



INTERNATIONAL UNION OF GEOLOGICAL SCIENCES (IUGS)

**Earth Science for
the Global Community**

2019 Edition

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IUGS MEMBER COUNTRIES/REGIONS

Albania	Guyana	Panama
Angola	Hungary	Papua New Guinea
Argentina	Iceland	Paraguay
Australia	India	Peru
Austria	Indonesia	Philippines
Azerbaijan	Iran	Poland
Bangladesh	Iraq	Portugal
Belarus	Ireland	Romania
Belgium	Israel	Russia
Belize	Italy	Saudi Arabia
Bolivia	Jamaica	Senegal
Bosnia and Herzegovina	Japan	Serbia
Botswana	Jordan	Slovak Republic
Brazil	Kazakhstan	Slovenia
Bulgaria	Kenya	Somalia
Burkina Faso	Korea North(PDR)	South Africa
Burundi	Korea South(ROK)	Spain
Cameroon	Kosovo	Sri Lanka
Canada	Kyrgyzstan	Sudan
Chile	Latvia	Suriname
China	Lebanon	Swaziland
Colombia	Lesotho	Sweden
Congo DR	Libya	Switzerland
Costa Rica	Lithuania	Syria
Cote D'Ivoire	Luxembourg	Taiwan, China
Croatia	Madagascar	Tajikistan
Cuba	Malawi	Tanzania
Cyprus	Malaysia	Thailand
Czech	Mexico	Tunisia
Denmark	Mongolia	Turkey
Ecuador	Morocco	Uganda
Egypt	Mozambique	Ukraine
Estonia	Myanmar	United Kingdom
Finland	Namibia	Uruguay
France	Netherlands	USA
Gambia	New Zealand	Uzbekistan
Georgia	Nicaragua	Venezuela
Germany	Niger	Vietnam
Ghana	Nigeria	Yemen
Greece	Norway	Zambia
Guatemala	Pakistan	

WHAT IS IUGS?

The International Union of Geological Sciences (IUGS) is a non-political, non-governmental, non-profit organization. Founded in 1961, it is one of the largest member organizations of the International Science Council (ISC) and one of the world's largest scientific organizations. It has a global membership of about a million earth scientists through approximately 120 member countries, which are represented through Adhering Organizations - commonly academies, geological surveys, or geological societies. In addition approximately 60 international organizations are affiliated with IUGS.

IUGS promotes development of the earth sciences by supporting broad-based scientific activities. It promotes international collaboration in establishing global geostandards. It strengthens public awareness of geology and advances geological education. IUGS organizes international projects and meetings, sponsors symposia and scientific field visits, produces publications, and addresses issues of standardization. Topics range from fundamental earth science research to economic and industrial applications and extend to social, educational, environmental and developmental issues. Many activities take place on a 4-year cycle, commencing or ending during each international geological congress (IGC) - the main scientific forum of the IUGS.

IUGS is governed by an elected Executive, which consists of a President, Treasurer, Secretary General, past President, 2 Vice-Presidents, and 4 Councilors. The Executive Committee is supported by a Secretariat (E-mail:secretariat@iugs.org). Details of current membership and the Executive are at www.iugs.org .



Outcrop of Roberts Mountains thrust with gray mudstone of Devonian age overlying yellowish-brown siltstone of Mississippian age. The thrust records the Antler Orogeny in north-central Nevada (photo S. Finney)

OBJECTIVES OF IUGS

IUGS promotes international collaboration and cooperation with the objectives of:

- expanding awareness of the importance of the earth sciences;
- producing authoritative geological standards;
- improving the exchange of and access to geoscience information;
- enhancing geoscience professionalism;
- supporting education in the earth sciences;
- addressing human and societal needs; and
- capacity building.

These objectives are addressed through Committees, Commissions, Task Groups, Initiatives and Joint Programmes undertaken in collaboration with other organizations.

ADMINISTRATION

The IUGS is administered by a Council consisting of representatives of the Adhering Organizations of member countries, Chairpersons of Commissions, and members of the Executive Committee. The Executive Committee, consisting of 10 distinguished Earth scientists from around the world, together with the Permanent Secretariat based in Beijing ensures that the Union operates as a professional scientific body and the actions approved by the IUGS Council are implemented. The Executive Committee also monitors and reports on IUGS activities. The Finance Committee, the Publications Committee, and the Nominating Committee support the work of the Executive Committee.

