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INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS UNION GÉODÉSIQUE ET GÉOPHYSIQUE INTERNATIONALE

HISTORIQUE

L'Union Géodésique et Géophysique Internationale (UGGI) est un organisme international non gouvernemental à but non lucratif fondé à Bruxelles le 28 juillet 1919. L'UGGI se consacre à l'étude scientifique de la Terre et à l'utilisation au profit de la société des connaissances acquises grâce à cette étude. L'UGGI est l'une des trois Unions scientifiques ayant participé en 1931 à l'Assemblée constitutive du Conseil international des recherches, devenu ensuite le Conseil international des unions scientifiques (CIUS), connu aujourd'hui sous le nom de Conseil international pour la science. Le CIUS est un forum planétaire des scientifiques. Il leur permet d'échanger des idées et des informations, et de définir des méthodes et procédures normalisées dans tous les domaines de recherche. L'UGGI, l'une des 32 Unions scientifiques actuellement réunies dans le CIUS, fournit son savoir-faire concernant les études terrestres effectuées par les chercheurs dans ses Associations internationales et Commissions inter-associations.

Les neuf premiers pays membres de l'UGGI étaient l'Australie, la Belgique, le Canada, la France, l'Italie, le Japon, le Portugal, le Royaume-Uni et les États-Unis. En 2016, l'UGGI compte 69 organismes adhérents ayant une activité géodésique ou géophysique indépendante.

Au début, l'Union chapeautait six sections : Géodésie, Séismologie, Météorologie, Magnétisme et électricité terrestre, Océanographie physique et Volcanologie. Une septième section, «Hydrologie Scientifique», fut créée en 1922. Le terme «Section» fut remplacé par celui d'«Association» lors de la cinquième Assemblée générale tenue à Lisbonne, en 1933. Une huitième Association sur les Sciences Cryosphériques fut créée lors de l'Assemblée Générale de 2007 à Pérougia, Italie.

Les langues officielles de l'UGGI sont l'anglais et le français.

BACKGROUND

The International Union of Geodesy and Geophysics (IUGG) is an international, non-governmental, non-profit organization established in Brussels on 28 July 1919. IUGG is dedicated to the scientific study of the Earth and the application of knowledge gained by such studies to benefit society. IUGG was one of the first three Scientific Unions established during the Constitutive Assembly of the International Research Council, the predecessor of the International Council of Scientific Unions (ICSU) created in 1931, and now known as the International Council for Science. ICSU provides a global forum for scientists to exchange ideas and information and to develop standard methods and procedures for all fields of research. IUGG, one of the 32 scientific Unions presently grouped within ICSU, brings expertise on Earth studies from researchers in its International Associations and Inter-Association Commissions.

The first nine member countries of IUGG were Australia, Belgium, Canada, France, Italy, Japan, Portugal, the United Kingdom, and the United States. By 2016, IUGG has 69 Member Countries in which independent activity in geodesy and geophysics has been developed

The original Union encompassed six Sections: Geodesy, Seismology, Meteorology, Magnetism and Terrestrial Electricity, Physical Oceanography, and Volcanology. A seventh section "Scientific Hydrology" was created in 1922. The term "Section" was replaced by "Association" at the 5th General Assembly held in Lisbon in 1933. The eighth Association of Cryospheric Sciences was added at the 2007 General Assembly held in Perugia, Italy.

The official languages of IUGG are English and French.

OBJECTIFS ET ACTIVITÉS DE L'UGGI

L'UGGI est une organisation purement scientifique, qui a été fondée afin de promouvoir et de coordonner les études sur les propriétés physiques, chimiques et mathématiques de la Terre et sur son environnement spatial. Ces études concernent la forme de la Terre; la nature de ses champs gravitationnel et magnétique; la dynamique de la Terre en tant qu'entité et de celle de ses composants; la structure interne, la composition et la tectonique de la Terre; la formation des magmas; la volcanologie et la genèse des roches; le cycle hydrologique, dont la neige et la glace; la physique et la chimie des océans; l'atmosphère, l'ionosphère, la magnétosphère et les relations Soleil-Terre; ainsi que les problèmes analogues propres à la Lune et aux autres planètes. Les activités de l'UGGI comprennent l'observation de la Terre par satellite et par d'autres techniques de mise en place d'instruments à haute altitude.

