

INTERNATIONAL UNION OF GEOLOGICAL SCIENCES (IUGS)

Reporting Form for IUGS Affiliated Organizations 2014

1. Name of Affiliated Organization

IAPG – INTERNATIONAL ASSOCIATION FOR PROMOTING GEOETHICS

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

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The IAPG is legally recognized by the Italian Republic through a public notarial deed on 21st December 2012, repertoire no. 16255, collection no. 8340.

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The IAPG is an affiliated organization of the IUGS - International Union of Geological Sciences and it has been recognized as an International Associate Organization of the American Geosciences Institute (AGI).



2. Overall objectives

The IAPG is a multidisciplinary, scientific platform for widening the debate on problems of Ethics applied to the Geosciences. Its overall objectives are:

- developing the discussion on ethical implications in research and practice of Geosciences among geoscientists and in the society, making Geoethics an essential point of reference for any action on the land, waters and atmosphere usage that all stake-holders and decision-makers have to 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;
- 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 the civil society;
- the 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 a social capital;
- a cultural renewal in the way we perceive and relate to our Planet;
- the sensitization towards the defense of life and the richness of the Earth.

2. 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 (like climate, geohazards, earth resources and geoeducation) with a 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 interaction among geoscientists from all parts of the world and encouraging international cooperation, and fostering the dissemination of Geoethics themes in the society.

3. Structure and organization

The bodies of the Association are the:

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

The 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. Elizabeth Silva, Prof. Ezzoura Errami, Dr. Meng Wang, Dr. Margaret Brocx).

The General Assembly is composed of all the members of the IAPG. Currently the IAPG network has reached more than 440 members from 76 countries on 5 continents.

The IAPG is also present in 10 countries with national sections: Brazil (Prof. Eduardo Marone), Canada (Prof. Anne-Marie Ryan), Democratic Republic of Congo (Dr. Jean-Robert Mweze), India (Dr. Vijay Mohan Sharma and Dr. Surya Gupta Parkash), Italy (Prof. Silvia Peppoloni), Jordan (Prof. Mamoon Allan), Malawi (Dr. Hilton Banda Eneya), Peru (Dr. Sandra Paula Villacorta Chambi), Ukraine (Prof. Yuriy Kostyuchenko), and USA (Prof. Vincent S. Cronin and Prof. Cindy

M. Palinkas).

In 2014, the IAPG has started to create a list of experts on specific issues related to geoethics. These colleagues have a new "function" in the IAPG: the "Corresponding Citizen Scientist" (CCS). The CCS has the important cultural function of stimulating our community with papers or news. The CCS is interested in Earth sciences and humanities and in promoting issues on geoethics and the IAPG. Current CCSs: Martin Bohle, Belgium (topic: Interdisciplinary explorations for mainstreaming interest in Earth sciences topics); Tony Mayer, Singapore (topic: Research Integrity).

4. Interaction with other International organizations and projects

The IAPG collaborates with the following:

- African Association of Women in Geosciences (AAWG);
- African Geoparks Network (AGN);
- American Geosciences Institute (AGI);
- European Association for the Conservation of Geological Heritage (ProGEO);
- European Federation of Geologists (EFG);
- Geology for Global Development (GfGD);
- Global Geoscience Professionalism Task Group (IUGS-TGGGP);
- International Geoscience Education Organisation (IGEO);
- International River Foundation (IRF);
- International Association of Hydrogeologists (IAH);
- Italian Council of Professional Geologists (CNG-Consiglio Nazionale dei Geologi);
- Italian Geological Society (SGI-Società Geologica Italiana);
- Science Education Resource Center (SERC);
- Young Earth-Scientists (YES) Network.

5. Chief products

Volumes

- 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 Geoitalia Conference 2011*. Annals of Geophysics, Vol. 55, No 3 (2012). <http://www.annalsofgeophysics.eu/index.php/annals/issue/view/482>.

Videos

- 6 videos uploaded on the YouTube channel of the IAPG: <http://www.youtube.com/user/iapgeoethics>
- 3 interviews to the IAPG Secretary General:
 - for the Italian Radio Television Network (RAI). The interview begins from 16m 30s: <http://www.raiscuola.rai.it/articoli/nautilus-seguendo-il-tempo/26025/default.aspx>;
 - for the 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. A total of 87 papers on Geoethics (with a peer-review process) have been published since 2012.

