological problems, particularly between those individuals from more industrialized and those from developing countries. Through long-term joint research efforts, meetings, field trips, and workshops, IGCP aims to promote the use of geosciences in global issues.

IGCP pursues four broad objectives:

- 1. improving our understanding of the geoscientific factors affecting the global environment in order to improve human living conditions;
- 2. developing more effective methods to find and sustainably exploit natural resources of minerals, energy and ground water;
- 3. increasing understanding of geological processes and concepts of global importance, including an emphasis on socially relevant issues;
- improving standards, methods and techniques of carrying out geological research, including the transfer of geological and geotechnological knowledge between industrialized and developing countries.

### 2. Operational policy

The objectives of IGCP are met through individual projects. The number of active projects in any given year depends on the current priorities of UNESCO and IUGS, the availability of funds, the success and progress of existing projects and the quality and merit of newly submitted proposals.

IGCP projects are approved for a period not exceeding five years. Individual projects are reviewed annually after the second year and may be terminated following review for their poor performance.

The annual allocation of support for each project depends upon its quality and, for an already funded project, upon its performance during the previous year. The financial support provided annually by UNESCO and IUGS for IGCP projects covers part of the costs of organizing and managing research, meetings, and workshops, related to the project, as well as to facilitate participation by scientists from developing countries. These limited funds provide 'seed money' to assist in the acquisition of additional funds from other sources. Past experience indicates that successful IGCP projects are able to secure significant additional funding from other sources. The actual amount of funding provided annually all IGCP projects reflects the collective decisions of UNESCO and IUGS.

IGCP projects must successfully meet the following criteria:

- 1. focus on high-quality science relevant to the scientific objectives of the IGCP;
- 2. meet a need of international importance and societal relevance;
- 3 emphasize interdisciplinary cooperation;
- 4. constitute international participation including scientists from developing countries;
- 5. demonstrate potential for both long-term and short-term geoscientific and/or societal benefits;
- 6. explicitly acknowledge the sponsorship of UNESCO, IUGS, and IGCP; and,
- 7. promote global geoscience visibility. For example, through the publication of scientific results using internationally recognized journals or other media.

### 3. Topics for IGCP project proposals

IGCP welcomes proposals on the following topics:

- (i) topics of particular interest to IGCP (as outlined in the following);
- (ii) topics defined annually by UNESCO and IUGS:
- (iii) other relevant topics in fundamental and applied geoscience.

### (i) Topics of particular interest to IGCP

### Geoscience of the Water Cycle

Life on Earth depends on water and its sustainable use is crucial for continued human existence. Earth's water resources include surface/ground water, ocean water, and ice. The study of Earth's water involves understanding and managing both surface and groundwater systems, including sources, contamination, vulnerability and history of water systems.

### Geohazards: Mitigating the Risks

Geohazards include earthquakes, volcanic activity, landslides, tsunamis, floods, meteorite impacts and the health hazards of geologic materials. Geohazards can range from local events such as a debris slide or coastal erosion to events that threaten humankind (e.g., supervolcano eruption or meteorite impact). Earth scientists undertake research to better understand such hazards and contribute to risk reduction.

### Earth Resources: Sustaining our Society

Earth resources include minerals, hydrocarbons, geothermal energy, air, and water. The future well-being of society depends on sustainable use of these resources. The environmentally responsible exploitation of these resources is a challenge for geoscience research. The progress of technological development is equally bound to this premise.

### Global Change and Evolution of Life: Evidence from the geological record

Changes in the Earth's climate and of life on Earth are preserved in the rock record. Ice and dust records, terrestrial and ocean sediments, and sequences of fossil plant and animal assemblages all comprise parts of this record. Life has impacted Earth's atmosphere, oceans, and land surface. Several major extinctions have punctuated Earth's history,

associated with dramatic environmental and ecosystem change. Past environmental lessons shed light on present and future challenges.

### The Deep Earth: How it controls our environment

The Earth's surface, including our habitable environment, is a product of, and controlled by deep Earth processes. The study of this environment (ranging from changes in the Earth's magnetic field to plate tectonics) using for example, geophysical and geodynamical techniques, enhances our understanding of the working of System Earth.