Programmes de recherche interdisciplinaire

L'UGGI a inauguré et activement soutenu les efforts de collaboration qui ont permis de mettre en œuvre des programmes de recherche interdisciplinaire internationaux de grande valeur, dont l'Année Géophysique Internationale (1957-1958), le Projet du Manteau Supérieur de la Terre (1964-1970), la Décennie Hydrologique Internationale (1965-1974), le Projet Géodynamique (1972-1979), le Programme Global de Recherche sur l'Atmosphère (1967-1980), le Programme Mondial de Recherche sur le Climat (1980-présent), le Programme International de la Lithosphère (1981-présent) et le Système Global d'Observation Géodésique (2003-présent). Ces programmes ont servi de modèle de coopération internationale et interdisciplinaire. L'UGGI a inauguré et soutenu des initiatives du CIUS, surtout ceux qui concernent les sciences de la Terre. L'une des contributions majeures de l'UGGI a été la création, il y a environ 50 ans, par l'intermédiaire du CIUS, du système de la Banque de Données Mondiale et de la Fédération des Services d'Analyse des Données Astronomiques et Géophysiques. Ceux-ci ont été transformés en Système de Données Mondial du CIUS qui mettra les données recueillies dans le cadre de ces grands programmes à la disposition des chercheurs du monde entier. L'UGGI a soutenu l'Année Internationale de la Terre (2007-2009) et l'Année Polaire Internationale (2007-2008) et a aussi initié et soutenu l'Année Géophysique Électronique (2007-2008) et l'Année Héliophysique Internationale (2007-2008).

Recherche internationale en coopération

L'UGGI collabore avec l'UNESCO à l'étude des catastrophes naturelles, des océans, et de l'hydrologie. Elle attache aussi une grande importance aux problèmes scientifiques des pays en voie de développement, en parrainant des activités liées aux besoins scientifiques du tiers monde. L'UGGI est un partenaire d'autres Unions Scientifiques du CIUS, par le biais des Commissions inter-unions, et ses activités correspondent avec celles de huit autres Unions du CIUS (GéoUnions): l'Union Astronomique Internationale (UAI), l'Association Cartographique Internationale (ACI), l'Union Géographique Internationale (UGI), la Société Internationale de Photogrammétrie et de Télédétection (SIPT), l'Union Internationale des Sciences Géologiques (UISG), l'Union Internationale pour l'Étude du Quaternaire (INQUA), l'Union Radio-Scientific Internationale (URSI) et l'Union Internationale de la Science du Sol (UISS).

OBJECTIVES AND ACTIVITIES OF IUGG

IUGG is a purely scientific organisation established to promote and co-ordinate studies of physical, chemical, and mathematical properties of the Earth and its environment in space. These studies include the shape of the Earth; the nature of its gravitational and magnetic fields; the dynamics of the Earth as a whole and of its component parts; the Earth's internal structure, composition, and tectonics; the generation of magmas; volcanism and rock formation; the hydrological cycle including snow and ice; the physics and chemistry of the oceans; the atmosphere, ionosphere, magnetosphere and solar-terrestrial relations; and analogous problems associated with the Moon and other planets. IUGG activities embrace studies of the Earth by artificial satellites and other techniques for deploying instruments at high altitude.

Interdisciplinary Research Programmes

IUGG has initiated and vigorously supported collaborative efforts that have led to highly productive world-wide interdisciplinary research programmes, such as the International Geophysical Year (1957-58), the Upper Mantle Project (1964-70), the International Hydrological Decade (1965-74), the Geodynamics Project (1972-79), the Global Atmospheric Research Programme (1967-80), World Climate Research Programme (1980-present), International Lithosphere Program (1981-present), Global Geodetic Observing System (2003-present) and others. These programmes have set a model for international, interdisciplinary co-operation. IUGG has initiated and supported ICSU initiatives, especially those in which Earth sciences have a role to play. One major contribution was the creation, some 50 years ago, through ICSU, of the World Data Centers and the Federation of Astronomical and Geophysical Data Analysis Services. These were transformed to the ICSU World Data System, from which the data gathered during major research programs and data products will be available to researchers everywhere. IUGG supported the International Year of the Planet Earth (2007-2009) and the International Polar Year (2007-2008) and has initiated and supported the Electronic Geophysical Year (2007-2008) and the International Heliophysical Year (2007-2008).

