SPANISH NATIONAL COMMITTEE REPORT 2013

1 Chairman and Secretary of the Spanish National Committee

Chairman:

Prof. Dr. Marcos A. Lamolda

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Secretary:

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2 Members of the Spanish National Committee

Dr. R. Mediavilla (CEICAG); Dr. Roger Urgeles Esclasans (585); Dr. Javier Lario (588); Prof. Dr. José Ignacio Valenzuela Ríos (596); Dr. Silvino Castaño Castaño (618); Dr. Javier Hernández Molina (619).

3 IGCP Projects with participation of Spanish Working Groups

3.1 Projects with Spanish project co-leader

IGCP-585: Earth's Continental Margins: Assessing the Geohazard from Submarine Landslides

Dr. Roger Urgeles

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Abstract: During 2013 the project has set up additional online lecture notes that can be downloaded from the website, which now contains 17 lectures (see http://www.igcp585.org/education). The social base of the project has been enlarged. Current IGCP-585 has more than 4 times more participants since the project started. The project has grown to 146 active participants (23 more with respect to the previous report) of 29 different countries, spanning 4 continents. IGCP-585 continued to foster submarine landslide and scientific drilling research through the IODP, one of the few programs in addition to IGCP that allows for true international collaboration. Of special significance is the accomplishment of IODP Exp. 338 early this year, which added additional coring to improve our understanding of submarine landslides in the Nankai Trough, offshore Japan. The following IODP proposals by IGCP-585 members are active within the IODP evaluation system:

809-APL (Haeussler et al.) A Holocene record of submarine landslides, seismic shaking, and climate change: Port Valdez, Alaska, Forwarded to OTF

796 Full (Kopf et al.), Landslide geohazards: Testing multiple trigger mechanisms at the Ligurian slope (W'Mediterranean Sea), PEP

811 Full (Flemings et al.), The impact of recent warming and pore pressure rebound on slope instability (Cape Fear-Blake Ridge), PEP

823 Full (Schwenk et al.), Records of geohazards and monsoonal changes in the northern Bay of Bengal, PEP

835 Pre (Kodaira et al.,), Tracking the Tsunamigenic slips Across and Along the Japan Trench (JTRACK): Investigating a new paradigm in tsunamigenic megathrust slip with very deep water drilling using the D/V Chikyu

841 APL (Pecher et al.,) Creeping Gas Hydrate Slides: Slow deformation of submarine landslides on the Hikurangi Margin

IGCP585 members are also preparing for future IODP proposal submissions:

A 2nd workshop was held in May on scientific drilling to assess geohazards from submarine landslides in the Ulleung Basin, East Sea with KIGAM in South Korea.

Meeting organization

- •General Assembly of the European Geosciences Union, April 2013, Viena, Austria. Session GM8.2/GD2.10/TS4.5 "Seafloor- and Subseafloor Expression of Tectonic and Geomorphic Processes". 18 abstracts from 12 different countries (China, Denmark, France, Greece, Germany, Israel, Italy, Japan, New Zealand, Switzerland, Turkey, UK); ~ 80 people attended the oral session. All abstracts are published online at the EGU website at: http://meetingorganizer.copernicus.org/EGU2013/session/11704.
- •Japan Geoscience Union Meeting 2013. Session H-DS28 "Submarine Landslide" 10 abstracts from 3 countries (Germany, Japan, Switzerland). All abstracts are published online at the JGSU website at: http://www2.jpgu.org/meeting/2013/session/H-DS28_e.html.
- •6th International Symposium on Submarine Mass Movements and Their Consequences. The meeting gathered 127 participants from 29 countries (Australia, Azerbaijan, Belgium, Canada, China, Colombia, Fiji, France, Gambia, Germany, Greece, India, Ireland, Israel, Italy, Japan, Malta, The Netherlands, New Zealand, Norway, Russia, Republic of Korea, Spain, Switzerland, Taiwan, Trinidad & Tobago, United Kingdom, United States and Venezuela), with a total of 109 submitted abstracts. Two fieldtrips were dedicated to visit coastal protection infrastructures and discuss (1) preparedness to offshore geohazards in the low-lying coastal areas along the North Sea and (2) to visit outcrops of synsedimentary block faulting and mass wasting induced by syndepositional tectonic pulses in the accreationary prism of the lower cretaceous nape pile in the Salzburg and Lechtal Alps. During the symposium we had three panel discussions led by experts on: 1) Weak layers, 2) Precursors to Mass Movement Events, and 3) Mass Movements as Proxy for Paleoseismicity. These panel discussions allowed the audience to have a glimpse at the major research questions in each of those topics and participate in the debate as to which future directions the research should focus. The meeting was also the occasion to hold our 2nd Business Meeting. A volume containing the totality of the abstracts presented at the conference was published and can be downloaded from: http://www.igcp585.org/documents/6thISSMMTCAbstracts.pdf.