### (ii) Topics defined annually

These are specific topics identified cooperatively by UNESCO, IUGS and the IGCP Scientific Board that are perceived to be of timely relevance in any given year.

### (iii) Other relevant topics in fundamental and applied geosciences

The IGCP encourages submission of project proposals in all aspects of the geosciences, provided they meet the requirements outlined above (see list of criteria in Section 2 - Operational Policy).

### 4. Project proposals

IGCP project proposals may be submitted by individual scientists or by a group of scientists. The IGCP Scientific Board is ready to advise project leaders, regarding the scientific quality, content, scope, viability, budget and relevance of potential project proposals (e.g., advice regarding the inclusion of other qualified scientists, bridging to other initiatives, outputs).

Assessments of proposals for new IGCP projects (and the Annual Reports of ongoing projects) are conducted once a year by selected representatives of the IGCP Scientific Board, usually during the first half of February. Assessments are based upon the criteria and objectives of IGCP (e.g. the scientific potential and feasibility of proposals, adherence to the overall goals of IGCP, qualifications of the proposers, scientific progress of the projects, significance of their results, adherence to an approved budget and so on). Projects are ranked into one of three funding levels: high, medium, or low.

The deadline for submission and receipt of new project proposals to the IGCP Secretariat is October 15th. Each project leader must include a letter of endorsement from his or her respective IGCP or IUGS National Committee. The IGCP Secretariat will promptly inform proponents of the decisions regarding individual proposals. Proposal forms are available from the IGCP website. It is strongly recommended that the proposers of a new IGCP project get in touch with the Italian IUGS-IGCP National Committee before submission.

### 5. Young Scientist Projects

The IGCP Young Scientist Project is a special type of IGCP Project which aims at fostering international cooperation between prospective young scientists from developing and developed countries early in their careers. It is expected that this will recruit and train young scientists to establish future cooperative projects. Proposals and projects should follow these guidelines:

- Proposers should be within 10 years of their PhD.
- Proposers should provide a CV and include a copy of at least one international peer-reviewed publication in their field.
- Proposers are encouraged (but not required) to find an experienced scientist as advisor to help guiding the project.
- Proposers need to demonstrate an affiliation to a research institute, university, geological survey, or equivalent organization for the duration of the project.
- Projects may, but do not need, to be linked to an existing IGCP project.
- The project duration is three years; the project should involve at least three young scientists from a minimum of two countries. The principal proposer must be from a developing country.

- The Young Scientist Project will be awarded a maximum of US\$5,000 per year.
- These funds are provided to support:
  - field meetings with at least five participants, which should including the group leaders,
  - travel to IGCP-organized or any other international scientific conference,
  - participation in training courses,
  - research equipment (max. 20% of the allocated funds).

### 6. Funding

IGCP is not a funding programme. The annual allocation of support for each project will depend upon its quality and, for an already funded project, upon its performance during the previous year. The financial support provided annually by UNESCO and IUGS for IGCP projects covers part of the costs of organizing and managing research, meetings, and workshops, related to the project, as well as to facilitate participation by scientists from developing countries. These limited funds (average ca. 30,000 USD for the entire length of the project) provide 'seed money' to assist in the acquisition of additional funds from other sources. Past experience indicates that successful IGCP projects are able to secure significant additional funding from other sources.

## Summary Report 2014 of the IGCP Italian National Committee

- 1. Name, address, telephone, fax, e-mail address of the Chairperson of the National Committee; see back cover.
- 2. Members of the Committee: see back cover.
- 3. Projects led by Italian scientists during 2014:
- <u>Project No.591</u> The Early to Middle Paleozoic Revolution (2011-2015) (Bradley D. Cramer, USA; Živile Žigaitė, Lithuania; Thijs R.A. Vanderbroucke, France; Kathleen Histon, Italy; Renbin Zhan, China; Guillermo L. Albanesi, Argentina; Michael J. Melchin, Canada; Mikael Calner, Sweden).
- 4. *Projects with active Italian Working Groups:*During 2014 Italian geoscientists were active in at least six other IGCP projects.
- 5. *IGCP meetings held in Italy in 2014* None was reported.