Worldwide Co-operative Research

IUGG co-operates with UNESCO in the study of natural catastrophes, oceans, and hydrology. It also gives particular emphasis to the scientific problems of Developing Countries by sponsoring activities relevant to the scientific needs of the Third World. IUGG is a partner with other ICSU Scientific Unions in inter-Union Commissions, and coordinates its activities with eight other ICSU Unions (GeoUnions): the International Astronomical Union (IAU), the International Cartographic Association (ICA), the International Geographical Union (IGU), the International Society of Photogrammetry and Remote Sensing (ISPRS), the International Union of Geological Sciences (IUGS), the International Union for Quaternary Research (INQUA), the International Union of Radio Science (URSI), and the International Union of Soil Sciences (IUSS).

STRUCTURE

De par leur nature même, les études géodésiques et géophysiques requièrent une importante coopération internationale, de même qu'une coordination efficace. L'UGGI, heureusement, compte 69 entités adhérentes (Tableau 1); les entités adhérentes sont répartis dans le monde entier, comme le montre le Tableau 2. En outre, l'UGGI possède six membres affiliés (Tableau 3).

Comités nationaux

La grande majorité des entités adhérentes participent aux activités de l'UGGI à travers leur Comité National de l'UGGI, mis en place par l'Académie nationale ou une autre institution officielle du pays adhérent à l'Union (il existe d'autres méthodes d'adhésion). Chaque Comité national de l'UGGI est représenté aux Assemblées Générales de l'UGGI par un délégué nommé par l'entité adhérente.

Assemblées générales

Les Assemblées générales de l'UGGI ont lieu tous les quatre ans. La prochaine Assemblée générale de l'UGGI sera la XXVII^e et se tiendra à Montréal, Canada, en 2019. L'UGGI tient des Assemblées Générales depuis 1922. Depuis 1963, elles ont lieu tous les quatre ans. Le Tableau 4 indique les années et les localisations des Assemblées générales de l'UGGI.

Au cours de ces Assemblées générales, on adopte les politiques régissant l'UGGI et on définit et coordonne les programmes nécessitant une participation internationale. De plus, on élabore les plans d'exécution de ces programmes de recherche. Les résultats scientifiques des programmes en cours font l'objet de discussions lors d'un grand nombre de symposiums, de réunions de commissions, de groupes de travail ou de rencontres réunissant les scientifiques assistant aux Assemblées.

Le Conseil, le Bureau et les Comités de l'UGGI

L'UGGI est dirigée par le Conseil de l'UGGI, lequel est régi par les statuts et le règlement intérieur de l'Union. Le Conseil de l'UGGI est composé des délégués accrédités des entités adhérentes. Le Conseil de l'UGGI se réunit lors de l'Assemblée Générale de l'UGGI, où il est procédé à l'élection des membres du Bureau de l'UGGI et du Comité des finances de l'UGGI. Les membres du Conseil de l'UGGI de la XXVI^e Assemblée Générale, en 2015, et les membres du Conseil de l'UGGI (2016-2019) seront présentés à la page 15.

Le Bureau de l'UGGI traite des affaires administratives entre les rencontres du Conseil. Ses membres, élus par le Conseil, sont au nombre de sept – quatre responsables (Président, Vice-président, Secrétaire général et Trésorier) et trois membres associés. Le Bureau se réunit chaque année.

STRUCTURE

By their very nature, geodetic and geophysical studies require a high degree of international co-operation as well as effective central co-ordination. IUGG is fortunate in having 69 Member Adhering Bodies (Table 1); the Members are distributed throughout the world as shown in Table 2. In addition, IUGG has six Affiliate Members (Table 3).

National Committees

The great majority of Member Adhering Bodies participate through IUGG National Committees set up by the national academy or another body in their country that adheres to the Union (other methods of adherence do occur). Each IUGG National Committee is represented at the IUGG General Assemblies by a Delegate appointed by its Adhering Body.

General Assemblies

IUGG General Assemblies are held every four years. The next IUGG General Assembly will be number XXVII (27th) in Montreal, Canada, in 2019. IUGG General Assemblies have been held since 1922. Since 1963, they are held every four years. Table 4 lists the years and locations of IUGG General Assemblies.

During these General Assemblies, policies governing IUGG are adopted, research programmes requiring international participation are formulated and coordinated. In addition, plans are drawn for the execution of research programmes. The scientific results of programmes in progress are discussed at the numerous Symposia, Commission and Working Group meetings, and other gatherings of scientists that are convened during these assemblies.