<u>List of most important publications (including maps)</u>

The IGCP-585 community actively publishes research findings in peer-reviewed journals of the highest standard. Unfortunately it is impossible to keep track of all publications by the 146 project members. Below the publications that are directly linked with formal IGCP-585 activities are reported:

5th edition of the 'Submarine Mass Movements and Their Consequences' book containing 61 peer-reviewed manuscripts presented to the 6th International Symposium on Submarine Mass Movements and Their Consequences. This volume will be indexed on the Web Of Knowledge ISI Proceedings database.

The full reference of the book is: Krastel, S.; Behrmann, J.-H.; Völker, D.; Stipp, M.; Berndt, C.; Urgeles, R.; Chaytor, J.; Huhn, K.; Strasser, M.; Harbitz, C.B. (Eds.) (2012): Submarine Mass Movement and Their

Consequences, Advances in Natural and Technological Hazards Research, 37, Springer, Dordrecht (The Netherlands), 683 pp, ISBN 978-3-319-00972-8.

http://www.springer.com/earth+sciences+and+geography/oceanography/book/978-3-319-00971-1

12 contributions to the 2nd World landslide Forum were published in Part I (Submarine Landslides and Tsunamis (pages 1-94) of Margotini, C., Canuti, P. and Sassa, K. (Eds.) (2013): Landslide Science and Practice, Volume 5, Springer, Dordrecht (The Netherlands), 349 pp. DOI: 10.1007/978-3-642-31427-8. http://www.springer.com/earth+sciences+and+geography/natural+hazards/book/978-3-642-31426-1? otherVersion=978-3-642-31427-8

Lectures and training

IGCP-585 chair R. Urgeles was designated this year as ECORD Distinguished Lecturer on the topic of "Submarine landslides and derived tsunamis, new challenges for the IODP" (http://www.essac.ecord.org/index.php?mod=education&page=dlp). 8 Lectures have been delivered throughout Europe and Canada.



Participants of the IGCP-585's 6th International Symposium on Submarine Mass Movements and Their Consequences at the GEOMAR/Helmholtz Centre for Ocean Research, Kiel (Germany).

IGCP-619: Contourites: geological record of ocean-driven paleoclimate, accomplice of submarine landslides and reservoir of marine geo-resources

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Abstract: Although the first IGCP-619 Project international meeting was between the 28th to 30th of January 2013 in the *Hull University* (UK), the project was deactivated in the first half of 2013 since UNESCO did not receive any response from *Dorrik A. V. Stow* on their requests for activity and budget reports. This anomalous situation has generated a quick reaction from the rest of the group and at the moment *D. Van Rooij* (Ghent Univ.), as the new proposed leader, is in contact with the IGCP Board for re-launching the

UNESCO IGCP-619 Project. IGCP Board will discuss our request during their next board meeting. In spite of this situation the Spanish Working Group has been actively participating in many actions and has contributed during 2013 with research publications in journals and congress.

<u>Publications and contributions to congresses</u>

During this year the SWG has published 11 scientific papers (1 in press) and 65 abstracts.

