



Annual Report for the IUGS

Chief Accomplishments 2018 and Plans 2019

December 2018

Summary

1. Name of Affiliated Organization	3
2. Overall objectives	5
3. Relate goals to overall IUGS scientific objectives	6
4. How has the organization been actively involved with IUGS related activities	7
5. Structure and organization	7
6. Interaction with other International organizations and projects	10
7. Chief products	11
8. Chief accomplishments 2018 and plans for 2019	17
<i>Chief accomplishments 2018</i>	<i>17</i>
<i>Plans for 2019</i>	<i>28</i>

INTERNATIONAL UNION OF GEOLOGICAL SCIENCES (IUGS)

Reporting Form for IUGS Affiliated Organizations 2018

1. Name of Affiliated Organization

IAPG – INTERNATIONAL ASSOCIATION FOR PROMOTING GEOETHICS

<http://www.geoethics.org/>

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The IAPG was legally recognized as a not-for-profit organization through a public notarial deed on 21st December 2012, repertoire no. 16255, collection no. 8340, Italian Republic.

Head Office c/o:

Istituto Nazionale di Geofisica e Vulcanologia

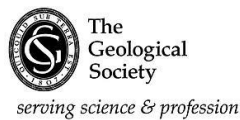
via di Vigna Murata, 605

00143 Rome, Italy

The IAPG is an affiliated organization of the **International Union of Geological Sciences (IUGS)**, an International Associate Organization of the **American Geosciences Institute (AGI)**, an Associate Society of the **Geological Society of America (GSA)**, an Associate Society of the **Geological Society of London (GSL)**, an Associate Organisation of the **Geoscience Information in Africa - Network (GIRAF)**, a member organisation of the **International Council for**



Philosophy and Human Sciences (ICPHS), an Observer Organization of the Canadian Federation of Earth Sciences (CFES).



The IAPG has agreements of collaboration with: **EuroGeoSurveys (EGS), European Federation of Geologists (EFG), American Geophysical Union (AGU), International Association for Engineering Geology and the Environment (IAEG), International Network of Young and Early Career Geoscientists (YES Network), International Association of Hydrogeologists (IAH), Association of Environmental & Engineering Geologists (AEG), International Geoscience Education Organisation (IGEO), African Association of Women in Geosciences (AAWG), Initiative on Forensic Geology (IUGS-IFG), Geoscientists Canada (GC), Geology for Global Development (GfGD), Forum for Climate Engineering Assessment (FCEA), Peruvian Geological Society (SGP), Instituto de Geociencias Y Medio Ambiente, Arequipa-Perù (I-GEMA), GEVAS Red Argentina, and African Network for Geo-Education (ANGE).**



The IAPG is Global Partner of the **International Year of Global Understanding (IYGU)**, Technical Partner of the IUGS Conference **Resource for Future Generation - RFG2018**, Summit Partner of the **Geoscience & Society Summit 2019**.



Finally, the IAPG is partner of the **AGU Ethics & Equity Center**:

<https://ethicsandequitycenter.org/>.



2. Overall objectives

The IAPG is a multidisciplinary, scientific network for widening the discussion and creating consciousness about problems of Ethics applied to the Geosciences, in particular on the ethical, social and cultural implications of Earth sciences education, communication, research and practice. Its overall objectives are:

- developing the discussion on ethical implications in research and practice of geosciences among geoscientists and into society, making Geoethics an essential point of reference for any action on land, waters and atmosphere usage that all stake-holders and decision-makers must take into proper account;
- increasing the base research on Geoethics and strengthening it from the scientific point of view;
- promoting Geoethics values and principles through international cooperation, encouraging the involvement of geoscientists belonging to low income countries;

- fostering the dissemination of Geoethics through websites and social networks, the publication of scientific papers, the organization of meetings and sessions/symposia on Geoethics within national and international scientific events;
- encouraging the establishment of both regional and specialty groups; and
- cooperating with national and international organizations whose aims are complementary to those of the IAPG.

The achievement of the IAPG objectives will lead to the:

- identification of methods for a more effective application of geoethical principles in geological practice and research;
- reflection on the role that geoscientists can have in society and the identification of suitable forms, positions, means and actions to be adopted by them;
- growth of awareness about our responsibility, both as geoscientists and as members of civil society;
- involvement of the community in the idea of a common and shared “geo-heritage”, to be considered as a cultural, educational and scientific value, as well as an economic resource;
- cultural renewal in the way we perceive and relate to our planet; and
- the sensitization towards the defense of life and the richness of the Earth.

3. Relate goals to overall IUGS scientific objectives

The IAPG goals are strongly related to the IUGS’s aims. This is evident by comparing the IUGS and IAPG Constitutions. The IAPG activities aim to develop thoughts and to find best practice solutions regarding global issues (such as geohazards, Earth resources, climate change, geoscience communication and geo-education) with the goal to sustain Earth’s natural environment, to use all natural resources wisely and to mitigate the impacts of geohazards for the benefit of society in the attainment of their economic, cultural and social goals. Moreover, the IAPG is involved in promoting geo-education in the widest sense, facilitating interactions among geoscientists from all parts of the world, encouraging international cooperation, and fostering the dissemination of Geoethics themes in society.

4. How has the organization been actively involved with IUGS related activities

- The IAPG was the most visible and active IUGS Affiliate participating at the IUGS RFG2018 conference held in Vancouver in June. As reported in the “section 8” of this report, IAPG organized and/or supported 6 sessions on geoethics, in cooperation with other IUGS affiliate organizations (EFG, AGI, GSL) or IUGS groups (IFG-Initiative on Forensic Geology).
- The IAPG, jointly with the Initiative on Forensic Geology (IFG), has created a Task Group to prepare a White Paper on Geoethics in Forensic Geology.
- The IAPG is a collaborating organization of the Task Group on Global Geoscience Professionalism (TGGGP).
- The IAPG has organized a session on geoethics in cooperation with the IUGS scientific commission “History of Geological Sciences (INHIGEO)” at the 89th Congress of the Geological Society of Italy.
- The IAPG proposal for a Symposium on Geoethics at the 36th IGC – International Geological Congress (Delhi, India, 2020), organized in several sessions on different topics, has been accepted and included in the Second Circular of the congress. Title of the Symposium: “1.7 Geoethics: Ethical, Social and Cultural Aspects in Geosciences”.

5. Structure and organization

All the IAPG members, including officers, are volunteers.

The bodies of the Association are the:

- 1) Executive Council;
- 2) General Assembly.

The **Executive Council** (<http://www.geoethics.org/executive-council>) consists of:

- a) one President (Prof. Stefano Tinti);
- b) two Vice-Presidents (Prof. Susan Kieffer; Dr. Shrikant Limaye)
- c) one Secretary General (Prof. Silvia Peppoloni);
- d) one Treasurer (Dr. Giuseppe Di Capua);

e) six Continental Coordinators (Dr. Peter Bobrowsky, Prof. Roberto Greco, Dr. Nic Bilham, Prof. Ezzoura Errami, Dr. Meng Wang, Dr. Margaret Brocx).

The **General Assembly** (<http://www.geoethics.org/ga>) is composed of all the IAPG members. Currently the IAPG network comprises 2153 members from 125 countries in 5 continents.