The IUGG Council, Bureau, and Committees

IUGG's affairs are directed by the Union Council governed by the Statutes and By-Laws of the Union. The IUGG Council is composed of one credentialed delegate from each Adhering Body. The IUGG Council meets during the IUGG General Assembly and elects the IUGG Bureau and the IUGG Finance Committee. The IUGG Council Delegates attending the XXVI General Assembly in 2015 (Prague, Czech Republic) and the IUGG Council Delegates (2016-2019) are listed on page 15.

The IUGG Bureau handles administrative affairs between Council meetings. It is elected by the Council and consists of seven members – four officers (President, Vice-President, Secretary General, and Treasurer) and three members at large. The Bureau meets annually.

Le Comité directeur de l'UGGI travaille en vue d'atteindre les objectifs scientifiques de l'Union et des Associations internationales grâce à une coordination et une définition efficace des politiques générales. Il regroupe les membres du Bureau de l'UGGI, le président sortant de l'Union et les présidents des Associations internationales.

Le Comité des finances de l'UGGI traite des affaires budgétaires avec le Trésorier de l'UGGI. Il regroupe personnes élues par le Conseil de l'UGGI. Les membres du Comité des finances ne peuvent être membres ni du Bureau de l'UGGI, ni du Comité directeur de l'UGGI.

Les Associations internationales

Les huit Associations internationales semi-autonomes de l'UGGI assument, chacune, les responsabilités relatives à une série de sujets ou de thèmes spécifiques, relevant des activités générales de l'Union. Chaque Association possède sa propre sous-structure, comme il sera expliqué ci-dessous. Les Associations internationales définissent des normes de recherche et conviennent de définitions et d'algorithmes, tels que le *Manual of Seismological Observatory Practice* ou le *Guide for Magnetic Repeat Station Surveys*. Pour les sujets importants les résolutions doivent être adoptées à l'unanimité. Ils transmettent dans le cadre de leur mission éducative les résultats de leurs recherches à la communauté scientifique internationale, aux agences gouvernementales, aux entreprises et au grand public. Les huit Associations internationales sont les suivantes:

Association Internationale des Sciences Cryosphériques (AISC)
International Association of Cryospheric Sciences (IACS)

Association Internationale de Géodésie (AIG)
International Association of Geodesy (IAG)

Association Internationale de Géomagnétisme et d'Aéronomie (AIGA)
International Association of Geomagnetism and Aeronomy (IAGA)

Association Internationale des Sciences Hydrologiques (AISH)
International Association of Hydrological Sciences (IAHS)

Association Internationale de Météorologie et des Sciences de l'Atmosphère (AIMSA)
International Association of Meteorology and Atmospheric Sciences (IAMAS)

Association Internationale pour les Sciences Physiques des Océans (AISPO)
International Association for the Physical Sciences of the Oceans (IAPSO)

Association Internationale de Séismologie et de Physique de l'Intérieur de la Terre (AISPIT)
International Association of Seismology and Physics of the Earth's Interior (IASPEI)

Association Internationale de Volcanologie et de Chimie de l'intérieur de la Terre (AIVCIT)
International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

The IUGG Executive Committee works to further the scientific objectives of the Union and International Associations by effective co-ordination and formulation of general policies. It consists of the IUGG Bureau, the retiring president of the Union, and the Presidents of the International Associations.

The IUGG Finance Committee interacts with the IUGG Treasurer regarding budgetary matters. It consists of persons elected by the IUGG Council. The members of the Finance Committee are not members of the IUGG Bureau or the IUGG Executive Committee.

The International Associations

The eight semi-autonomous International Associations within IUGG are each responsible for a specific range of topics or themes within the overall scope of the Union's activities. Each has a sub-structure as discussed below. The International Associations work to set standards for research and agree on definitions and algorithms, such as the *Manual of Seismological Observatory Practice* or the *Guide for Magnetic Repeat Station Surveys*. Participants pass resolutions on important issues where all agree. They make research visible to the international scientific community, to governmental agencies, to industry, and to the general public through their education activities. These eight International Associations are as follows:

Les Associations internationales jouent également un rôle particulier en faisant bénéficier tous les pays du monde des dernières avancées scientifiques, grâce à des rencontres, des ateliers et des assemblées. Les Associations internationales tiennent leurs propres Assemblées scientifiques tous les quatre ans environ, généralement deux ans avant la tenue de l'Assemblée générale de l'IUGG. En 2013, les Assemblées scientifiques des Associations étaient ainsi: l'Assemblée conjointe de l'AISC et l'AIMSA en Suisse, l'Assemblée conjointe de l'AISH, l' AISPO, et l' AISPIT en Suède, de l'AIG en Allemagne, de l'AIGA en Mexique, et de l'AIVCIT en Japon. Lors des Assemblées scientifiques, les Associations internationales parrainent des symposiums sur des sujets particuliers, souvent en partenariat.