Meeting organisation

- •First IGCP-619 Project international meeting: "DIALOGUE BETWEEN CONTOURITE & OCEANOGRAPHY PROCESSES". 28th -30th of January 2013, Hull University (UK).
- •Meeting of the Spanish working group (PICG) № 619: "Contourites: geological record of oceandriven paleoclimate, accomplice of submarine landslides and reservoir of marine geo-resources". Hull University (UK).
- •30th Meeting of International Association of Sedimentologists (IAS). Session (T3.4): Contourites: their nature, deposition, and environmental/economic implication. 5th September, Manchester (UK).



Group photo (28 January 2013) of the first IGCP-619 International Meeting in the Hull University (UK).

Ph.D. as result of the SWG-IGCP 619:

- •A. Mena Rodriguez. "Paleoceanography and paleoclimatic evolution of the Galicia Interior Basin (NW Iberian Peninsula) during the past 60ka". Universidad de Vigo, 10th January 2014. Supervisor: *Dr. G. Francés Pedraz (Univ Vigo)*.
- •R. Brackenridge. "Contourite sands: characterisation, identification and hydrocarbon potential" Heriot-Watt Univ. (Edinburgh, UK). In preparation (to be finished by March-April 2014). Supervisor: *D.A.V. Stow* (Heriot-Watt Univ.) and *F.J. Hernández-Molina* (RHUL, UK).

- •C. Juan Valenzuela. "Pliocene and Quaternary stratigraphy stacking pattern and evolution of the Alboran Sea". CMIMA-CSIC. In preparation (to be finished during 2014). Supervisor: *G. Ercilla* (CMIMA-CSIC); *T. Medialdea* (IGME) and *F.J. Hernández-Molina* (RHUL, UK).
- •L. Pérez Felicidad. Stratigraphy stacking pattern and evolution of the Scotia Sea (Antarctica). Univ. Granada. In preparation (to be finished during 2014). Supervisor: *Dr. A. Maldonado* (IACT, CSIC) and *F.J. Hernández-Molina* (RHUL, UK).
- •G. Jané. "Morphological study of the northern Iberian margin and abyssal plains: recent tectonic and sedimentary evolution implications". In preparation. Supervisors: Dr. Jerónimo López (Autónoma Madrid Univ.), Dr. Adolfo Maestro and Estefanía Llave (Geological Survey of Spain).
- 3.2 Projects with active working groups.

IGCP-588: Preparing for Coastal Change - A detailed process-response framework for coastal change at different timescales.

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Abstract: Changes in relative sea level, coastal evolution and extreme events such as storms and tsunami are of local and global interest, which hinder individual well-being and intensify/enhance environmental degradation. An increased public awareness of predicted future sea-level rise combined with recent devastating extreme events has placed significant socioeconomic relevance on the understanding of human-land-ocean interaction and coastal dynamics. This project looks at records that will assist in assessing human interactions, coastal dynamics and vulnerability at different timescales which are immediately relevant to a variety of stakeholders interested in the future of coastal communities. They are: catastrophic or instantaneous events (minutes to hours); measurable and predictable changes (hours to years) for planning scale decisions (years-decades) and; geological-scale changes (centuries to millennia).

The Spanish Working Group was established in September 2010 with more than 33 researchers interested. The investigations cover areas from all the Spanish and Portugal coast as well as Tunisia, Açores, Cape Verde and Santo Domingo coasts.



Active dunes in the Cala de Monsul, Almeria (Spain).

<u>Publications and contributions to congresses</u>

The Spanish Working Group has published 10 scientific works in journals and 4 extended abstracts to professional meetings.

IGCP-596 "Climatic change and biodiversity patterns in the Mid-Palaeozoic (Early Devonian to Late Carboniferous)