The IAPG is also present in 30 countries with **national sections** (<http://www.geoethics.org/sections>) (coordinators in brackets): **Argentina** (Elizabeth I. Rovere and Roberto A. Violante), **Bangladesh** (Ershadul Haque and Jahangir Alam), **Brazil** (Eduardo Marone), **Cameroon** (Ndzishepngong Kelvin Ngwang), **Canada** (Jan Boon and Shona van Zijll de Jong), **Cuba** (Yurisley Valdes Mariño), **Democratic Republic of Congo** (Jean-Robert Mweze), **Egypt** (Kholoud M. Abdelmaksoud), **France** (Michèle Barbier and David Crookall), **Greece** (Gerassimos A. Papadopoulos), **India** (Surya Parkash Gupta), **Iraq** (Nawrass N. Ameen and Ameer Hayder Khalid), **Iran** (Vahid Ahadnejad and Sedigheh Seifilaleh), **Italy** (Silvia Peppoloni), **Jordan** (Mamoon Allan), **Lebanon** (Soumaya Ayadi-Maasri), **Malawi** (Hilton Banda Eneya), **Mexico** (Miguel Rangel Medina), **Nepal** (Shree Prasad Vista and Ranjan Kumar Dahal), **Nigeria** (Arinze Harrison Ikwumeleze), **Pakistan** (Muhammad Yaseen and Emad Ullah Khan), **Paraguay** (Moisés Alejandro Gadea Villalba), **Peru** (Sandra Paula Villacorta Chambi), **Portugal** (Clara M. da Silva de Vasconcelos and Paulo Emanuel Talhadas Ferreira da Fonseca), **Romania** (Antoneta Seghedi and Ilies Dorina Camelia), **Spain** (Emilia H. Lopera Pareja and Domingo A. Martín Sánchez), **Ukraine** (Yuriy Kostyuchenko), **United Kingdom** (David Craig Ovardia), **USA** (Vincent S. Cronin and Cindy M. Palinkas), **Uruguay** (Leda Sánchez Bettucci). IAPG-France and IAPG-Lebanon have been established in 2018.

In 2018, the IAPG has enlarged its **Board of Experts (BE)** (<http://www.geoethics.org/experts>) on specific issues related to geoethics. The BE has the important cultural function of suggesting to our community themes, articles, initiatives. The BE is interested in Earth sciences and humanities and in promoting issues on Geoethics and the IAPG. Currently the board includes 14 experts: Martin Bohle, Belgium (topic: **Interdisciplinary explorations for main-streaming interest in Earth sciences topics**); Elizabeth Silva, Portugal (topic: **Geoethics and Geoparks**); Robert Frodeman, USA (topic: **Geoethics and Philosophy**); Madhumita Das, India (topic: **Geoethical aspects in low income countries**); Juan Carlos Gutierrez-Marco (topic: **Geoethics in Paleontology**), Christine McEntee, USA (topic: **Harassment and Discrimination in Geosciences**); Iain Stewart, United

Kingdom (topic: **Geoscience Education and Communication**); Edmund Nickless, United Kingdom (topic: **Geoethics for Society**); David Mogk, USA (topic: **Geo-education and Teaching Geoethics**); Ruth Allington, United Kingdom (topic: **Geoscience Professionalism**), Luis González de Vallejo, Spain (topic: **Geoethics in Engineering Geology**); Manuel João Florentino Gomes Abrunhosa, Portugal (topic: **Geoethics in Groundwater Management**), Tony Mayer, Singapore (topic: **Research Integrity**); Ciro Manzo, Italy (topic: **Geoethics and young geoscientists**).

In 2015, the IAPG has established the **Young Scientists Club - YSC** (<http://www.geoethics.org/young-club>). The YSC is the interface between the IAPG and young geoscientists' organizations and groups, in order to promote Geoethics and the IAPG among the youngest colleagues more effectively. Members of the YSC have to be members of the IAPG and less than 35 years old. The YSC board was nominated in December 2015 after a public call. It consists of the YSC chair (Dr. **Marie Charrière**, from Switzerland) and 5 members: **Ndivhuwo Cecilia Mukosi** (South Africa), **Francesco De Pascale** (Italy), **Craig O'Brien** (Ireland), **Jonathan Gomez Cantero** (Spain), **Tharwat Hassan** (Egypt). In 2019 the YSC will be renewed.

On 8 May 2017, the IAPG has nominated the **Task Group on Responsible Mining – TGRM** (<http://www.geoethics.org/tgrm>), formed by Nikolaos Arvanitidis (Sweden), Jan Boon (Canada), Pekka Nurmi (Finland), Giuseppe Di Capua (Italy). The goal of the Task Group has been to draft a document on “Responsible Mining”, on values and concepts that must be considered in mining, including their importance for future generations in the perspective of a sustainable development of our societies. On 1st December 2017, the IAPG Executive Council approved the “White Paper on Responsible Mining” (<http://www.geoethics.org/wp-responsible-mining>), prepared by the Task Group following a review by an International Panel of Experts formed by Vitor Correia (Portugal), Roberto Lencina (Argentina), David Ovadia (United Kingdom), Mark Rachovides (Canada), Ian Thomson (Canada).

On 5 October 2018, the IAPG, jointly with the IFG – Initiative on Forensic Geology of the IUGS, has created the **Task Group on Geoethics in Forensic Geology – TGGFG** (<http://www.geoethics.org/tggfg>), formed by Lorna Dawson (United Kingdom), Silvia Peppoloni (Italy), Rosa Maria Di Maggio (Italy). The goal of the Task Group is to draft a White Paper on “Geoethics in Forensic Geology”, in order to define ethical values in the applications and best practices of Forensic Geology across the world.

6. Interaction with other International organizations and projects

The IAPG collaborates with the following organizations:

- African Association of Women in Geosciences (AAWG);
- African Geoparks Network (AGN);
- African Network for Geo-Education (ANGE);
- American Geophysical Union (AGU);
- American Geosciences Institute (AGI);
- Association of Environmental & Engineering Geologists (AEG);
- Canadian Federation of Earth Sciences (CFES);
- EuroGeoSurveys (EGS);
- European Association for the Conservation of Geological Heritage (ProGEO);
- European Federation of Geologists (EFG);
- European Geosciences Union (EGU);
- Forum for Climate Engineering Assessment (FCEA);
- Geological Society of America (GSA);
- Geological Society of London (GSL);
- Geological Society of Peru (SGP - Sociedad Geológica del Perú);
- Geology for Global Development (GfGD);
- Geology in the Public Interest (GPI);
- Geoscience Information in Africa - Network (GIRAF);
- Geoscientists Canada/Géoscientifiques Canada (GC);
- GEVAS Red Argentina;
- Global Geoscience Professionalism Task Group (IUGS-TGGGP);
- Initiative on Forensic Geology of the IUGS (IUGS-IFG).
- Instituto de Geociencias Y Medio Ambiente, Arequipa-Perù (I-GEMA);
- International Association for Engineering Geology and the Environment (IAEG);
- International Association for Geoscience Diversity (IAGD);
- International Association of Hydrogeologists (IAH);
- International Council for Philosophy and Human Sciences (ICPHS);

- International Geoscience Education Organisation (IGEO);
- International River Foundation (IRF);
- International Union of Geological Sciences (IUGS);
- International Year of Global Understanding (IYGU).
- Italian Geological Society (SGI-Società Geologica Italiana);
- Resources for Future Generations Conference (RFG 2018);
- Science Education Resource Center (SERC);
- Young Earth-Scientists (YES) Network;
- World Conferences on Research Integrity (WCRI).