Les géodésiens et les géophysiciens de tous les pays du monde sont invités à participer aux nombreux symposiums et ateliers des Associations internationales et des Assemblées générales de l'IUGG. Lors de ces rencontres, les scientifiques ont l'occasion de discuter de leurs méthodologies, résultats et hypothèses respectifs, et de planifier des projets de recherche en collaboration.

Les symposiums ont vocation à s'adresser tout particulièrement aux jeunes scientifiques des pays en voie de développement. L'IUGG a prévu un budget particulier pour assurer leur participation aux symposiums organisés sous l'égide de l'Union et de ses Associations.

Comme l'IUGG, les Associations internationales sont gérées par des officiers qui sont élus pendant leurs Assemblées Générales. Dans son domaine respectif, chaque Association est responsable de la définition de son propre programme et de soutenir les activités de ses propres composantes.

Commissions de l'Union

En raison de la nature interdisciplinaire des domaines traités par les Associations internationales, plusieurs Commissions de l'Union ont été créées pour assister l'Union et la communauté géophysique internationale pour promouvoir l'étude de problèmes interdisciplinaires particuliers. Ces organisations sont habilitées par le Comité directeur de l'IUGG à mener des recherches conjointes entre les Associations. Les commissions de l'Union font l'objet d'un examen et d'un remaniement lors de chaque Assemblée générale de l'IUGG. Les six Commissions et Groupe de travail suivantes sont actuellement en activité:

- Commission de l'union sur les changements climatiques et les modifications de l'environnement (CCEC)
- Commission de l'union sur la géophysique mathématique (CMG)
- Commission de l'union sur les risques géophysiques et le développement durable (GRC)
- Commission de l'union sur l'étude des profondeurs terrestres (SEDI)
- Commission de l'union sur les données et l'information (UCDI)
- Commission de l'union sur la planétologie (UCPS)
- Groupe de travail sur l'histoire (WGH)

En outre, deux ou plusieurs Associations internationales peuvent créer et soutenir des groupes de travail conjoints chargés de sujets scientifiques spécifiques.

The International Associations also play a special role in bringing state-of-the art science to all the countries of the world through meetings, workshops, and assemblies. The International Associations convene their own Scientific Assemblies approximately every four years, generally two years following the IUGG General Assembly. In 2013, the following scientific assemblies were held: a joint assembly of IACS and IAMAS in Switzerland, a joint assembly of IAHS, IAPSO, and IASPEI in Sweden, IAG in Germany, IAGA in Mexico, and IAVCEI in Japan. At Scientific Assemblies the International Associations sponsor symposia on particular topics, often in partnership with one another.

Geodesists and geophysicists from all countries of the world are encouraged to attend the numerous Symposia and Workshops of the International Associations and the General Assemblies of IUGG. At these meetings scientists have the opportunity to discuss their respective methodologies, results, and hypotheses and to plan collaborative research projects.

The Symposia are intended to be particularly helpful to younger scientists from developing countries of the world. The IUGG has made special financial provision for them to participate in the Symposia organised under the aegis of the Union and its Associations.

Like IUGG, International Associations are managed by officers who are elected during their General Assembly. Within its own discipline each Association is responsible for determining its own programme of investigations and for supporting the activities of its own component parts.

Union Commissions

Owing to the interactive nature of the subject fields managed by the International Associations, several Union Commissions and a Working Group have been established which serve the Union and the international geophysical community by promoting the study of particular interdisciplinary problems. These bodies are chartered by the IUGG Executive Committee to conduct inter-association science. Union Commissions are reviewed and renewed at each IUGG General Assembly. The following six Commissions and Working Group are presently active:

- Union Commission on Climatic and Environmental Change (CCEC)
- Union Commission on Mathematical Geophysics (CMG)
- Union Commission on Geophysical Risk and Sustainability (GRC)
- Union Commission on the Study of the Earth's Deep Interior (SEDI)
- Union Commission on Data and Information (UCDI)
- Union Commission on Planetary Sciences (UCPS)
- Working Group on History (WGH)

In addition, two or more International Associations may set up and support joint working groups to address specific scientific topics.