The International geological community interacts with IUGS through two types of organization.

- a) Adhering Organizations representing countries or defined regions - currently there are approximately 120 of these; and
- b) Affiliated Organizations, which are international non-governmental autonomous scientific organizations and which collaborate with IUGS in scientific meetings and activities - there are about 60 of these.

CURRENT IUGS ACTIVITIES

International Geological Congress

The IUGS-IGC Council is responsible for deciding the host of future IGCs and the International Geological Congress Committee (IGCC), comprising the Presidents and Secretary Generals of the past two IGCs and the IUGS Bureau (President, Secretary General, and Treasurer), advises the organizers.

IUGS Scientific Commissions:

- Geoscience Education, Training and Technology transfer (COGE)
- History of Geological Sciences (INHIGEO)
- Management and Applications of Geoscience Information (CGI)
- Stratigraphy (ICS)
- Tectonics and Structural Geology (TECTASK)
- Global Geochemical Baselines (GGB)
- Geoheritage (ICG)



Golden Spike



GSSP Marker



Pounding in of the base of a golden spike that marks the base of the Jurassic System

Task groups:

- Global Geoscience Professionalism (TGGGP)
- Geohazards (TGG)

Joint programs:

- International Lithosphere Program (ILP)
- Isotopes and Geochronology (TGIG)
- International Geoscience Partnership (IGCP)
- International Geological Congress (IGC)

Initiatives:

- Forensic geology (IFG)
- Resourcing the Future (RFG)



Members of IUGS Task Group on Geohazards inspect landslides generated by 6-Sep-2018 magnitude 6.7 earthquake, Hokkaido, Japan
(Photo Y. Ito)



Ground search and recovery by police trained in a Forensic Geology workshop (photo L. Donnelly)



Prof. Chris King, President of COGE teaching teachers how to teach geology in the classroom (Brazil)



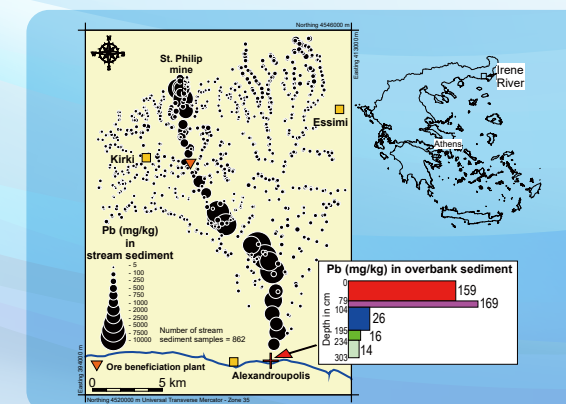
Members of COGE teaching teachers how to teach geology in the field (Morocco)



Young Researchers observe deformation associated with the Frontal Pennine Thrust of the Alps and the emplacement of evaporite bodies that cross-cut Alpine structures at Col du Galibier, France; field trip organized by Commission on Structural Geology and Tectonics (Photo: R. Carosi)



Sampling floodplain sediment using a trench
of 170 cm depth, Colombia



Distribution of Pb in the 0.180 mm reconnaissance stream sediment fraction, and in the 0.063 mm fraction of overbank sediment layer



Overbank sediment sampling site on the left bank of
Manzanares River, Spain

IUGS PUBLICATIONS

Episodes – the flagship quarterly international science journal of the IUGS. It contains original scientific research and review papers of global and regional significance and IUGS reports. A special issue is prepared for each International Geological Congress. Thematic issues appear regularly. The Geological Society of Korea provides editorial and production support through their office in Seoul. Newly accepted articles are published online first. These and all issues can be accessed without charge at www.episodes.org. Printed copies are available on subscription.