The IAPG collaborates with the following international projects:

- Geoethics Outcomes and Awareness Learning (**GOAL**): IAPG is partner of the project (website: <https://goal-erasmus.eu/>)-
- International Network of Raw Materials Training Centres (**INTERMIN**): IAPG is part of the International Advisory Board of the project (website: <http://interminproject.org/>).

The IAPG doesn't receive funds from the project GOAL. The IAPG representative in the project INTERMIN receives only a reimbursement for the participation in the project meetings.

7. Chief products

VOLUMES

- Special volume: Peppoloni S., Di Capua G., Bobrowsky P., Cronin V. (Eds). *Geoethics at the heart of all geoscience*. Annals of Geophysics, Vol 60, Fast Track 7 (2017), <http://www.annalsofgeophysics.eu/index.php/annals/issue/view/537>.
- Book: Gundersen Linda C. (Ed.). *Scientific Integrity and Ethics in the Geosciences*, (2017), p. 336, American Geophysical Union, Wiley, ISBN 978-1-119-06778-8, <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1119067782.html>.

- Book: Peppoloni S. and Di Capua G. (Eds.). *Geoethics: the Role and Responsibility of Geoscientists*, Geological Society, London, Special Publications, (2015), 419, ISBN 978-1-86239-726-2, <http://sp.lyellcollection.org/content/419/1>.
- Book: Wyss M. & Peppoloni S. (Eds.). *Geoethics: Ethical Challenges and Case Studies in Earth Sciences*, 450 p. Elsevier (2014), <http://store.elsevier.com/Geoethics/isbn-9780127999357/>.
- Book: Lollino G., Arattano M., Giardino M., Oliveira R., Peppoloni S. (Eds.). *Engineering Geology for Society and Territory - Volume 7: Education, Professional Ethics and Public Recognition of Engineering Geology*, XVII, 274 p. 103 illus., 86 illus. in color, Springer (2014),
<http://www.springer.com/earth+sciences+and+geography/environmental+science+%26+engineering/book/978-3-319-09302-4>.
- Special volume: Peppoloni S. and Di Capua G. (Eds.). *Geoethics and geological culture. Reflections from the Geotalia Conference 2011*, Annals of Geophysics, Vol. 55, No 3 (2012).
<http://www.annalsofgeophysics.eu/index.php/annals/issue/view/482>.

REFERENCE DOCUMENTS

- **Cape Town Statement on Geoethics:** <http://www.geoethics.org/ctsg>.
Supported by 21 geoscience organizations (International Union of Geological Sciences - IUGS, European Federation of Geologists - EFG, International Association of Geomorphologists - IAG/AIG, African Association of Women in Geosciences - AAWG, Young Earth Scientists Network - YES Network, International Geoscience Education Organisation - IGEO, Geology in the Public Interest - GPI, International Association for Geoscience Diversity - IAGD, EuroGeoSurveys - EGS, American Geophysical Union - AGU, American Geosciences Institute - AGI, Geological Society of America - GSA, Società Geologica Italiana-Italian Geological Society - SGI, Sociedad Geológica del Perú-Geological Society of Peru - SGP, Instituto Geológico, Minero y Metalúrgico, Peru - INGEMMET, International Association of Hydrogeologists - IAH, Geology for Global Development - GfGD, International Association for Engineering Geology and the Environment - IAEG, South Asian Association of Women Geoscientists - SAAWG, Instituto de Geociencias Y Medio Ambiente, Arequipa-Perù - I-GEMA, African Network for Geo-Education – ANGE.
Available in 35 languages: Afrikaans, Albanian, Arabic, Armenian, Belarusian, Bengali, Czech,

Danish, Dutch, English, French, Georgian, German, Greek, Hindi, Hungarian, Italian, Japanese, Korean, Mandarin Chinese, Nepali, Norwegian, Persian, Portuguese, Romanian, Russian, Sepedi, Serbian, Slovenian, Spanish, Swahili, Tamil, Turkish, Ukrainian, Urdu.

- **Geoethical Promise:** <http://www.geoethics.org/geopromise>.
Supported by 21 geoscience organizations and available in 35 languages (see above).
- **White Paper on Responsible Mining:** <http://www.geoethics.org/wp-responsible-mining>.
Available in 3 languages: English, Greek, Swedish.

VIDEOS, INTERVIEWS AND ARTICLES FOR NEWSPAPERS AND MAGAZINES

- 12 videos uploaded on the YouTube channel of the IAPG:
<http://www.youtube.com/user/iapgeioethics>
- Articles on geoethical issues for the Italian newspapers “Corriere della Sera” and “Il Sole24Ore”, and for the Italian Magazines “112 Emergencies” and “MicroMega, La Mela di Newton” (by Silvia Peppoloni, IAPG Secretary General);
- 6 interviews with the IAPG President, Secretary General and IAPG members for the:
 - Swiss Radio Network 2, subject: “Prevention and Geoethics”, by Matteo Martelli;
 - Austrian Radio (ORF1) program on Geoethics: "Dimensionen - die Welt der Wissenschaft: Was soll ich tun - global gesehen? Die Ethik in den Geowissenschaften" ("Dimensions - the world of science: What should I do - a global perspective? The Ethics in the geosciences"), by Wolfgang Däuble: <http://oe1.orf.at/programm/404157>;
 - German Radio (SWR2), title “Endgültig freigesprochen: Das Erdbeben von L'Aquila und die ethische Verantwortung der Geowissenschaftler. Gespräch mit Silvia Peppoloni, International Association for Promoting Geoethics, Rom. (Finally acquitted: The L'Aquila earthquake and the ethical responsibility of geoscientists. Interview with Silvia Peppoloni, International Association for Promoting Geoethics, Rome). Redaktion / Moderation: Gabor Paal;
 - Italian Radio Television Network (RAI), subject: culture of prevention. The interview begins from 16m 30s: <http://www.raiscuola.rai.it/articoli/nautilus-seguendo-il-tempo/26025/default.aspx>;
 - Italian Radio Television Network (RAI), Radio3 Scienza, subject: Natural risks;
 - Science Festival in Genoa (Italy):
Part 1 https://www.youtube.com/watch?v=Xt0_Z6mAGeI&list=UUP-Fngse1pu9sFvyBgN3AzQ
Part 2 <https://www.youtube.com/watch?v=M2aYspo0p5Y&feature=youtu.be>

Many scientific PAPERS on geoethics have been included in the books mentioned above. More than 180 papers on geoethics (with a peer-review process) have been published since 2012.