Commission Inter-Unions

Le Programme International du Lithosphère, guidé par le Comité Scientifique du Lithosphère (SCL), fut établi en 1980 comme la Commission Inter-Union sur le Lithosphère (ICL) par le Conseil International des Sciences (CIUS), selon la demande de l'Union Internationale des Sciences Géologiques (UIGS) et l'Union Géodésique et Géophysique Internationale (UGGI). Le nom fut changé au Comité Scientifique sur le Lithosphère en 1999. Selon la Décision 8.4 de l'Assemblée Générale de 2005 du CIUS, le CIUS a décidé de terminer son soutien du SCL/ILP et de recommander un décalage de responsabilité vers l'UGGI et l'UIGS. Depuis cette décision, l'UGGI et l'UIGS ont rétabli la mission du ILP et ont collaboré pour re-définir l'ILP comme une entité Inter-Union. Des nouveaux Termes de Référence ont été approuvés par les deux Unions.

Inter-Unions Commission

The International Lithosphere Program, guided by the Scientific Committee on the Lithosphere (SCL), was established in 1980 as the Inter-union Commission on the Lithosphere (ICL) by the International Council for Science (ICSU), at the request of the International Union of Geological Sciences (IUGS) and the International Union of Geodesy and Geophysics (IUGG). The name was formally changed to the Scientific Committee on the Lithosphere in 1999. According to Decision 8.4 from the 2005 ICSU General Assembly, ICSU decided "to withdraw ICSU sponsorship from SCL/ILP and to recommend that responsibility would then shift to IUGG and IUGS." Since that time, IUGG and IUGS have reaffirmed the ILP mission and have collaborated to re-define ILP as an inter-Union body. New Terms of Reference have been approved by both Unions.

FINANCES

L'UGGI collecte les cotisations annuelles pour financer les projets scientifiques inter-unions, les initiatives inter-associations et les activités administratives de l'UGGI, y compris ses publications. La moitié du revenu net de l'UGGI est remis aux Associations internationales qui peuvent décider de l'utilisation de ces fonds.

Le revenu de l'Union provient des contributions annuelles des entités adhérentes. Les entités adhérentes ont le choix entre le statut de membre régulier ou de membre associé (ne payant pas de cotisation). Les entités adhérentes peuvent envoyer un délégué aux rencontres quadriennales du Conseil de l'UGGI et voter sur les affaires administratives. Les scientifiques des entités adhérentes peuvent occuper un poste de responsabilité dans les Associations internationales et ils ont un droit de vote lors des séances de travail. Les membres associés ne paient pas de cotisations, n'ont pas le droit de voter, et leurs scientifiques ne peuvent pas occuper un siège de responsabilité dans le comité exécutif ou financier de l'UGGI. Les scientifiques des entités adhérentes associés sont toutefois les bienvenus aux activités scientifiques et sociales tenues lors de toutes les rencontres de l'UGGI et des Associations internationales. Les données scientifiques et les recherches effectuées par les entités adhérentes associées sont prises en considération par les autres scientifiques, et nombreuses sont les occasions de rencontres et de collaboration avec d'autres participants de l'UGGI. Si la situation économique d'un pays ne lui permet pas l'adhésion de plein droit à l'UGGI, le statut de membre associé peut être une étape vers l'adhésion de plein droit.

Les cotisations qu'une entité adhérente régulière paye sont calculées selon un barème (en fonction de la 'catégorie - Table 1') défini par le Comité des finances de l'UGGI. Les catégories reflètent la situation économique du pays et à sa participation aux Assemblées Générales de l'UGGI. Les détails figurent dans le titre III des statuts et le titre III du règlement intérieur de l'UGGI. Chaque catégorie correspond à un nombre d'unités permettant de calculer la cotisation. En 2016 la valeur d'une unité de cotisation est de USD 1905. Le Comité des finances utilise un algorithme pour déterminer le montant de l'unité. Le Comité des finances examine également la catégorie d'adhésion de chaque entité adhérente au moins une fois tous les quatre ans.