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Abstract: The Spanish Working Group (SWG) has participated in three international meetings: 1) the Morocco joint SDS-IGCP 596 symposium with two talks and one poster; 2) the ICOS meeting in Mendoza (Argentina), with four talks (one of them as key note) and two posters. All these presentations were related to the IGCP-596; and 3) the GSA meeting in Denver, Colorado with three contributions in connection with the IGCP-596 goals, (two talks and one poster). The SWG has offered scientific support and field guidance for the celebration of the XXIX Annual Meeting of the Spanish Paleontological, where a monographic IGCP-596 Symposium has been organised and a field trip guided. This meeting took place in Córdoba, and besides the technical sessions (15 contributions -13 oral and two posters) the special symposium was dedicated "In Memoriam" to Mena Schemm-Gregory; the opening talk was a lovely homenage to her life. On this occasion, the SWG celebrated its annual meeting. The Secretary (J.-C. Liao), the Leader (J.I. Valenzuela-Ríos) and one of the members of the SWG (Sergio Rodríguez García) were involved in the organisation of the Spanish Paleontological Meeting, in one of the field trips and in the editorial work that leaded to the publication of a special Conference Volume. The SWG has also taken part in the XI Meeting of Young Palaeontologists of Spain, hold in Atarfe (Granada), with a Conference addressed to the young Master and Ph. D. students on IGCP matters (José Ignacio Valenzuela-Ríos).

Currently the SWG is composed of 25 members (14 females and 11 males; including 2 Post-docs; 5 Ph. D. students and 1 Master Student).

<u>Publications and contributions to congresses</u>

During this year the SWG has published 14 scientific papers, 16 Proceedings, 13 abstracts, edited a Field guide and participated in the edition of one Conference book.

Meeting organisation

Co-organised a major Conference, the XXIX Meeting of the Spanish Palaeontological Society and organised and IGCP Symposium within this Meeting. Both events took place in Córdoba, 2-6 October,

Post-Graduate Training:

Conodont laboratory and fieldwork basic techniques. General Devonian Biostratigraphy and Chronostratigraphy. April 2013; University of Valencia. Organiser: José Ignacio Valenzuela-Ríos. Student: Ph. D. student Lu Jianfeng, Nanjing Institute of Geology and Palaeontology; Chinese Academy of Sciences.



Participants of the IGCP-596 Fieldtrip to the Devonian and Carboniferous of El Alto Guadiato, Córdoba (Spain).

<u>Granted Projects related to the IGCP</u>

Lower Devonian Global Events of Spain and its worldwide correlation. CGL2011-24775. Main Researcher: José Ignacio Valenzuela-Ríos. Grant Agency: Spanish Ministry of Science and Innovation. Duration 3 years (2012-2014).

Hi-Res correlation and dating of Mid-Palaeozoic sedimentary sequences of Peri-Gondwana using integrated biostratigraphy and chemo-physical methods. M100131201. Main Researchers: Ladislav Slavík & José Ignacio Valenzuela-Ríos Financial Source: Czech Academy of Sciences. Czech Republic. Duration July 2012-June 2015

Partial support for attending and organising the different activities outlined above has been obtained by the Spanish IGCP National Committee, the International IGCP-596, and mainly by the Spanish Ministry for Economy and Competitiveness (MINECO), Grant CGL2011-24775.

Planned activities for 2014

Next year the SWG will organise a Special Symposium in connection with the XXX Annual Meeting of the Spanish Paleontological Society that will take place in Teruel Besides, it is the intention to participate, at least, in the Joint SDS-IGCP 596 to be held in Mendoza (Argentina) and to attend the Mongolia fieldwork and IGCP-596 meeting.

IGCP-618: Paleoclimate information obtained from past recharged groundwater

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Abstract: Las Tablas de Daimiel National Park is a Mediterranean wetland whose existence and natural evolution are strongly influenced by the geological complexity of the substratum and the catchment basin, as well as by vegetation. All these components have been interacting with each other under changing climates. During the Holocene, the area evolved from a fluvial system to a wetland. This process is attributed to the filling of topographic depressions, the loss of slopes and subsidence events. The wetland bottom is still subject to subsidence processes. In the last 3000 years, minor climate changes (scale ranging from centuries to years) have joined to the geological processes, conditioning the extent of the flooded area as well as the hydrochemical and ecological conditions. Natural dynamics in Las Tablas de Daimiel are strongly conditioned by human activities. These have become increasingly intense over time. All these interactions and changes remain recorded in the sediments yet. These show the behavior of Las Tablas de Daimiel in a long, medium and short timescales. In this sense, in the wetland, consecutive research works have been raised in the study of these sediments and their generating processes. The studies have taken different approaches from different areas of the Earth Sciences seeking to integrate all the available information and to find a consistent interpretation of its past and present which will enable to cope the problems of the future.