ORAL AND POSTER PRESENTATIONS in scientific sessions, courses, meetings: EGU General Assembly (2012, 2013, 2014, 2015, 2016, 2017, 2018), IGC – International Geological Congress (2016), Congress of the Italian Geological Society (2016, 2018), Geotalia conference (2013), IAEG Congress (2014), GSA Annual Meeting (2014, 2015), AGU Fall Meeting (2014, 2015, 2016, 2017, 2018), Resources for Future Generations Conference – RFG (2018), WCRI (2013, 2015), AGU-GAC-MAC-CGU Joint Assembly (2015), Argentine Geological Congress (2017), Geological Congress of Spain (2016), Peruvian Congress of Geology (2016), CAAWG - Conference of the African Association of Women in Geosciences (2016, 2018), Nigeria Geoethics Conference (2018), Simposio de Paleontologia del Perú (2018), Jornadas Científicas sobre Geología del Paraguay y Ciencias Afines (2018), EADI NORDIC Conference (2017), GeoSciEd (2018), EnsinoGEO (2018), General Assembly of the European Seismological Commission – ESC (2018), GfGD Annual Conference (2018), Earth System Governance Conference (2018), EFG Workshop (2014), EFG-UNECE Conference (2017), Foro Internacional sobre Gestión del Riesgo Geológico - International Forum on Geological Risks Management (2015), Future Earth international symposium in Japan (2017), International Conference of the Institute of African Research and Studies – IARS in Egypt (2016), Colloquium on Geoethics in Peru (2015), Conference of the African Association of Women in Geosciences Nigeria (2015), OTC Conference in Houston (2014), SERC workshop in Montana (2014), AEG course in Texas (2014), Geological Society of London, Regional Group – Lecture (2017), CNG course in Italy (2014), Science Festival in Genoa, Italy (2013, 2014), Meeting: nANO meets water VII meeting in Germany (2016), South Texas Geological Society meeting (2016), Ocean Sciences Meeting – OSM (2016, 2018), 45th IAH Congress (2018), CoV-9: Cities on Volcanoes in Chile (2016, 2018), Workshop on Geoethics in Nigeria (2016), XV Chilean Geological Congress (2018), Colombian Conference of Geology (2015), International Conference of Underground Construction (2015), Geological Conference of Central America (2015), Salzburg Global Seminar (2018), FORAM 18 pilot event on raw materials governance (2018), National Congress of the Italian Environment Fund – FAI (2017), GOAL workshop (2018), INTERMIN Meeting (2018), WISE Multiplier Event (2017).

WEBSITE AND SOCIAL NETWORKS

- Official Website: <http://www.geoethics.org>
- Blog: <http://iapgeoethics.blogspot.com>
- LinkedIn Group “Geoethics and Culture of Geosciences” (1548 members):
<https://www.linkedin.com/groups/4615518>
- Facebook Page: <https://www.facebook.com/iapg.geoethics/>
- Twitter Page (@IAPGeoethics) (1688 followers): <https://twitter.com/IAPGeoethics>
- Global Ethics Network: <http://www.globalethicsnetwork.org/group/iapggeoethics>
- Other IAPG national sections webpages at: <http://www.geoethics.org/sections.html>
- Photo gallery on Flickr: <https://www.flickr.com/photos/125283529@N05/sets/>

From 2012, thousands of posts have been published on the IAPG website, blog, and social networks regarding articles, news, call for abstracts, meetings-conferences, seminars, events and other kind of information on geoethics.

WEBINAR AND VIDEO-LECTURES

- Video-Lesson by Silvia Peppoloni (IAPG Secretary General) on “Geoethics in Disaster Risk Reduction” in the online course (MOOC): “A Resilient Future: Science and Technology for Disaster Risk Reduction” (Discover how science and technology help us reduce disaster risk and increase resilience). This online course has been organized by the École Polytechnique Fédérale de Lausanne (Switzerland). The video is included in the Chapter 7: Science and Technology for Resilience and Sustainable Development - Ethics in Disaster Risk Reduction. Video: <https://www.youtube.com/watch?v=jCVkuaKAqK8&t=43s>.
- Webinar by David Mogk (IAPG Board of Experts) entitled “Professionalism and Geoethics: Creating a Workplace Environment Where Everyone Can Succeed” for the GOLI – Geoscience Online Learning Initiative by AGI – American Geosciences Institute: <https://goli.americangeosciences.org/courses/course-v1:AIPG+AIPG009+2018/about> (June 2018).
- Video-Lecture on “Geoethics and Georisks Reduction” at the conference organized by the Italian Embassy in Norway, in collaboration with the University of Oslo, in the framework of the initiative “Under the Sign of Excellence”.

- Video-Lecture on Geoethics at the First National Conference of the African Association of Women in Geosciences Nigeria - AAWGN, June 2015). Video: <https://www.youtube.com/watch?v=f-ki8cwP8bk>.
- Organization of a webinar on Geoethics at the EGU General Assembly 2013. Video: http://www.egu2013.eu/nh9_8_video.html. In collaboration with YES-Network and AGI – American Geological Institute.

NEWSLETTER

IAPG releases its Newsletter from May 2015. Up to now, 20 numbers have been published and are available at: <http://www.geoethics.org/newsletter.html>.

INTERNATIONAL EVENTS

- **International Geoethics Day.** Officially launched in 2017, it is held every year during the Earth Science Week: <http://www.geoethics.org/geoethics-day>. In 2018, the IAPG community celebrated the 2nd edition.

AWARDS

- **Geoethics Medal.** It was conceived in April 2016 during the IAPG Council Meeting held during the EGU General Assembly in Vienna, and unanimously approved by the first IAPG General Assembly held during the 35th IGC – International Geological Congress in Cape Town, on 31 August 2016. The Geoethics Medal is assigned annually. The first edition of the Geoethics Medal (2018) has been launched on 18 October 2017, during the Global Ethics Day 2017 of the Carnegie Council for Ethics in International Affairs: <http://www.geoethics.org/geoethics-medal>. The Geoethics Medal 2018 was assigned to Chris King (IUGS-COGE and EGU Committee on Education) in September 2018.

8. Chief accomplishments 2018 and plans for 2019

CHIEF ACCOMPLISHMENTS 2018

January 2018

- IAPG has been included as official partner of the European project Erasmus+ “GOAL – Geoethics Outcomes and Awareness Learning” (1 January 2018).
- Training Course on “Ocean Governance, Sciences, Geoethics” (Valparaiso, Chile): IAPG has been partner of the training course, organized by the International Ocean Institute (IOI) - Training Centre for Latin America and the Caribbean. This course was hosted by the Universidad de Playa Ancha - UPLA, at the Centro De Estudios Avanzados of UPLA. IAPG-Brazil (coordinator: Eduardo Marone) was in charge to prepare the module on geoethics in the training course (8 January-2 February).
- Shona van Zijll de Jong has been appointed co-coordinator of IAPG-Canada (10 January).
- Yankho Naomi Kalebe (IAPG member from Malawi) and Patrick Bacirhonde Maheshe (IAPG member from Democratic Republic of Congo) won the selection for the IAPG financial support for their abstracts submitted in the IAPG sessions on geoethics respectively at EGU General Assembly 2018 and RFG Conference 2018 (17 January).
- Interview to Silvia Peppoloni (IAPG Secretary General) by Jonathan Rizzi, entitled “Ethics and Geosciences: discovering the International Association for Promoting Geoethics” and published on the blog of the Natural Hazards (NH) Division of the European Geosciences Union (EGU) (read: <http://iapgeoethics.blogspot.com/2018/01/ethics-and-geosciences-discovering.html>) (22 January).
- Silvia Peppoloni (IAPG Secretary General) presented the “IAPG Annual Report 2017 and 2018 Plans” at the 72nd IUGS Executive Council Meeting, held at Deutsches GeoforschungsZentrum (GFZ) (Potsdam, Germany). She announced that the “Geoethical Promise” had been included as official declaration during the ceremony for the Master Degree in Geology in the Italian Universities, thanks to the cooperation of IAPG-Italy and the SGI – Società Geologica Italiana (Italian Geological Society). Moreover, she delivered the “Geoethical Promise” parchment (Italian version) to Qiuming Cheng (IUGS President) and Stan Finney (IUGS Secretary General) (23-24 January).