## Summary Report 2014 of the IUGS Italian National Committee

- 1. Country: Italy
- **2. Name of IUGS Adhering Organization or National Committee**: Consiglio Nazionale delle Ricerche (CNR).
- 3. Name and address of person preparing form:

Prof. W. Cavazza
Dipartimento di Scienze Biologiche, Geologiche e Ambientali
Università degli Studi di Bologna
Piazza Porta San Donato 1
I-40126 BOLOGNA
Tel. +39 051 209 4939

Fax. +39 051 209 4903

E-mail: william.cavazza@unibo.it

#### 4. Status of the IUGS National Committee:

The IUGS Italian National Committee is an official committee of C.N.R. (Consiglio Nazionale delle Ricerche), a public agency whose duty is to carry out, promote, spread, transfer, and improve research activities in the main sectors of knowledge growth and of its applications for the scientific, technological, economic and social development of the country. C.N.R. is also the organization representing Italy in all major international scientific organizations and unions.

### 5. Number of people on Committee or body for IUGS:

Ten. The members of the Committee are: Dr. Marco Amanti, Prof. Attilio Boriani, Prof. Antonio Brambati, Prof. William Cavazza, Prof. Carlo Doglioni, Prof. Domenico Rio, Dr. Marco Sacchi, Dr. Pierluigi Soddu, Dr. Fabio Trincardi, Dr. Gianluca Valensise (see back cover for details).

### 6. Number of meetings during the year:

No official meetings were held. Informal meetings of the members of the IUGS Italian National Committee were held at national meetings and other gatherings.

- 7. Major IUGS-related scientific activities (e.g., congresses, symposia, workshops, courses) which took place in Italy:
- 29<sup>th</sup> Himalaya-Karakoram-Tibet (HKT) Workshop (sponsored by IUGS Tectask): Lucca, 2-4 Sept. 2014 (110+ participants);
- 12<sup>th</sup> Congress, International Association of Engineering Geology and Environment (IAEG): Turin, 15-19 Sept. 2014 (1000+ participants).
- 8. Main outreach activities, e.g. primary-secondary-tertiary education, community, media, etc.

The Commission itself did not directly produce outreach activities during 2014.

### 9. Main publications (scientific, other):

The IUGS Italian National Committee publishes in electronic format a yearly report on the International Geoscience Programme (IGCP) which is distributed to the entire Italian Earth sciences community through the Italian Federation of Earth Sciences (FIST). The report reaches over 2,000 geoscientists.

### 10. Major initiatives currently underway:

The Commission is committed to a new drive to stimulate the participation of Italian geoscientists in the International Geoscience Programme (IGCP) and IUGS activities at large.

### 11. Important activities of other geology-related academic organization(s):

The current governmental budget squeeze makes investments in new initiatives very difficult.

### 12. Activities/achievements reported or to be reported in Episodes and/or in the IUGS website

None.

13. Leadership by Italian geoscientists of IUGS bodies, programmes, joint-initiatives, or other IUGS activities:

Marco BALINI

Chair, Triassic Subcommission of the IUGS International Commission on Stratigraphy

E-mail: Marco.Balini@unimi.it

Rosa Maria DI MAGGIO

Officer Europe, Initiative on Forensic Geology

Email: rosamaria.dimaggio@gmail.com

Isabella RAFFI

Chair, Neogene Subcommission of the IUGS International Commission on Stratigraphy

E-mail: raffi@unich.it

Simonetta MONECHI

Chair, Paleogene Subcommission of the IUGS International Commission on Stratigraphy

E-mail: monechi@unifi.it

Igor M. VILLA

Chair, IUGS Task Group on Isotope Geology and Geochronology

E-mail: igor@geo.unibe.ch

#### 14. Activities related to the next IGC

During 2015 the IUGS Italian National Committee will actively promote the participation of Italian geoscientists in the IGC Capetown.

#### 15. Website

**IUGS National Committee of Italy** 

### **Active IGCP Projects**

You are invited to visit the <u>UNESCO webpage</u> listing all active IGCP projects. All Italian colleagues interested in joining the projects or just wishing to receive additional information are invited to visit the relevant webpages and/or get in touch with the project leader(s).