Las Tablas de Daimiel is a wetland strongly dependent on the water of a 5000 km² aquifer. This groundwater has chemical characteristics very different to that of surface waters Since the 1970s, intensive groundwater exploitation prevented the aquifer supplying the wetland and a complete change in the environmental conditions occurred. Then, Las Tablas de Daimiel became a component of the recharge to the aquifer. The information obtained from groundwater had a limited use in the study of environmental conditions given by the sediment. However, since 2009, a very humid period occurs in the zone. Then, groundwater level has risen, and the system is in a quasi-natural status since the spring of 2013, when the aquifer is directly or indirectly discharging to the wetland. From that moment, all information about groundwater will help to explain past environmental situations in two meanings. The first is to consider the influence of the whole groundwater characteristics in the sedimentation processes and its climate print. In the second, the long flows established into the aquifer system at the present can show paleoenvironmental indicators of water recharged in another climate conditions.

<u>Publications and contributions to congresses</u>

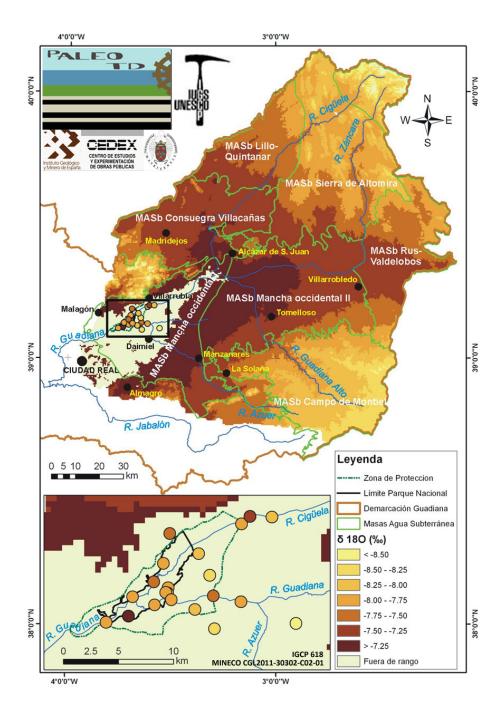
During this year the SWG has published 3 scientific papers, and 2 abstracts.

Post-Graduate Training:

Three students have performed research practices in the project during 2013. One of them belongs to E.T.S.I. Minas of Polytechnic University of Madrid (UPM), and the others to the Faculty of Geology, Complutense University of Madrid (UCM).

<u>Granted Projects related to the IGCP</u>

"Holocene Paleo-climate and hydrological reconstruction on the Upper Guadiana (Tablas de Daimiel), MINECO CGL2011-30302-C02-01"



Spatial distribution of precipitations originating groundwater from Tables of Coldstream.

4. National Committee activities

The Spanish National Committee (SNC) annual meeting took place in Atarfe (Granada) with Prof. M.A. Lamolda as Chairman and Prof. J. I. Valenzuela as secretary. The Centro Cultural Medina Elvira of Atarfe, provided the place and all facilities that were needed and the Foundation Sierra Elvira support the participants assistance to the meeting. The meeting was attended by five participants and other four (including the Director of the Spanish Geological Survey) could not attend due to agenda incompatibilities, but send his contributions and they were presented and discussed in SNC annual meeting.

Two Spanish Members were appointed this year to the UNESCO Scientific Committee; Antonio Pulido in Geoscience of the Water Cycle and Pablo Silva in Geohazards: reducing risks.

Both, the Chairman and the Secretary expressed their disappointment with the way the International Committee is addressing the National Committees, specially after the recommendations and oral agreements reached in the IGCP 40th Anniversary Meeting held in 2012. The new members of the International Committee seemed to overlook all the good wishes aiming at strengthen cooperation and communication among the Main Office and the National Committees. Also the way some Working Groups (in Spain) proceed was not appreciated by the Chairman and the Secretary, as some groups only contact the SNC for support but afterwards they do not provide any information and/or even do not create the suggested Working Group.