- IAPG has become Partner organization of the Geoscience & Society Summit, managed by AGU (29 January).
- Publication of the article “The Cape Town Statement on Geoethics and the IAPG Network” (by Silvia Peppoloni and Giuseppe Di Capua) in the Newsletter (issue #1) of EPOS - European Plate Observing System research infrastructure (30 January).

February 2018

- IAPG has been included in the International Advisory Board of the European H2020 project “INTERMIN - International Network of Raw Materials Training Centres”. Giuseppe Di Capua (IAPG Treasurer) and David Ovadia (IAPG-UK coordinator) represents IAPG in the project (1 February).
- IAPG and YES Network signed a Memorandum of Understanding (MoU), that expresses a mutual desire to officially co-operate on a range of themes in the field of geoethics as already done unofficially in the last years, in particular, to promote the discussion on geoethical issues among the international community of young and early-career Earth Scientists (5 February).
- TownHall Meeting “GeoEthics and the Responsible Conduct of Scientists as Professionals and Educators” at the 2018 Ocean Sciences Meeting (OSM) in Portland, Oregon (USA). Cindy Palinkas (co-coordinator of IAPG-USA) co-convened the TownHall Meeting (13 February).
- Giuseppe Di Capua (IAPG Treasurer) represented the IAPG in the International Advisory Board at the kick-off meeting of the European H2020 project “INTERMIN - International Network of Raw Materials Training Centres” (13-14 February).
- Martin Bohle (IAPG Board of Experts) attended the session “The Shock of the New - Arts, Technology and Making Sense of the Future”, at the Salzburg Global Seminar, as IAPG representative (20-25 February).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (21 February).
- IAPG-Peru organized a conference entitled “Epistemological and methodological reflections about the research method in Geo-archaeology” at the SGP Auditorium in Lima (Peru), for the “Geological Wednesdays” initiative of the Peruvian Geological Society (SGP) (21 February).

March 2018

- Publication of the IAPGeoethics Newsletter issue #1 – 2018 (15 March).

- IAPG organized the Workshop 3 “Geoethics: at the heart of all geoscience” at the Congress “Earth Sciences for Society”, organized by the Arabian Geosciences Union (ArabGU), the African Association of Women in Geosciences (AAWG) and the African Geoparks Network (AGN) in collaboration with the Faculty of Sciences, Chouaib Doukkali University, El Jadida, Morocco. Giuseppe Di Capua (IAPG Treasurer) represented the IAPG and chaired the Workshop. Speakers of the Workshop: Giuseppe Di Capua on behalf of Silvia Peppoloni (IAPG Secretary General), Chris King (IUGS-COGE chair), José Brilha (ProGEO President) (21 March).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (23 March).
- Ruth Allington (United Kingdom) has been appointed member of the IAPG Board of Experts for the topic “Geoscience Professionalism” (26 March).

April 2018

- Vincent Cronin (IAPG-USA co-coordinator) represented the IAPG at the joint 2018 Spring GSA Associated Societies Virtual Meeting (4 April).
- INGEMMET - Instituto Geológico, Minero y Metalúrgico (Geological, Mining and Metallurgic Institute of Peru) has become official supporting organization of the Cape Town Statement on Geoethics (4 April).
- David Ovadia (IAPG-UK coordinator) and Nic Bilham (IAPG Continental Coordinator for Europe) published an article entitled “Geoethics - what do you think?” in Geoscientist Online, April issue – 2018, Geological Society of London (<https://www.geolsoc.org.uk/Geoscientist/Archive/April-2018/Geoethics-what-do-you-think>) (4 April).
- The First Announcement of the International Congress “Geoethics & Groundwater Management - Theory and Practice for a Sustainable Development” (GEOETH&GWM’19) that will be held from 21 to 25 October 2019 in Porto (Portugal), as a joint event IAPG and IAH - International Association of Hydrogeologists, has been released (website: <https://geoeth-gwm2019.wixsite.com/porto>). Manuel Abrunhosa (IAPG Board of Experts) is chair of this event, Silvia Peppoloni (IAPG Secretary General), Giuseppe Di Capua (IAPG Treasurer) and Clara Vasconcelos (IAPG-Portugal coordinator) are members of the Organizing Committee (6 April).
- TownHall Meeting TM11 “Seeking Engagement and Input on Harassment and Workplace

Climate Issues within the Geoscience Community” (convenership: Silvia Peppoloni, Nicholas T. Arndt, Pranoti Asher, Vincent Cronin, Chloe Hill, Mary Anne Holmes, Christopher Keane, Chris McEntee) at the EGU General Assembly 2018 in Vienna, Austria: joint event IAPG-AGI-AGU-EGU (10 April).

- Splinter Meeting SMI28 “IAPG business meeting” (convenership: Silvia Peppoloni, Giuseppe Di Capua) at the EGU General Assembly 2018 in Vienna, Austria (11 April).
- IAPG Session EOS4 “Geoethics: ethical, social and cultural implications of geoscience knowledge, education, communication, research and practice” (convenership: Silvia Peppoloni, Nic Bilham, Martin Bohle, Giuseppe Di Capua, Eduardo Marone) at the EGU General Assembly 2018 in Vienna, Austria: 12 orals + 15 posters (details at: <http://www.geoethics.org/egu2018>). The session was co-sponsored by the GSL-Geological Society of London (12 April).



- Juan Carlos Gutiérrez-Marco (Spain) has been appointed member of the IAPG Board of Experts for the topic “Geoethics in Paleontology” (26 April).

May 2018

- Opening of the section IAPG-France. Michèle Barbier and David Crookall appointed as co-coordinators (9 May).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (19 May).
- IAPG and FCEA - Forum for Climate Engineering Assessment have signed an Agreement on Cooperation. The Agreement expresses a mutual desire to co-operate on a range of issues in the field of geoethics and climate engineering (21 May).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (21 May).
- Publication of the IAPGeoethics Newsletter issue #2 – 2018 (22 May).