Orals and Posters have been given in scientific sessions or course at the EGU General Assemblies (2012, 2013, 2014), Geoitalia conference (2013), IAEG Congress (2014), GSA Annual Meeting (2014), AGU Fall Meeting (2014), 3rd WCRI (2013), EFG Workshop (2014), OTC Conference (2014), SERC workshop in Montana (2014), AEG course in Texas (2014), CNG course in Palermo (2014), Science Festival in Genoa (2013, 2014).

Website and social networks

- Official Website: <http://www.iapg.geoethics.org>
- Website IAPG Italy: <http://geoeticaitalia.blogspot.it/>
- Website IAPG India: <https://www.facebook.com/pages/International-Association-for-Promoting-Geoethics-Indian-Section/185084551694845>
- Website IAPG Jordan: <https://www.facebook.com/pages/The-International-Association-for-Promoting-Geoethics-IAPGJordan-Section/210761242415533>
- Website IAPG Ukraine: <https://www.facebook.com/pages/IAPG-Ukraine-Local-Section/566829440048463?fref=ts>
- Website IAPG DR Congo: <https://www.facebook.com/pages/IAPG-DR-Congo-section/411599808971608?fref=ts>
- Website IAPG Malawi: <https://www.facebook.com/groups/546423265456190/?fref=ts>
- Website IAPG Peru: <http://geoeticaperu.blogspot.it/>
- Blog: <http://iapgeoethics.blogspot.com>
- Linkedin Group “Geoethics and Culture of Geosciences” (419 members): http://www.linkedin.com/groups/Geoethics-Culture-Geosciences-4615518?gid=4615518&trk=hb_side_g
- Twitter Page (@IAPGeoethics) (383 followers): <https://twitter.com/IAPGeoethics>
- Facebook Page: <http://www.facebook.com/pages/International-Association-for-Promoting-Geoethics-IAPG/102926009863246>
- Global Ethics Network: <http://www.globalethicsnetwork.org/group/iapgeoethics>

More than 1,000 posts have been published on the IAPG webpages, regarding articles, news, call for abstracts, meetings-conferences, seminars, events and other kind of information on Ethics in Geosciences.

Webinar

- Organization of a webinar on Geoethics at the EGU General Assembly 2013. Video at http://www.egu2013.eu/nh9_8_video.html. In collaboration with YES-Network and AGI – American Geological Institute.

2013 activities

- Presentation of the IAPG to the Board on Science Education (BOSE) of the National Academy of Sciences (USA).
- IAPG session at EGU General Assembly (Vienna, Austria): – NH9.8 “Geoethics and natural hazards: the role and responsibility of the geoscientists” (35 papers discussed and a webinar followed by 300 geoscientists from all over the world).

- IAPG oral presentation at the 3rd World Conference on Research Integrity (Montreal, Canada).
- IAPG Lecture on Geoethics at the Geological Survey of Canada (Ottawa, Canada).
- Affiliation to the IUGS – International Union of Geological Sciences confirmed.
- Presentation of the IAPG to the Regional Conference of IGU, International Geographical Union, (Kyoto, Japan).
- Opening of national sections: IAPG-Brazil, IAPG-Jordan, IAPG-Ukraine, IAPG-India, IAPG Italy, and IAPG-Democratic Republic of Congo.
- IAPG session: "Geoethics and Society: Geosciences serving the public" within the Geoitalia Congress 2013 (Pisa, Italy).
- IAPG Round Table: "Geoethics", within the Geoitalia Congress 2013 (Pisa, Italy).
- IAPG Conference on Geoethics: "Geoethics: Earth Sciences and their contribution to a cultural renewal of society: a conversation between a geologist and a science philosopher". Science Festival (Genoa, Italy).
- IAPG Seminars on Geoethics for students at Kiev National University of Shevchenko and at the Scientific Centre for Aerospace Research of the Earth of National Academy of Sciences of Ukraine (IAPG-Ukraine).