The Secretary reported on the IGCP 41st Annual Meeting and pointed out that in contrast with other years, on the occasion of this meeting the National Representatives were not allowed to express their opinions. The International Committee selected Ireland and Portugal to present their reports and the other Committees were banned, not event in the "Any other business" issue of the Agenda that was skipped by the Executive Secretary. Moreover, the International Committee never answer to the numerous questions and proposals that have been submitted from the SNC.

As another example of this "estrange" new way of dealing with National Committees, the Secretary of the SNC pointed out that this year no information on the new projects, their founding, current status, numerical reference, title, web page, coordinators,...was provided. Only the number of projects per Themes were indicated but not even the titles.

The SNC Secretary reported in the IGCP Scientific Board changes that took place this year and that affect the New Executive Secretary (Patrick Mckeever), the new IGCP Chairperson (Patricia Vickers-Rich) and the new IGCP Theme leaders: Robert Moritz (Earth Resources); Guy Narbonne (Climate Change and Life Evolution); Andrej Gosar (Geohazards); Gil Mahe (Hydrogeology) and George Gibson (Geodynamic). Also there were changes in the IUGS Board, being the new President Roland Oberhänsil and the new General Secretary Ian Lambert.

This year a new project with a Spanish co-leader was approved. IGCP-619. "Contourites: geological record of ocean-driven paleoclimate, accomplice of submarine landslides and reservoir of marine geo-resources". Subsequently, the proposal for the corresponding Spanish Working Group was approved.

The Chairman of the SNC gave a supporting letter to Prof. Dr. Juan Carlos Braga Alarcón for his proposal of a new project titled: Neogene low-latitude shallow-water marine Ecosystems: consequences of the different histories of regional systems for future responses.

The SNC give support to the Secretary J.I. Valenzuela for a lecture on IGCP Historical Evolution, structure and goals, on going projects and the YES program held within the XI EJIP (Paleontology Young Researches Meeting).

The SNC also supported the Coordinator of the SWG-596 and two students to attend (with contributions) the Special Symposium of the IGCP-596 held in Córdoba in connection with the Annual Meeting of the Spanish Paleontological Society and to organize the SWG-596 Annual Meeting.

This year a total of 5 working groups are active in Spain: 585, 588, 596, 618 and 619.

As a result of the activity 3 monographies, 111 papers, 238 abstracts and proceedings and 3 field-guides have been published.

Field-trips

Rodríguez, S., Wagner, R.H., Álvarez-Vázquez, C., Cózar, P. & Coronado, I. (2013) El Carbonífero del Alto Guadiato. XXIX Jornadas Sociedad Española de Paleontología. Guía de excursiones, 38-62

5. IGCP Meetings held during the year in Spain

- Annual Meeting of the Spanish National Committee, April 19th, Atarfe (Granada)
- •Annual Meeting of the Spanish Working Group-IGCP 596 and Special Symposium with 15 contributions and a field-trip. Córdoba and the Guadiato Área. 2nd-5th October.
- •Meeting of the Spanish Working Group-IGCP 619: Contourites: geological record of ocean-driven paleoclimate, accomplice of submarine landslides and reservoir of marine geo-resources". Hull (UK); January, 28-30. (The Spanish Working Group celebrated its meeting in UK instead of Spain to take advantage of the presence of most members at the International Meeting.
- 6. IGCP meetings planned for the next year (2014)
- Annual Meeting of the Spanish National Committee in The Las Tablas de Daimiel Natural Park (April 4-5).
- •Annual Meeting and Special Symposium of the Spanish Working Group-IGCP 596 during the XXX Meeting of the Spanish Paleontological Society to be held in October in Teruel.
- •Annual meeting of the Spanish Working Group-IGCP 619 and a field trip for visiting some contourite outcrops is planning to be celebrated in September 2014 in Mallorca.
- •IODP Expedition 339 2nd Post-cruise Meeting Tarifa (Cádiz, Spain) from 1st to 6th of June 2014.