Tout défaut de paiement d'une cotisation par un pays entraîne son passage dans une catégorie particulière de membres sans droit de vote, dits «observateurs». Le défaut prolongé de paiement des cotisations peut entraîner l'expulsion d'un pays de l'UGGI.

FINANCES

IUGG collects annual contributions to carry out its support for Inter-Union science, Inter-Association initiatives, and IUGG administration, including IUGG publications. One half of IUGG's net income from the previous year is passed to the International Associations to use as they see fit.

The income of the Union comes from annual contributions of the Members. Member Adhering Bodies can choose to be regular paying Members or Associate (non-paying) Members. Members may send a delegate to quadrennial meetings of the IUGG Council and vote on matters of business. Scientists from regular Members may hold office in the International Associations and vote at their business meetings. Associate Members pay no contributions, have no voting rights, and their scientists may not hold offices in the IUGG Executive Committee and Finance Committee. However, scientists from Associate Member countries are welcome to attend all scientific and social activities at all IUGG and International Association meetings. The scientific data collected and research performed within Associate Member countries is valued by other scientists and the opportunities for networking and collaboration with other IUGG participants are abundant. Associate Membership can be a first step toward regular membership, if a country's economic condition does not currently permit the payment of annual dues.

A regular Member Adhering Body pays dues according to a scale ("the category number - See Table 1") established by the IUGG Finance Committee. Categories are related to the economic condition of the country and its participation in IUGG General Assemblies. Details are specified in Statute III and By-Law III of IUGG. Each category has an associated number of Units used to determine the dues to be paid. The value of a single Unit of membership in 2016 is USD 1,905. The Finance Committee uses an algorithm to determine the price of a Unit. The Finance Committee also reviews the category of membership for each Member Adhering Body at least every four years.

Failure to pay fees in a timely manner places a country into a special class of non-voting membership known as "observers". Continued failure to pay fees is grounds for expulsion from IUGG.

Table 1: Member Adhering Bodies of IUGG

MEMBERS	Dates of ADMISSION & TERMINATION	CATEGORY ⁽¹⁾	UNITS ⁽²⁾
ALBANIA	1997-2002, 2003	A	0
ALGERIA	1971-2006		
ARGENTINA	1927	3	3
ARMENIA	2000	A	0
AUSTRALIA	1919	5	7
AUSTRIA	1948	3	3
AZERBAIJAN	2010	1	1
BELGIUM	1919	4	5
BOLIVIA	1960-2000, 2006	A	0
BOSNIA & HERZEGOVINA	2003	A	0
BRAZIL	1922	3	3
BULGARIA	1930	1	1
BURUNDI	1987-1995		
CANADA	1919	6	10
CHILE	1924	2	2
CHINA	1977	6	10
CHINA – Acad. of Sciences in Taipei	1995	4	5
COLOMBIA	1938-1971, 2000	1	1
CONGO D.R. (**)	2004	A	0
COSTA RICA	2010	1	1
CROATIA	1992	1	1
CUBA	1960-1996		
CZECH REPUBLIC	1993	2	2
DENMARK	1923	4	5
DOMINICAN REP.	1957-1971		
EGYPT	1924	2	2
ESTONIA	1991	1	1
ETHIOPIA	1952-2000		
FINLAND	1927	3	3
FRANCE	1919	7	15
GEORGIA	2009	A	0
GERMANY	1951	8	20
GHANA	1957-1987, 2006	A	0
GREECE	1922-2003; 2008	2	2
GUATEMALA	1957-2000		
GUINEA	1987-1995		
HAITI	1956-1971		
HUNGARY	1930	2	2
ICELAND	1967	1	1
INDIA	1947	6	10
INDONESIA	1951	1	1
IRAN	1957	1	1
IRAQ	1983-1996		
IRELAND	1946	2	2
ISRAEL	1951	1	1
ITALY	1919	6	10
IVORY COAST	1975-1996		
JAPAN	1919	8	20
JORDAN	1979	1	1
KENYA	1975-1997		
KOREA	1960	2	2
KOREA /DEM.REP	1967-2000		
LEBANON	1967-2003		
LIBYA	1979-1996		