June 2018

- Opening of the section IAPG-Lebanon. Soumaya Ayadi-Maasri has been appointed as coordinator (9 June).
- Publication of the 3rd version of the IAPG leaflet (previous versions was produced in 2014 and 2016): http://docs.wixstatic.com/ugd/5195a5_9a4ccf7e70254d62be82b5788dc7a7e0.pdf (11 June).
- Publication of the online volume “Spreading geoethics through the languages of the world. Translations of the Cape Town Statement on Geoethics. International Association for Promoting Geoethics (IAPG), 2018”, translation of the Cape Town Statement on Geoethics in 35 languages: Afrikaans, Albanian, Arabic, Armenian, Belarusian, Bengali, Czech, Danish, Dutch, English, French, Georgian, German, Greek, Hindi, Hungarian, Italian, Japanese, Korean, Mandarin Chinese, Nepali, Norwegian, Persian, Portuguese, Romanian, Russian, Sepedi, Serbian, Slovenian, Spanish, Swahili, Tamil, Turkish, Ukrainian, Urdu. This volume is edited by Silvia Peppoloni (IAPG Secretary General); translations by IAPG officers, members, and followers. Flip book: <http://fliphtml5.com/gqru/ttwl> (12 June).
- David W. Mogk (IAPG Board of Experts) was the presenter of the Webinar AGI-American Geosciences Institute and AIPG-American Institute of Professional Geologists entitled “Professionalism and Geoethics: creating a workplace environment where everyone can succeed”. This webinar is part of the Geoscience Online Learning Initiative (GOLI): <https://goli.americangeosciences.org/courses/course-v1:AIPG+AIPG009+2018/about> (17 June).
- IAPG organized 6 sessions on different issues of geoethics at the RFG 2018 Conference, under the Theme “Resources and Society” (Vancouver, Canada). The sessions included 11 keynote speeches, 28 oral presentations, 10 poster presentations (49 contributions in total) (details at: <http://www.geoethics.org/rfg2018>):
 - Session RS13 “Geoethics and Environmental and Social Responsibility: Doing the Right Thing to Develop Resources for Future Generations”. This session, jointly organized by the IAPG and the Environmental and Social Responsibility Society of the CIM - Canadian Institute of Mining was supported and endorsed by the EFG - European Federation of Geologists (19 June).



- Session RS8 “Geoethics and the Responsible Conduct of Scientists” (20 June).
- Session RS9 “Geoethics in georisks management for a safer and more resilient society” (20 June).
- Session RS10 “Geoethics in geoscience education, communication and citizen science: experiences, approaches, and concepts”. This session was jointly organized by the IAPG and the GSL - Geological Society of London (20 June).
- Session RS12 “Forensic Geology: Ethics, Communication, Regulation and Opportunities”. This session was jointly organized by the International Union of Geological Sciences - Initiative on Forensic Geology (IUGS-IFG) and the IAPG (21 June).
- Poster Session “Geoethics” (17-20 June).
- The IAPG was invited by the EFG – European Federation of Geologists to join the FORAM 18 pilot event on raw materials governance (Nancy, France). David Ovadia (IAPG-UK coordinator) represented the IAPG in this event. Report: <https://iapgeoethics.blogspot.com/2018/07/an-iapg-report-from-foram-18-pilot.html> (27 June).
- Silvia Peppoloni (IAPG Secretary General) published an article, as co-author, entitled “The ethical duty to divulge geosciences and the improvement of communication skills to fulfil it” in Episodes, June issue, Vol. 41, n. 2, 2018, International Union of Geological Sciences, <http://dx.doi.org/10.18814/epiiugs/2018/018007> (30 June).

July 2018

- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (11 July).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (16 July).
- For the first time in the world, the “Geoethical Promise” was recited at the University of Modena and Reggio Emilia (UNIMORE) during the ceremony of the Master Degree in Geology, thanks to the cooperation of IAPG-Italy and the SGI – Società Geologica Italiana (Italian Geological Society) (video: <https://www.facebook.com/unimore.it/videos/1981457161875697/>) (19 July).
- The IAPG was partner of the eighth edition of the Quadrennial Conference of the International Geoscience Education Organization – IGEO (8th GeoSciEd) and the eighth National Symposium of Earth Sciences Teaching and History (8th EnsinoGEO) (Campinas, Brazil). Roberto Greco (IAPG Continental Coordinator for South America) represented the IAPG in this event (22-27

July).

- Publication of the IAPGeoethics Newsletter issue #3 – 2018 (26 July).
- David Ovadia (IAPG-UK coordinator) represented IAPG in the E-Conference of the European project INTERMIN (26 July).
- 1st Workshop of the European Project Erasmus+ “GOAL – Geoethics Outcomes and Awareness Learning”, held at the INGV – Istituto Nazionale di Geofisica e Vulcanologia (Italian National Institute of Geophysics and Volcanology) (Rome, Italy). Title of the Workshop: “Theoretical aspects of geoethics and geoethics in georisks”. IAPG is official partner of the project and cooperated to the organization of the workshop (30 July – 3 August).

August 2018

- International Association of Geomorphologists (IAG/AIG) officially supports the “Cape Town Statement on Geoethics” (23 August).
- Publication of a new section in the IAPG website, titled “Videos for triggering a discussion” as an initiative by Johanna Ickert (IAPG member), Silvia Peppoloni (IAPG Secretary General), and Henry Wichura. This is an online resource on geoscience issues, with a focus on aspects of interest for geoethics: <http://www.geoethics.org/videos> (29 August).

September 2018

- Session S40 “Seismology and Society” at the 36th General Assembly of the European Seismological Commission (ESC) (La Valletta, Malta): 8 orals + 7 posters. The IAPG co-organized the session (6 September).
- Manuel Abrunhosa (IAPG Board of Experts) represented IAPG and delivered a joint talk IAPG-IAH, entitled “Introducing Geoethics in Groundwater Science, Technology, and Management” (authors: Manuel Abrunhosa, Silvia Peppoloni, Antonio Chambel), at the 45th Congress of the IAH – International Association of Hydrogeologists (Daejeon, South Korea) (9-14 September).
- Session S38 “History of geosciences and Geoethics: the right way for social responsibility” at the 89th Congress of the Geological Society of Italy, jointly with the Italian Society of Mineralogy and Petrography (Catania, Italy): 8 orals + 7 posters. This session was jointly organized by the sections “History of Geosciences” and “Geoethics and Geological Culture” (IAPG-Italy) of the Italian Geological Society, and was promoted by INHIGEO (International Commission on the History of Geological Sciences of the IUGS) and the IAPG (13 September).
- Ranjan Kumar Dahal has been appointed co-coordinator of IAPG-Nepal (18 September).

- IAPG and Geoscientists Canada/Géoscientifiques Canada (GC) have signed a Memorandum of Understanding (MoU). The MoU expresses a mutual desire to cooperate on a range of themes in the field of ethics in geoscience (22 September).
- Chris King (Chair of IUGS-COGE and of the Committee on Education of the European Geosciences Union - EGU) has been awarded with the Geoethics Medal 2018 with the following motivation: *“for his valuable contribution in promoting Earth Sciences in society by introducing innovative methods and tools to teaching, aiming at the proactive involvement of end-users based on developing their critical thinking and observational scientific approaches”* (25 September).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (30 September).