7. Forthcoming events in connection with IGCPs

- •European Geosciences Union General Assembly 2014 (EGU), Vienna (Austria) 27 April 02 May 2014. Two specific sessions: 1) Seafloor Expression of Tectonic and Geomorphic Processes" related to IGCP-585; 2 Session OS2.6: "Climatic causes and consequences of Mediterranean-Atlantic gateway exchange from Miocene to present" related to IGCP 619.
- •2nd Deep-Water Circulation Congress. International meeting, Ghent (Belgium), 10th 12th September 2014 http://www.2dwc.ugent.be/ Session on Contourites and Slope Stability organized together with IGCPs 585, 619 and INQUA 1204 in the frame IGCP 619's annual meeting in May 2014, Ghent, Belgium,
- •3rd World Landslide Forum, June 2014, Beijing, China Sesion C8. "Landslide in coastal and submarine environments".
- •International Sedimentological Congress Session "Turbidity current, subaqueous mass flow and mass movement processes- recent insights and future research directions"; August 2014, Geneva, Switzerland,
- •XII IAEG Congress, Session "4.8 Submarine mass movements: hazards and risk assessment", September 2014, Torino, Italy.
- •4D multibeam mapping and its use for offshore geohazard assessment. Planned conference to be held in Italy
- •XXX Meeting of the Spanish Paleontological Society, October, Teruel (Spain).
- •IGCP-596 and IGCP 580 Joint Meeting and Field-Workshop. International Symposium in Mongolia, Ulaanbaatar, Mongolia, 5-18 August, 2014.
- •4th International Paleontological Congress. The history of life: A view from the Southern Hemisphere. IGCP596/SDS Joint Meeting. September 28-October 3; Mendoza, Argentina.
- •The IODP Expedition 339 2nd Post-cruise Meeting is being organized for expedition participants and shorebased scientists in Tarifa (Cádiz, Spain) from 1st to 6th of June 2014.
- Second Iberian Groundwater Conference. 8-10 Sep 2014 Valencia, Spain.

- •10th International Hydrogeological Congress with emphasis on Groundwater depended ecosystems. 8-10 Oct 2014 Thessaloniki, Greece.
- •Culture, climate and environment interactions at prehistoric wetland sites. 11-14 Jun 2014 Bern, Switzerland.
- •QuicklakeH: An international workshop on lakes and human interactions. 15-19 Sep 2014 Ankara, Turkey.
- •56th Scientific Session of Spanish Geological Society. 30 May 2014 Alicante, Spain.
- •57th Scientific Session of Spanish Geological Society. Nov 2014 Madrid, Spain.
- •The IGCP-585 will submit an Initial Training Network (ITN) proposal on "Submarine Landslides and Their impact on European continental margins". If funded, it will provide training for 11 Pre-Doc and 12 Post-Doc students.

8. Suggestions relating to conduct and improvement of the Program

A better communication between the Board and the National Committees has always been desirable and the Spanish National Committee has suggested in numerous occasions some ideas, but the International Board has not paid attention to any yet.

The lack of transparency and effective communication of the Board is a major handicap towards an active cooperation and fluid transference of ideas and informations that is needed in improving the program.

It seems that the International Board did not paid any attention to the feed-back that the National Committees provided each year and this is a serious limitation for improving communication and hampers the confidence of the National Committees on the International Board.

It is inconceivable that Spanish Co-Leaders of IGCP projects do not contact the National Committee, or even worse, when the Spanish National Committee learns about them and contact them, they never reply. We have denounced this aspect to the Board, and even suggested that those projects (not only in Spain but worldwide) that do not report to the respective national committees shall not be granted, or their funding be fined, the following year. As you can imagine, this greatly affect the annual reports that continuously will be incomplete. Therefore, the IGCP is funding and supporting actions that are out of control because the responsibles do not care to report them to the National Committees.

We want to remember here that the Spanish National Committee has always supported the IGCP by participating, sending reports and making comments for improving collaboration. However, we unfortunately have observed that the same relevant problems remain unsolved being the most important the lack of communication between the General Office and the National Committees.