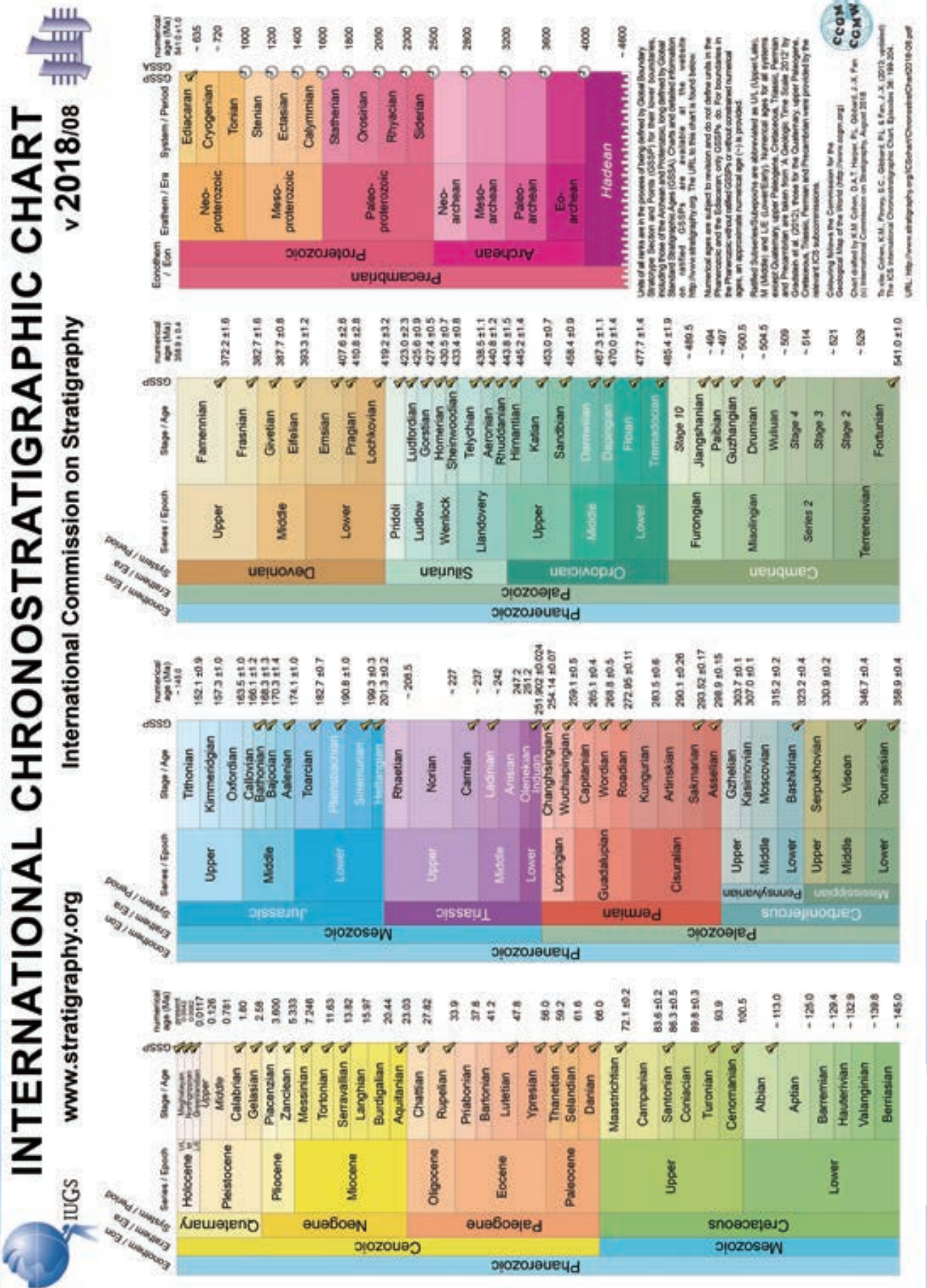


Books - The Geological Society of London has first refusal of publications arising from IUGS activities. Since this relationship was established, the Society has published 25 books arising from IUGS activities and 11 books from International Geological Congress sessions.



International Stratigraphic Chart – The IUGS International Commission on Stratigraphy, with international agreement, regularly updates a definitive chart with the aim of standardizing stratigraphical nomenclature. The current edition is at www.stratigraphy.org.

IUGS activities also contribute numerous papers to other journals and books from other publishers.