October 2018

- IAPG has become official partner of GeoSoc 2019 - International Conference on Geoscience for Society, that will be held in Segunbagicha, Dhaka (Bangladesh) from 14 to 17 March 2019 (3 October).
- The Task Group on Geoethics in Forensic Geology – TGGFG is established as a jointly initiative by IAPG and IFG-Initiative on Forensic Geology of the IUGS. Members: Silvia Peppoloni (IAPG Secretary General), Lorna Dawson (IUGS-IFG), Rosa Maria Di Maggio (IUGS-IFG) (5 October).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (5 October).
- The IAPG network celebrated the 2nd edition of the International Geoethics Day: <http://www.geoethics.org/geoethics-day>. This event was supported by the YES Network (18 October).
- IAPG-Nigeria (coordinator: Arinze Harrison Ikwumeleze) organized the NGC1 - First Nigeria Geoethics Conference. Theme: *“Integrating Geoethics into the Extractive Industry Governance”* (details: http://docs.wixstatic.com/ugd/5195a5_269ecc9769a249379a3cfe27151e9643.pdf) (Port Harcourt, Nigeria) (18-19 October).
- Michèle Barbier (IAPG-France co-coordinator) published, as co-author, an article entitled *“Geoethics, how to apply ethical core-values to the ocean observation community”* in the newsletter, vol. 1, issue 4, of the European H2020 project AtlantOS - Optimising and Enhancing

the Integrated Atlantic Ocean Observing Systems: <https://www.atlantosh2020.eu/download/Media/newsletters-briefing-apers/AtlantOS-Newsletter-4.pdf> (23 October).

- Launch of the call for abstracts for the 3 sessions on geoethics at the EGU General Assembly 2019 in the EOS group (details: <http://www.geoethics.org/egu2019>) (24 October).
- IAPG has become an Observer Organization of the CFES – Canadian Federation of Earth Sciences. Jan Boon (IAPG-Canada co-coordinator) represents the IAPG in the CFES Council Meetings (28 October).

November 2018

- Nic Bilham (IAPG Continental Coordinator for Europe) gave an introduction to the IAPG at the 6th Annual Conference of the GfGD – Geology for Global Development, hosted by the GSL – Geological Society of London (London, United Kingdom) (2 November).
- Vincent Cronin (IAPG-USA co-coordinator) represented IAPG at the joint AGI/GSA Societies Meeting at the Annual Meeting of the GSA – Geological Society of America (Indianapolis, USA) (5 November).
- Martin Bohle (IAPG Board of Experts) and Eduardo Marone (IAPG-Brazil coordinator) contributed to the panel on “Ocean Governance” at the Earth System Governance Conference 2018 (Utrecht, The Netherlands) with a talk entitled “Not out of the blue: Ethics to Intersect Civic Participation and Formal Guidance”, authors: Martin Bohle, Cornelia E. Nauen, Eduardo Marone (5-8 November).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (15 November).
- Luis Alberto Araujo Ramos (IAPG-Peru) represented the IAPG at the XV Congreso Geológico Chileno (Chilean Geological Congress) (Concepción, Chile) in the session “GEOS-5: Geo-ética y responsabilidad profesional en geociencias” (Geoethics and professional responsibility in the geosciences) and gave a talk entitled “Geoethics and its impact in Peru”, authors: Sandra Paula Villacorta Chambi, Yanet Teresa Antayhua Vera, Vicentina Cruz Paucara, Carlos Alberto Toledo Gutierrez, Luis Alberto Araujo Ramos (18-23 November 2018).
- Michèle Barbier (IAPG-France co-coordinator) published an article, as co-author, entitled “Ethical recommendations for ocean observation” in *Advances in Geosciences*, June issue, 45, 343–361, doi: 10.5194/adgeo-45-343-2018, 2018, European Geosciences Union, <https://www.adv-geosci.net/45/343/2018/> (22 November).

- IAPG-Peru organized the 4th edition of MinerLima, International Exhibition of Minerals (Feria Internacional de Minerales), to promote geosciences and geoethics in Peru (Lima, Peru), in cooperation with Universidad Nacional Mayor de San Marcos (UNMSM), Instituto Geológico, Minero y Metalúrgico (INGEMMET), Sociedad Geológica del Perú (SGP), and Laboratorio de Investigación Y Servicios para la Actividad Minera (BIZALAB). Activities planned: short courses, conferences and workshops (for children and the general public), showcase (exhibition-sale of mineral samples), geological excursions and guided tours (post-event) (22-24 November).
- Carlos Alberto Toledo Gutierrez (IAPG-Peru Scientific Coordinator) and Juan Carlos Gutiérrez-Marco (IAPG Board of Experts) represented the IAPG at the II Simposio de Paleontología del Perú (II Symposium on Paleontology of Peru) (Lima, Peru). César Augusto Chacaltana Budiel (IAPG-Peru) coordinated the session ST6 “Geoética Paleontológica, Educación y Sociedad” (Geoethics in Paleontology, Education and Society). Juan Carlos Gutiérrez-Marco gave the keynote speech “El fraude científico en la historia de la Paleontología y su trascendencia social” (The scientific fraud in the history of Paleontology and its social meaning) and chaired the Mesa Redonda “La geoética y la práctica paleontológica para el desarrollo sostenible” (Round Table: “geoethics and paleontological practice for sustainable development”) (details: <https://app.ingemmet.gob.pe/evento/IIsimposio/paleoperu/sesion-tematica/st6>) (30 November).
- Moisés Alejandro Gadea Villalba (IAPG-Paraguay coordinator) presented the IAPG and geoethics at the II Jornadas Científicas sobre Geología del Paraguay y Ciencias Afines (II Scientific Days on Geology of Paraguay and similar sciences), at the National University of Asunción - Campus Universitario (San Lorenzo, Paraguay) (29-30 November).

December 2018

- IAPG and I-GEMA - Instituto de Geociencias Y Medio Ambiente (Institute of Geosciences and Environment) signed a Memorandum of Agreement (MoA). The aim of the MoA is to develop a coordinated approach, where appropriate, for promoting initiatives and events discussing the ethical, social, and cultural implications of geosciences, and favoring high ethical standards in the research and practice of geoscience in order to better serve society (1 December).
- I-GEMA - Instituto de Geociencias Y Medio Ambiente (Institute of Geosciences and Environment) officially supports the Cape Town Statement on Geoethics (1 December).
- Session ED13D “Geoethics: Taking a Stand for Ethical Geoscience Research, Education, Communication, and Practice” (Posters) at the AGU Fall Meeting 2018 (Washington, D.C.,

USA): 9 posters (details: <http://www.geoethics.org/agu2018>). This session was jointly organized by IAPG and AGI – American Geosciences Institute (10 December).

- IAPG becomes an official partner of the AGU Ethics and Equity Center (11 December).
- New article published in the IAPG Blog (<http://www.geoethics.org/articles-from-iapg-blog>) (19 December).
- IAPG has completed the preparation of the questionnaire on ethics in geosciences for the online survey to be launched in 2019. The survey will be proposed to the international geoscience community (21 December).
- IAPG was an organizing partner of the Earth Science Cultural Fair in (Awkum, Pakistan) (27 December).

In addition to previous activities:

- IAPG-CANADA:
 - put out a call for volunteers to standing committees on “geoethics pedagogy” and “communication strategy”, and started a communication activity of the section through LinkedIn (<https://www.linkedin.com/groups/8645410/>) and Facebook (<https://www.facebook.com/canadiangeoethics/>).
- IAPG-EGYPT:
 - contributed to a section on geoethics for a strategic report (in Arabic) published for the Egyptian Ministry of Foreign Affairs about environmental challenges;
 - included a section on geoethics in a book (in Arabic) dedicated to mineral wealth in Africa;
 - cooperated in teaching geoethics to post-graduate students;
 - trained 100 school students on the meaning of geoethics and the “Geoethical Promise”.
- IAPG-PERU:
 - organized regularly section meetings (January, February, March, April, November, December);
 - organized committee meetings for the organization of MinerLima 2018 (March, May, June July, August, September, October);
 - contributed to the creation of the LAIGEO, the South American Chapter of IGEO – International Geoscience Education Organisation during the 8th International Conference on Geoscience Education and Training (GeoSciEd) held in Campinas (Brazil) from 22 to 27 July

2018;

- cooperated in the organization of technical courses in geoscience issues held in January, February, April);
- cooperated with the Peruvian chapter of the YES Network in the organization of activities for children during MinerLima 2018.