#### **IGCP Projects active in 2014**

### 574 BENDING AND BENT OROGENS, AND CONTINENTAL RIBBONS

Project leaders: Stephen T. Johnston (Canada), Gabriel Gutierrez-Alonso (Spain), Arlo Weil (USA)

Duration: 2009-2013 (on extended term in 2014)

http://www.brynmawr.edu/geology/faculty/aweil/IGCP-574/

### 575 PENNSYLVANIAN TERRESTRIAL HABITATS AND BIOTAS OF SOUTHEASTERN EURAMERICA

<u>Project leaders:</u> Christopher J. Cleal (United Kingdom), Stanislav Opluštil (Czech Republic), Isabel van Waveren (The Netherlands), Mihai E. Popa (Romania), Barry A. Thomas (United Kingdom)

Duration: 2010-2014 http://www.igcp575.org

### **580** APPLICATION OF MAGNETIC SUSCEPTIBILITY ON PALEOZOIC SEDIMENTARY ROCKS Project leaders: Anne-Christine da Silva (Belgium), Michael T. Whalen (USA), Jindrich Hladil

(Czech Republic), Daizhao Chen (China), Simo Spassov (Belgium), Frederic Boulvain (Belgium), Xavier Devleeschouwer (Belgium)

Duration: 2009-2013

http://www.ulg.ac.be/geolsed/MS

#### 581 EVOLUTION OF ASIAN RIVER SYSTEMS

<u>Project leaders:</u> Hongbo Zheng (China), Ryuji Tada (Japan), Peter Clift (United Kingdom), Masood Ahmad (India), Zhengxiang Li (Australia)

Duration: 2009-2013

http://isg.nju.edu.cn/Exchange/Index.aspx

### 582 TROPICAL RIVERS: HYDRO-PHYSICAL PROCESSES, IMPACTS, HAZARDS AND MANAGEMENT

Project leaders: Edgardo M. Latrubesse (Argentina), Rajiv Sinha (India), Jose C. Stevaux

(Brazil), Zhonguan Chen (China)

Duration: 2009-2013 http://www.igcp582.uem.br/

### 585 E-MARSHAL: EARTH'S CONTINENTAL MARGINS: ASSESSING THE GEOHAZARD FROM SUBMARINE LANDSLIDES

Project leaders: Roger Urgeles (Spain), David Mosher (Canada), Jason Chaytor (USA),

Michael Strasser (Germany)

Duration: 2010-2014

http://www.igcp585.org

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

Project leaders: Patricia Vickers-Rich (Australia), Mikhail Fedonkin (Russia), Jim Gehling

(Australia), Guy Narbonne (Canada)

Duration: 2010-2014

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

### 588 PREPARING FOR COASTAL CHANGE

Project leaders: Adam D. Switzer (Malaysia), Craig Sloss (Australia), Benjamin Horton

(USA), Yongqiang Zong (China)

Duration: 2010-2014

http://www.coastal-change.org

### 589 DEVELOPMENT OF THE ASIAN TETHYAN REALM

Project leaders: Xiaochi Jin (China), Katsumi Ueno (Japan), Graciano Yumul JR

(Philippines), Pol Chaodumrong (Thailand)

Duration: 2012-2016 http://igcp589.cags.ac.cn/

### 591 THE EARLY TO MIDDLE PALAEOZOIC REVOLUTION

<u>Project leaders:</u> Bradley D. Cramer (USA), Živile Žigaitė (Lithuania), Thijs R.A. Vanderbroucke (France), Kathleen Histon (Italy), Renbin Zhan (China), Guillermo L. Albanesi (Argentina), Michael J. Melchin (Canada), Mikael Calner (Sweden)

Duration: 2011-2015 http://igcp591.org/

### 592 CONTINENTAL CONSTRUCTION IN CENTRAL ASIA

Project leaders: Inna Safonova (Russia), Reimar Seltmann (UK), Min Sun (China)

Duration: 2012-2015 http://www.iagod.org/igcp/

### 594 IMPACT OF MINING ON THE ENVIRONMENT IN AFRICA (SPONSORED BY THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY)

<u>Project leaders:</u> Bohdan Kríbek (Czech Republic), Ewa Cukrowska (South Africa), Benjamin Mapani (Namibia), Imasiku Nyambe (Zambia)