In addition to that, it was an unexpected surprise that a book summarizing the 40 years of IGCP history, overlooked relevant aspects of the past. This book greatly disregards the "historical heritage" of all hard work done in the past and lay too much stress on the recent years achievements. Furthermore, no reference to the work carried out by the National Committees was mentioned in the book and as consequence of this way of dealing with the National Committees that always have supported the IGCP program, like the Spanish one, no mention to their activities was provided. This is not the best way of dealing with effective communication and transference of ideas and proposals, and creates a feeling of desperation and frustration that does not benefit the needed cooperation. We hope that the International Board acknowledges this situation and seeks for a joint solution.

9. Financial support received for the activities of this National Committee and given to IGCP projects and their activities.

The activities of the Spanish National Committee have been supported by a part of the Grant ACI2009-1037 of the Ministry for Economy and Competitiveness (30,000 euros for four years). The supported activities were:

- Participation of Secretary of the Spanish National Committee in the annual meeting of the IGCP Scientific Board, Paris, February 19th-21st, 2013.
- •Annual Meeting of the IGCP Spanish Committee, held at Atarfe (Granada) 18th-19th April 2013. The meeting was attended by 6 members, with one representative of the Spanish Geological Survey (IGME). On this occasion a conference on IGCP history, goals, evolution, current situation and the YES program addressed to young researchers in the XI EJIP Meeting held in Atarfe was presented by the Secretary of the SNC.
- •Participation of two Spanish Committee representatives in the 6th International Symposium on Submarine Mass Movements and their consequences, at Kiel (Germany), 23rd 25th september, 2013.
- Participation of four Spanish Committee representatives in the IGCP-596 Symposium, in the XXIX Annual Meeting of the Spanish Paleontological Society, Córdoba, 3-5 October, 2013.
- •Participation of one Spanish Committee representative in the International meeting Paleosismology and Archaeosismology, at Morelia (México), 19th 24th november, 2013.
- •One registration (in advance) to the 5th International IGCP 588 Conference, Girdwood, Alaska (USA).
- •Xerocopies and stationary for the Spanish National Committee and its Working Groups.
- •The Universities of Granada (Depto. de Estratigrafía y Paleontología) and Valencia (Dpto. de Geología), provided general services that allowed to the Chairman and the Secretary of the Committee, respectively, to carry out their duties appropriately.

Other financial sources that supported activities related to the Spanish Working Groups were: Lower Devonian Global Events of Spain and its worldwide correlation. CGL2011-24775. Main Researcher: José Ignacio Valenzuela-Ríos. Grant Agency: Spanish Ministry of Science and Innovation. Duration 3 years (2012-2014).

Hi-Res correlation and dating of Mid-Palaeozoic sedimentary sequences of Peri-Gondwana using integrated biostratigraphy and chemo-physical methods. M100131201. Main Researchers: Ladislav Slavík & José Ignacio Valenzuela-Ríos Financial Source: Czech Academy of Sciences. Czech Republic. Duration July 2012-June 2015

They supported the following activities:

- Participation of the National Secretary and Spanish Leader of the SWG-IGCP-596 in the Morocco Joint SDS-IGCP 596 symposium, 22nd-29th March, 2013.
- Participation of the National Secretary and Spanish Leader of the SWG-IGCP-596 in the Third International Conodont Symposium, Mendoza (Argentina) 15-19 July, 2013.
- Participation of the National Secretary and Spanish Leader of the SWG-IGCP-596 in the 125 Annual Meeting of the Geological Society of America, Denver (Colorado) 27-30 October, 2013.
- •Joint fieldtrip (Spain-Czech Republic) in the Devonian of Bohemia. These grants supported the trip and accommodation of the Spanish Leader and two Ph. D. students of the SWG-IGCP-596.

•Joint fieldtrip (Spain-Czech Republic) in the Devonian of the Spanish Central Pyrenees. These grants supported the trip and accommodation of the Spanish Leader and two Ph. D. students of the SWG-IGCP-596.

The IGCP-596 partially supported the participation of the Secretary of the IGCP-596, SWG in the Morocco Joint SDS-IGCP 596 symposium, 22nd-29th March, 2013.

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Valencia, February 14th, 2014

José Ignacio Valenzuela Ríos Secretary, Spanish National Committee, IGCP