6. Chief accomplishments 2014 and plans for 2015

Chief accomplishments 2014

- IAPG-India: participation to the Seminar on "Geosciences for Mineral Development & Environmental Challenges" (GEMDEC), Bhubaneswar (India).
- IAPG-EC: 2013 activity report at the IUGS 67th Executive Committee Meeting in Goa (India).
- IAPG is partner of the Day for Earth Sciences in Africa and Middle East (DESAME) and IAPG DR Congo organizes a DESAME event in Bukavu: a short capacity building courses to teachers of some high schools, activities with pupils of secondary schools, a conference on natural hazard management, artisanal mining, geo-education.
- IAPG-Jordan co-organizes a conference on "Geoparks network: the project of Wadi Al Mujib in Jordan" in Amman (Jordan).
- IAPG-Italy organizes a Conference on "Natural Hazards and Society" in Rome (Italy) that saw among the speakers the President of the Italian Geological Society and the President of the Italian Council of Professional Geologists.
- IAPG session at EGU-General Assembly 2014 – NH9.8 "Geoethics: Ethical Challenges In: Communication, Geoeducation and Management of Natural Hazards" in Vienna (Austria): 38 papers accepted (18 orals + 20 posters); co-organized by IAPG-Italy, IAPG-Brazil, IAPG-Ukraine.
- IAPG lecture at the Ethics breakfast of the OTC - Offshore Technology Conference (the world's foremost event for the development of offshore resources in the fields of drilling, exploration, production, and environmental protection) in Texas (USA).
- IAPG invited speech at the EFG (European Federation of Geologists) workshop "Geologists of Europe in the 3rd millennium" in Palermo (Italy); IAPG attends also the EFG Summer Council Meeting 2014 in quality of observer.
- IAPG-Brazil at the Coastal Zone Canada 2014 Conference with a presentation on Geoethics.
- IAPG keynote speech "The foundations of Geoethics" and convenership for the Workshop "Teaching GeoEthics Across the Geoscience Curriculum", Montana (USA), organized by the Montana State University and funded through the National Science Foundation Ethics Education in Science and Engineering (EASE) program, grant, also co-sponsored by the On the Cutting Edge program for geoscience faculty development (NSF TUES Phase III), and the InTeGrate - Interdisciplinary Teaching of Geoscience for a Sustainable Future program (NSF-STEP).

- IAPG session at the IAEG XII International Congress (50th anniversary) - Session 7.3 “Geoethics and natural hazards: communication, education and the science-policy-practice interface”: 22 papers accepted (6 orals + 16 posters); co-organized by IAPG-Italy and IAPG-Brazil, with the participation of IAPG-Peru.
- IAPG recognized as an International Associate Organization of the AGI - American Geosciences Institute.
- IAPG starts to create a list of experts on specific issues related to Geoethics.
- IAPG-USA takes a course on ethics for professional geoscientists in Texas (USA) organized by the AEG (Association of Environmental and Engineering Geologists).
- IAPG-Italy invited speech in the course for Professional Geologists “Geoethics, Landscape Ecology and Professional Deontology”, in Palermo (Italy), organized by the Italian Council of Professional Geologists.
- IAPG-USA oral presentation about the association at the GSA Annual Meeting 2014 in Vancouver (Canada): session “Geoscience Education: Research and Practice”.
- IAPG-Italy participates in the publication of the “Geoethical Promise” in Episodes.
- IAPG-Jordan organized a volunteering campaign for students of the Bachelor in “Tourism Management” at the University of Jordan to clean up an environmental and geological site in the Northern Jordan: the goal was to enhance the ethical practice with the environment in Jordan.
- IAPG-EC members in the Steering and Scientific Committees of the Second International Conference on Geoparks in Africa and Middle East: Geoheritage for local socio-economic sustainable development, Dakar (Senegal).
- IAPG-Italy invited speech for the conference “Which risks are you willing to take? A dialogue between nature, reason and technology” at the Science Festival 2014 in Genoa (Italy).
- IAPG-Italy: interviews to the IAPG Secretary General for the YouTube Channel EduScienza.
- IAPG-Italy: interview to the IAPG Secretary General on natural risks, risks management and geoethics for the Italian Radio Television Network (RAI).
- International Union for Conservation of Nature (IUCN), Sixth World Parks Congress in Sydney (Australia): debate “Local solutions to environmental challenges”, event manager: Margaret Brocx, IAPG coordinator for Australia.
- IAPG-Italy at the ESA LearnEO! Workshop on Earth Observation Education 2014 in Frascati (Italy) with an oral presentation “Geoscience for Society in a Geoethical perspective: the Istituto Nazionale di Geofisica e Vulcanologia experience”.
- IAPG posters at the AGU Fall Meeting 2014 in San Francisco (USA): poster session “Teaching GeoEthics Across the Geoscience Curriculum”.
- IAPG-Brazil performed activities of dissemination of the principles of Geoethics in courses of the Universidade Federal do Paraná and in the POGO (Partnership for Observations of the Global Oceans) Training Course at the Centre for Marine Studies, Paraná, for Latin America and the Caribbean participants.
- Opening of the sections IAPG-Canada, IAPG-Malawi, IAPG-Peru, IAPG-USA.
- IAPG-Jordan edits a book on Geotourism in Arabic language “Allan M. (Ed). Geotourism in Jordan. 2014, Doi: 10.13140/2.1.4229.7607”: the book focuses on developing Geotourism in Jordan to enhance the geo-education and geo-heritage resources in that country.
- IAPG edits the Part II “Geoethics and Natural Hazards: Communication, Education and the Science-Policy-Practice Interface” (22 chapters) of the 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., Springer”.
- The IAPG Secretary General is co-editor of the book “Wyss M. & Peppoloni S. (Eds). Geoethics: Ethical Challenges and Case Studies in Earth Sciences. 2014, 450 p. Elsevier” (33