Duration: 2011-2014 (4 years) http://www.geology.cz/igcp594

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

Project leaders: Peter Königshof (Germany), Thomas J. Suttner (Austria), Iliana A. Boncheva (Bulgaria), Nadezhda G. Izokh (Russia), Phuong Ta Hoa (Vietnam), Thasinee

Charoentitirat (Thailand), Johny A. Waters (USA), Wolfgang Kiessling (Germany)

Duration: 2011-2015 Web site in process

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

Project leaders: J. Brendan Murphy (Canada), J. Duncan Keppie (Mexico), Cecilio Quesada

(Spain), Bill Collins (Australia)

Duration: 2011-2015

http://www.wix.com/declan 15/test

### 598 ENVIRONMENTAL CHANGE AND SUSTAINABILITY IN KARST SYSTEMS (SPONSORED BY THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY)

Project leaders: 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 (4 years)

http://igcpkarst.com/

### 599 THE CHANGING EARLY EARTH (SPONSORED BY THE SWEDISH INTERNATIONAL **DEVELOPMENT COOPERATION AGENCY)**

Project leaders: Jaana Halla (Finland), Kent C. Condie (USA), Roberto Dall'Agnol (Brazil), Mudlappa Jayananda (India), Martin J. Van Kranendonk (Australia), Hugh Rollinson (UK), Gary Stevens (South Africa), Jin-Hui Yang (China)

Duration: 2011-2014 (4 years)

https://sites.google.com/a/helsinki.fi/early-earth-tectonics/

### 600 METALLOGENESIS OF COLLISIONAL OROGENS (SPONSORED BY THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY)

Project leaders: Zengian Hou (China), David Leach (USA), Jeremy Richards (Canada), Richard Goldfarb (USA)

Duration: 2011-2014 (4 years) http://igcp600.cags.ac.cn/en/

### 601 SEISMOTECTONICS AND SEISMIC HAZARDS IN AFRICA (SPONSORED BY THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY)

Project leaders: Mustapha Meghraoui (France), Vunganai Midzi (South Africa), Atalay

Ayele (Ethiopia), Djillali Benouar (Algeria)

Duration: 2011-2014 (4 years)

http://eost.u-strasbq.fr/~iqcp601/Documents.html

### 604 GROUNDWATER AND WETLANDS IN IBERO-AMERICA

Project leaders: Emilia Bocanegra (Argentina), Gerdon Cardoso (Brazil), Emilio Custodio (Spain), Teresita Betancur (Colombia), Marisol Manzano (Spain)

Duration: 2011-2015

http://www.mdp.edu.ar/hidrogeologia/IGCP604/description.php

### 606 ADRESSING ENVIRONMENTAL AND HEALTH IMPACTS OF MAJOR AND ABANDONED MINES IN SUB-SAHARAN AFRICA (SPONSORED BY THE SWEDISH INTERNATIONAL **DEVELOPMENT COOPERATION AGENCY)**

Project leaders: Theo C. Davies (South Africa), Benjamin Mapani (Namibia)

Duration: 2011-2014 (4 years)

Web site in process

#### 608 ASIA-PACIFIC CRETATCEOUS ECOSYSTEMS

Project leaders: Hisao Ando (Japan), Xiaoqiao (China), Daekyo Cheong (Republic of

Korea), Sunil Bajpai (India) Duration: 2013-2017

http://igcp608.sci.ibaraki.ac.jp/

#### 609 CRETACEOUS SEA-LEVEL CHANGES

<u>Project leaders:</u> Michael Wagreich (Austria), Silke Voigt (Germany), Svetlana Zorina (Russia), Xiumian Hu (Russia), Julleh Jalalur Rahman (Bangladesh), Ismail Omer Yilmaz (Turkey)

Duration: 2013-2017

http://geologie.univie.ac.at/home/news/news-singleview/article/igcp609-new-project-on-sealevel-changes-in-a-greenhouse-

climate/?tx ttnews[backPid]=122050&cHash=b60b5355dce0ee38ddcda976972270d8

### 610 FROM THE CASPIAN TO MEDITERRANEAN: ENVIRONMENTAL CHANGE AND HUMAN RESPONSE DURING THE QUATERNARY

<u>Project leaders:</u> Valentina Yanko-Hombach (Ukraine), Nikolay Panin (Romania), Olena Smvntvna (Ukraine).