IUGS OUTREACH

News and information are provided through:

- the IUGS website (www.iugs.org);
- a monthly E-Bulletin, released to some 16000 addresses world-wide, which provide short informal news on activities and changes in the IUGS community and all issues are archived on the IUGS website; and
- regular postings on social media – some posts on the IUGS Facebook page have reached tens of thousands of viewers.

IUGS/UNESCO INTERNATIONAL GEOSCIENCE PARTNERSHIP

This respected collaboration between IUGS and UNESCO began in 1972 as the International Geological Correlation Program (IGCP). Since then, tens of thousands of earth scientists from many countries have participated in short-term projects, many of which have led to long-term collaborations. The program now primarily supports participation by geoscientists from under-represented groups and regions and is an international gateway for early career geoscientists. Work is currently supported within 5 themes:

- Earth resources – sustaining our society;
- Global change and the evolution of life – evidence from the geologic record;
- Geohazards – mitigating the risks;
- Hydrogeology – geosciences for the water cycle; and
- Geodynamics – control of our environment.

There is an annual call for applications. Full information is available on the IGCP website:

<http://www.unesco.org/new/en/natural-sciences/environment/earth-sciences/international-geoscience-programme/>



INTERNATIONAL GEOLOGICAL CONGRESS (IGC)

First held in 1878, the quadrennial IGC is a premier event of the earth science calendar covering the whole span of geosciences. The IUGS has been involved in its organisation since 1961. Information on the next Congress (New Dehli, India, 2020) can be found at www.36igc.org.



IUGS AFFILIATED ORGANIZATIONS

 African Association of Women in Geosciences	 AAPG Advancing the World's Petroleum Enterprise™	 AGI american geosciences institute connecting earth, science, and people
 AGU100 ADVANCING EARTH AND SPACE SCIENCE	Arab Geologists Association	 aiipa Association of International Petroleum Professionals
 ASSOCIATION OF APPLIED GEOCHEMISTS	 Association of European Geological Societies	 Association of Geoscientists for International Development
 Balkan Geophysical Society	 CFES/FCST Canadian Federation of Earth Sciences / Fédération Canadienne des Sciences de la Terre	Carpathian Balkan Geological Association
Centre International pour la Formation et les Echanges Géosciences	 CIRCUM-PACIFIC COUNCIL	 CONSORTIUM FOR THE GEOLOGICAL MAP OF THE WORLD
 Coordinating Committee for Geoscience Programs in East and Southeast Asia	 DGGV Deutsche Geologische Gesellschaft - Geologische Vereinigung	 DOSECC Exploration Services
 EarthScienceMatters Bringing knowledge of the Earth to everyone	 EuroGeosciences The European Geoscience Community	 ProGEO the european association of conservation geological heritage
 European Association of Science Editors	 European Geoparks Network	 Geoparks
 EUROPEAN MINERALOGICAL UNION	 geochemical society	 GEOLOGICAL ASSOCIATION
 Geological Society of Africa	 Geological Society of America	 SGF Société Géologique de France
 Geological Society of India In the Service of Earth Science in India	 International Association for Engineering Geology and the Environment	 IAGETH
 International Association for Mathematical Geosciences	 International Association for Paleontology and Geobiology	 IAGC International Association of GeoChemistry
 International Association of Geomorphologists The World's Geomorphological Association	 International Association of Hydrogeologists The World-wide Groundwater Organisation	 IAS International Association of Sedimentologists
 International Association on the Genesis of Ore Deposits	 ICL International Commission on Land Use	International Federation of Palynological Societies
 International Federation of Hydrographic Societies	 ICGEO International GeoScience Education Organisation	 IMGA International Medical Geology Association
 International Mineralogical Association	 The Palaeontological Association	 International Permafrost Association Fostering collaborative research in the north of the Earth
 International Society for Rock Mechanics	 International Society of Soil Mechanics & Geotechnical Engineering	 NGWA WellOwner.org Informing consumers about groundwater and water wells
 The Meteoritical Society	 SGA Society for Geoscientists Applied to the Mineral Resources	 SEPM Society for Sedimentary Geology
 Society of Economic Geologists Advancing Science and Discovery	 YES Network	