chapters).

Plans for 2015

- Editorial projects with peer-review process:
 - Book: Peppoloni S. & Di Capua G. (Eds). *Geoethics: the role and responsibility of geoscientists*. Lyell Collection (Geological Society of London). In preparation.
- International conferences/meetings:
 - IAPG session at the EGU – General Assembly 2015 in Vienna (Austria): EOS8 “Geoethics for Society: general aspects and case studies in geosciences” (IAPG-Italy and IAPG-Brazil).
 - IAPG participation at the 4th World Congress on Research Integrity (Rio de Janeiro, Brazil): 2 works accepted on Geoethics.
 - Session and workshop proposals by the IAPG-Canada and IAPG-USA for the AGC-AGU-GAC-MAC Joint Assembly 2015 in Montreal (Canada): session “How Do We Build A Healthy Geoscience Community that Better Serves Society?” and workshop “Teaching Geoethics in Undergraduate Geoscience Programs”.
 - IAPG-Canada at the 41st annual AGS - Atlantic Geoscience Society Colloquium and Annual General Meeting. Title of the presentation “Geoethics: What is It, Why Should We Care, and How Should We Teach It?”.
 - IAPG-Canada at the WCSE - Western Conference on Science Education 2015 with a presentation on Geoethics.
 - IAPG-Ukraine intends to organize special sessions on Geoethics in the Water Quality Forum, in collaboration with the Institute of Cybernetics (Kiev) and the International Institute for Applied Systems Analysis (Austria) about water & food security, water contamination risk assessment; security & sustainability in strategic perspective – regional and global context.

IAPG will continue to develop the following activities:

- IAPG-Canada, IAPG-Italy, IAPG-USA are working to build a course on Geoethics that will help the geoscience education community to bring ethics education into the college curriculum for student geoscientists;
- IAPG-Brazil will work on the organization of a regular training course, which will include geoethics as its main core, relevant to ocean and coastal issues, together with the International Ocean Institute, and other relevant international organizations;
- IAPG-Italy and IAPG-Ukraine will continue in popularizing Geoethics through interviews and participations in science festivals;
- IAPG-Canada, IAPG-Italy, IAPG-Ukraine, IAPG-USA will teach principles of Geoethics in seminars and courses for students, professional geologists and researchers;
- IAPG-USA will work to organize geoethics symposia at meetings of professional society like AEG, AIPG, GSA, AGU and AAPG.
- IAPG-Ukraine will work to organize a lecture series in Kiev National University on “Ecosystems change analysis derived by natural and human induced impact using satellite observation”, and in faculty of Geology on “Satellite Risk Analysis” (supported by National Academy of Sciences of Ukraine).
- IAPG-Ukraine will organize national and regional Geo-parks virtual excursions for students.
- IAPG-Italy will work to include Geoethics principles in research projects;
- IAPG-Italy and IAPG-USA will work on proposals for new editorial projects, with peer-review process, to strengthen Geoethics from a scientific point of view and to collect experiences and case-studies;



- IAPG will continue in spreading news, information, activities, initiatives on Geoethics through its webpages.