Mehmet Celal Ösdoğan (Turkey), Tamara Yanina (Russia)

Duration: 2013-2017

http://www.avalon-institute.org/IGCP610/index.php

### 616 TECTONIC, PALEOCLIMATIC, LANDSCAPE EVOLUTION OF CENTRAL AFRICA (SPONSORED BY THE SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY)

Project leaders: Boniface Kankeu (Cameroon), R.O. Greiling (Germany), Jurgen

Runge (Germany)

Duration: 2012-2014 (3 years) <a href="http://www.igcp616-y.org/">http://www.igcp616-y.org/</a>

### 618 PALEOCLIMATE INFORMATION OBTAINED FROM PAST-RECHARGED GROUNDWATER

<u>Project leaders:</u> Dioni I. Cendón (Australia), Jianyao Chen (China), Jason J. Gurdak (USA), Ofelia Tujchneider (Argentina), Emerit. Sylvi Haldorsen (Norway), Ir. M.J (Martine) van der Ploeg (The Netherlands), Rein Vaikmäe (Estonia), Roland Purtschert (Switzerland) Najiba Chkir Ben Jemâa (Tunisia)

Duration: 2012-2016 http://www.gw-gps.com/

### 624 ONEGEOLOGY

Project leaders: Alex Malahoff (New Zealand)

Duration: 2013-2017 http://www.onegeology.org/

### 628 THE GONDWANA MAP PROJECT

Project leaders: Renata de Silva Schmidt (Brazil)

Duration: 2013-2017

http://www.gondwana.geologia.ufrj.br/igcp 628.html

### 630 PERMIAN-TRIASSIC CLIMATIC AND ENVIRO NMENTAL EXTREMES AND BIOTIC RESPONSES

Project leaders: Zhong-Qiang Chen (China)

Duration: 2014-2018 http://igcp630.cug.edu.cn/

### 632 CONTINENTAL CRISI OF THE JURASSIC

Project leaders: Jingeng Sha (China)

Duration: 2014-2018 http://www.igcp632.org/

### Italian Contributions to the IGCP - Year 2014

The following are short descriptions of the Italian participation in the IGCP during 2014. This year's report includes only the summaries of the activities of IGCP projects led by Italian geoscientists. All material included was received by December 31, 2014. Some Italian involvement in IGCP projects may not be documented in this publication because the National IGCP Committee of Italy did not receive the relevant information. If you are participating in an IGCP project —as project leader or participant—and your name does not appear in this list get in touch with W. Cavazza (see address and contact numbers on the back cover). All Italian colleagues interested in joining the projects or just wishing to receive additional information are invited to get in touch with the relevant project leader(s) or with the Italian coordinators.

### Project No. 591 - The Early to Middle Paleozoic Revolution (2011 – 2015)

### **Project leaders:**

Bradley D. Cramer (USA), Żivilė Żigaitė (Lithuania), Thijs R.A. Vandenbroucke (France), Kathleen Histon (Italy), Renbin Zhan (China), Guillermo L. Albanesi (Argentina), Michael J. Melchin (Canada), Mikael Calner (Sweden)

Contact: Kathleen Histon

Via Mazzini 4

21039 Valganna (Varese), Italy e-mail: hiscat@interfree.it

Website: www.igcp591.org

### **Project Summary**

The Early Ordovician to Early Devonian interval contains several of the most significant paleoclimate and paleobiological events in Earth history. This interval of Earth history also contains the acme and amelioration of the Early Paleozoic Ice Age, which provides an important historical analogue for researchers of modern climate change. Additionally, this interval contains the roots of the invasion of life onto land. The Earth did not go quietly into the Middle Paleozoic and the primary research objective of IGCP 591 – 'The Early to Middle Paleozoic Revolution' is to investigate this dynamic and important interval in the history and evolution of life and our planet.

### **Main Project Activities 2013**

The 2014 annual meeting was held in June in Tartu (Estonia) with field excursions to the Ordovician and Silurian of Estonia. Related Abstract volume and fieldguides were published. A proceedings volume is being published as a Special Issue in 2 parts (Issue 4-December, vol. 63, 2014; Issue 1-March, vol. 64, 2015) in the Estonian Journal of Earth Sciences.