- IAPG-PORTUGAL:

- appointed a new web-designer, Tiago Ribeiro (University of Porto), to improve the website: <https://www.fc.up.pt/iapg-pns/>;
- published several articles and proceedings;
- cooperated in the coordination activities of the European project GOAL “Geoethics Outcomes and Awareness Learning”.

PLANS FOR 2019

- Editorial projects with peer-review process:

- Book: Bohle M., Peppoloni S., Di Capua G., Marone E., Bilham N., Preiser R. (2019), *Exploring Geoethics: Ethical Implications, Societal Contexts, and Professional Obligations of the Geosciences*, Palgrave MacMillan (in press).
- Book: Di Capua G., Bobrowsky P.T., Kieffer S.W., Palinkas C. (Eds.), *Geoethics: subjects for discussion*, Geological Society, London, Special Publications (in preparation).

- International conferences/meetings:

- IAPG will attend the 73rd Executive Committee meeting of the IUGS - International Union of Geological Sciences in Beijing (China) and will present its annual report on 2018 activities and 2019 plans (January 2019).
- IAPG will attend the 2nd Workshop of the European Project Erasmus+ “GOAL – Geoethics Outcomes and Awareness Learning”, to be held at the University of Porto (Portugal). Title of the Workshop: Geoethics’ Syllabus and Geoethics in Georesources and Geoparks. IAPG is official partner of the project and will cooperate to the organization of the workshop (January 2019).
- IAPG will attend the meeting of the European H2020 project “INTERMIN - International Network of Raw Materials Training Centres” in Madrid (Spain) (January 2019).

- IAPG is partner organization of the International Conference on Geoscience for Society (GEOSOC 2019), that will be held in Segunbagicha, Dhaka (Bangladesh): http://docs.wixstatic.com/ugd/5195a5_39b4e9e9099340a39f34be323f6f6bd8.pdf (March 2019).
- IAPG is partner organization of the Geoscience & Society Summit “Bridges to Global Health, Resilience, and Sustainability”, to be held in Stockholm (Sweden). IAPG has submitted 2 innovation proposals (March 2019).
- IAPG has proposed 3 sessions on geoethics at the EGU General Assembly 2019 in Vienna (Austria): <http://www.geoethics.org/egu2019> (April 2019).
- IAPG-Nepal has proposed a special session on geoethics at the First Himalayan Engineering Geological Congress (HEGC-1) in Kathmandu (Nepal) (May 2019).
- IAPG is co-organizing the International Congress “Geoethics & Groundwater Management: Theory and Practice for a Sustainable Development”, to be held in Porto (Portugal): <https://geoeth-gwm2019.wixsite.com/porto>. This event is co-organized by IAPG and IAH - International Association of Hydrogeologist (October 2019).
- Other activities (main initiatives by IAPG and its national sections):
 - IAPG-Peru will contribute to the Conference on Young Geoscientists organized by INGEMMET in Peru (January 2019).
 - IAPG is partner of the 3rd Training Course on “Ocean Governance, Sciences, Geoethics” (Universidad del Atlántico Barranquilla, Colombia), organized by the International Ocean Institute (IOI) - Training Centre for Latin America and the Caribbean. This course is hosted by the Universidad del Atlántico Barranquilla, Colombia. IAPG-Brazil (coordinator: Eduardo Marone) is in charge to prepare the module on geoethics in the training course (21 January-15 February 2019) (January-February 2019).
 - IAPG will continue to cooperate in the activities on geoethics into the European Project ENVRIplus “Common Operations of Environmental Research Infrastructures” (January-May 2019).
 - IAPG will continue to develop activities in the International Advisory Board of the European Project INTERMIN “International Network of Raw Materials Training Centres” (January-December 2019).
 - IAPG will continue to work in the European Project GOAL “Geoethics Outcomes and Awareness Learning” (January-December 2019).

- IAPG-Peru will organize the 3rd Roundtable on geoethics in Peru (February 2019).
- IAPG will launch the online survey on ethics in geosciences. A report containing data and results will be released for free access and will be publicized and discussed in various international meetings. The IUGS support to this initiative will be clearly emphasized (March 2018).
- IAPG-Bangladesh will represent the association in the International Conference on Geoscience for Society, in Dhaka (Bangladesh) (March 2019)
- IAPG-Peru will contribute to the organization of the 1st Symposium of Young Geoscientists in Peru (March 2019).
- IAPG-Peru will contribute to the organization of the 1st Peruvian Olympiad of Geoscience (April 2019).
- IAPG-Peru will organize the 3rd Round Table on Geoethics in Peru (15 April 2019).
- IAPG-Peru will organize a “Geoethical Dinner” in Lima for the members of the section (May 2019).
- IAPG-Peru will organize the General Assembly of its members in Lima (July 2019).
- IAPG will assign the Geoethics Medal 2019 (September 2019).
- IAPG will celebrate the 3rd edition of the International Geoethics Day on 17 October 2019 (October 2019).
- IAPG will organize the short course “Foundations of Geoethics for Earth, Marine and Atmospheric Sciences” at the EGU General Assembly 2019 in Vienna (Austria) (April 2018).
- IAPG-Peru will organize the 5th Edition of MinerLima “Feria Internacional de Minerales y Fósiles en el Perú” (International Exhibition of Minerals and Fossils in Peru) (November 2019).
- IAPG-Egypt will promote an agreement between IAPG and GSAf – Geological Society of Africa.
- IAPG-Egypt will include geoethics issues in training courses for 200 school students and will promote geoethics and the IAPG among undergraduate students of Fayoum University.
- IAPG-Lebanon will develop the website of the section.
- IAPG-Lebanon will organize conferences and workshops on geoethics in Lebanon, in cooperation with IAPG-Italy.
- IAPG-Paraguay will cooperate with Geology Department of the Facultad de Ciencias Exactas y Naturales of the National University of Asuncion to define a plan of joint events to promote geoethics and the IAPG.
- IAPG-Peru will promote cooperation with National Society of Mining and Petroleum and the

Geology Faculties in the Peruvian universities and the Geological Engineering Faculty of the Universidad Nacional Mayor de San Marcos (UNMSM).

- IAPG-UK, following preliminary discussions with the Executive Secretary of the Geological Society of London (GSL), will consider various follow up actions to the 2018 article published in Geoscientist.
- IAPG, in cooperation with IFG-Initiative on Forensic Geology, will release the White Paper on Geoethics in Forensic Geology.
- IAPG will establish new Task Groups on geoethical issues.
- IAPG will continue to enlarge its network by opening new national sections.
- IAPG will continue to spread news, and information about contents, activities and initiatives on geoethics through its website, blog, social networks and newsletter.

Name, address and e-mail of person preparing this report

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