A regional field meeting and excursion were held in Kunming, China, in August, and included field trips throughout southwest China, including a mid-meeting field trip to the world-famous Chengjiang Biota locality and museum. Abstract volume and fieldguides were published. A proceedings volume is being published as a Special Issue of Palaeoworld.

A public policy symposium was held in May in Iowa City, Iowa, USA.

A symposium was held at the Gondwana 15 meeting in July held in Madrid, Spain.

Details of all these activities may be found on the project website.

# A new International Geoscience and Geoscience Programme (IGGP)?

Following is a message to the IGCP National Committees from Patrick McKeever, IGCP Secretary and Chief of the Earth Science Section, on the future of Earth Sciences at UNESCO. A few irrelevant passages are omitted.

Dear Members of the IGCP Board, National Committees and IGCP Project Leaders,

Over the last number of years UNESCO has been facing one of the most severe financial crisis in its history. As part of the response to this, a major re-organisation of UNESCO is underway and a detailed prioritisation of all UNESCO activities has taken place. Unfortunately Earth Science was deemed as being of low priority and we have had to struggle for its continuing survival. In this context, over the last two years at the annual meetings of the IGCP Board, discussions on a re-focussing of the IGCP have taken place to ensure that the programme reflects the priorities of UNESCO in supporting increasing North-South and South-South (i.e. developing countries – developing countries) scientific cooperation in IGCP projects and to ensure that IGCP projects have a stronger focus on societal relevance for sustainable development.

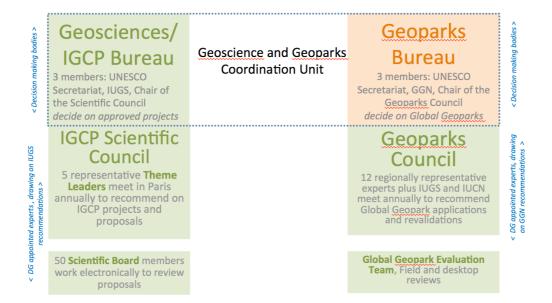
Parallel to this, and again as many of you will be aware, over the last two years there have been increasingly detailed discussions about the possibility of formalising the link between the Global Geoparks, the Global Geoparks Network (GGN) and UNESCO. (...)

Since the creation of the GGN in 2004, the link to UNESCO has been one of "supported by....," "endorsed by....," "under the auspices of...." etc etc. There has been no such thing as UNESCO Global Geoparks and there is still is no such thing as a UNESCO Global Geopark. The discussions over the last two years have considered whether and how this could be changed. Following a meeting of UNESCO's Executive Board (one of the Organisations' governing bodies) in April 2013, a Working Group on Geoparks was established. This Working Group comprises Member States of UNESCO, representatives of the GGN and IUGS (International Union of Geological Sciences). The group has now met 5 times (June 2013, July 2013, February 2014, May 2014 and July 2014) and it has made very substantial progress. A clear picture has now emerged of how a possible formalisation between UNESCO and Global Geoparks might happen.

Since 1972, the main UNESCO platform for encouraging international cooperation in Earth Science has been the International Geoscience Programme - IGCP. However the IGCP is a platform for scientific cooperation. The members of the Working Group on Geoparks are suggesting that the IGCP is now reformed and restructured so that, in addition to scientific cooperation, a societal outreach activity is created within it - UNESCO Global Geoparks. To reflect this, the IGCP and Global Geopark activities would come together under a new International Geoscience and Geoparks Programme - IGGP. 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 Geoparks. They would each have separate decisionmaking bureaux but would be linked by a non-decision making coordination unit that would explore possible synergies and areas of cooperation between both activities. The attached diagram illustrates what is being proposed. Essentially the current IGCP would continue in the same way as it was over the last number of years but with the re-focussed priorities referred to above. However the idea of having a link between the geoscience projects and the Global Geoparks would greatly help strengthen Earth Science in UNESCO, would ensure dynamic and synergetic cooperation between the Geoscience Projects and the Global Geoparks and would result, I have no doubt, in a rise in the visibility of Earth Science worldwide among decision makers and national authorities

This figure represents one proposed possible structure for Earth Sciences at UNESCO that was under discussion during the 10 Feb 2014 Working Group and modified during the 23 May 2014 and 2 July 2014 Working Groups on Geoparks. Bodies in green already exist, although the proposed Geoparks Council is currently called the GGN Bureau and exists outside of UNESCO, those bodies in orange are proposed.

### International Geosciences and Geoparks Programme



Throughout all of the discussions over the last two years, and largely as a result of the financial situation here in UNESCO, it has been strongly emphasised that any UNESCO Global Geopark activity must be at no extra cost to UNESCO. All funding for this side of the proposed IGGP would come from the Global Geoparks themselves (this has been agreed by them already). No funding will be diverted from the current IGCP to the Global Geoparks side of the proposed IGGP.

The next stages in these discussion are as follows. (...) New statutes for the proposed IGGP will be drawn up. These statutes, along with the final draft guidelines will be subject to debate in another meeting of the Working Group at UNESCO, most likely late 2014 / early 2015. If agreement is reached they will go for discussion to the UNESCO Executive Board in April 2015 and possibly again to another meeting of the Executive Board in September 2015. If they are approved, then the General Conference of UNESCO will be asked to endorse them sometime in October / November 2015. It would be at that stage, again subject to agreement of all parties, that the new IGGP and the UNESCO Global Geoparks would come into existence.

(...) The proposed IGGP will be on the agenda of the next IGCP Board meeting in February 2015 here in Paris to which national committee representatives are always welcome. In the meantime, if you have any questions about this proposal please do not hesitate to contact me

With my very best wishes,

Patrick Mc Keever

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### **CNR-IUGS-IGCP Italian National Committee**

Dr. Marco AMANTI

Dipartimento Difesa del Suolo/Servizio Geologico d'Italia ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale

Via Curtatone 3 - 00185 Roma E-mail: marcoamanti@isprambiente.it

Prof. Attilio C. BORIANI Dipartimento di Scienze della Terra Università degli Studi di Milano Via Botticelli, 23 - 20133 Milano E-mail: Attilio.Boriani@unimi.it

Prof. Antonio BRAMBATI Museo Nazionale dell'Antartide Via Weiss 21 34127 Trieste E-mail: brambati@units.it

Prof. William CAVAZZA (Chair)
Dipartimento di Scienze, Biologiche, Geologiche e Ambientali
Università di Bologna
Piazza Porta San Donato 1 - 40126 Bologna
E-mail: william.cavazza@unibo.it

Prof. Carlo DOGLIONI Dipartimento di Scienze della Terra Università "La Sapienza" Piazzale Aldo Moro 5 - 00185 Roma E-mail: carlo.doglioni@uniroma1.it

Prof. Domenico RIO
Dipartimento di Geoscienze
Università degli Studi di Padova
Via Gradenigo 6 - 35131 Padova
E-mail: domenico.rio@unipd.it

Dott. Marco SACCHI Istituto per l'Ambiente Marino Costiero Consiglio Nazionale delle Ricerche Calata Porta di Massa - 80133 Napoli E-mail: marco.sacchi@iamc.cnr.it

Dr. Pierluigi SODDU
Dipartimento Protezione Civile
Via Ulpiano 11 - 00193 Roma
E-mail: Pierluigi.Soddu@protezionecivile.it

Dr. Fabio TRINCARDI Istituto di Scienze Marine Consiglio Nazionale delle Ricerche Arsenale – Tesa 104 – Castello 2737/F - Venezia E-Mail: fabio.trincardi@bo.ismar.cnr.it

Dott. Gianluca VALENSISE
Istituto Nazionale di Geofisica e Vulcanologia
Via di Vigna Murata 605
00143 Roma
E-mail: gianluca.valensise@ingv.it

#### A Reminder:

If you participate in an IGCP Project do not forget to submit a short report by December 15th, 2015, to be included in the next issue of the IGCP Italian Report. The report should be <1,500 words long and should include the following information:

- number, title and duration of project;
- leader(s) and affiliation(s);
- name and affiliation of Italian correspondent;
- description of Italian involvement in the project during the year 2015 (including research interests and results, participation and organization of meetings, etc.);
- publications authored by Italian participants during the year 2015.