Table 1 (continued): Member Adhering Bodies of IUGG

MEMBERS	Dates of ADMISSION & TERMINATION	CATEGORY ⁽¹⁾	UNITS ⁽²⁾
LUXEMBOURG	1971	1	1
MACEDONIA, F.Y.R.	1995-2001, 2010	1	1
MADAGASCAR	1967-1995		
MALAYSIA	1967-2002		
MAURITIUS	2003	A	0
MEXICO	1922	2	2
MONACO	1967-2013		
MONGOLIA	1995-2001		
MOROCCO	1924	A	0
MOZAMBIQUE	1983	1	1
MYANMAR (BURMA)	1957-2003		
NEPAL	1975-1987		
THE NETHERLANDS	1925	4	5
NEW ZEALAND	1927	1	1
NICARAGUA	2014	1	1
NIGERIA	1971	2	2
NORWAY	1923	4	5
PAKISTAN	1952	2	2
PERU	1925-1979, 2000	A	0
PHILIPPINES	1951-2015		
POLAND	1924	2	2
PORTUGAL	1919	2	2
ROMANIA	1930	1	1
RUSSIA (***)	1992	6	10
SAUDI ARABIA	1971-2001, 2012	2	2
SENEGAL	1960-1995		
SERBIA & MONTENEGRO (*)	1996-2006		
SIERRA LEONE	1967-1983		
SLOVAK REPUBLIC	1993	1	1
SLOVENIA	1994	1	1
SOUTH AFRICA	1924	3	3
SPAIN	1922	5	7
SUDAN	1955-2000		
SWEDEN	1923	4	5
SWITZERLAND	1923	5	7
SYRIA	1948-1995		
TANZANIA	1975-2000		
THAILAND	1923	2	2
TUNISIA	1927-2001		
TURKEY	1949	2	2
UK	1919	8	20
URUGUAY	1924-2000		
USA	1919	11	35
VENEZUELA	1975-2008		
VIETNAM	1931	1	1
ZIMBABWE	1967-2000		

(1) According to IUGG Statute 12a, there are fourteen categories of membership in the Union, numbered 1 to 14, plus a special category, called A (Associate).

(2) According to IUGG Statute 12b and IUGG By-Law 18 a, for categories 1 to 14, each member country pays annually the number of units of contribution assigned to the category in which it adheres. Associates (Category A) do not pay an annual contribution to the Union.

(*) Adhesion in 1996 under the name of the Federal Republic of Yugoslavia which was changed in 2003 to Serbia & Montenegro. In 2006, Serbia & Montenegro divided, and attempts to confirm membership of either country have been unsuccessful.

(**) Adhesion in 1991 under the name Zaire, membership terminated in 1997.

(***) Adhesion in 1954 under the name of the USSR

**Table 2:
Regional Distribution of
Members**

REGION	# OF MEMBERS
Africa	8
Asia	18
Europe	31
North and Central America	5
Oceania	1
South America	6

**Table 3:
Affiliate Members of IUGG**

MEMBERS	ADMISSION
American Geoscience Institute (AGI)	2014
Commission for the Geological Map of the World (CGMW)	2014
International Association for Geoethics (IAGETH)	2014
International Association for Mathematical Geosciences (IAMG)	2015
International Consortium on Landslides (ICL)	2015
Young Earth Scientist (YES) Network	2014

Table 4: IUGG General Assemblies

Assembly	Year	National	Foreigners	Total
I.* Rome	1922			
II. Madrid	1924			
III. Prague	1927			
IV. Stockholm	1930	91	240	331
V. Lisbon	1933	40	160	200
VI. Edinburgh	1936	80	264	344
VII. Washington	1939	580	225	805
VIII. Oslo	1948	46	322	368
IX. Bruxelles	1951	60	858	918
X. Rome	1954	163	760	923
XI. Toronto	1957	293	872	1165
XII. Helsinki	1960	121	1254	1375
XIII. Berkeley	1963	1124	814	1938
XIV. Zurich	1967	151	2049	2200
XV. Moscow	1971	1070	1507	2577
XVI. Grenoble	1975	413	2151	2564
Durham, UK	1977		Exceptional G.A.	
XVII. Canberra	1979	469	1475	1944
XVIII. Hamburg	1983	495	2709	3204
XIX. Vancouver	1987	539	3400	3939
XX. Vienna	1991	162	4169	4331
XXI. Boulder	1995	2066	2415	4481
XXII. Birmingham	1999	647	3405	4052
XXIII. Sapporo	2003	1989	2162	4151
XXIV. Perugia	2007	618	3757	4375
XXV. Melbourne	2011	675	2717	3392
XXVI. Prague	2015	143	4088	4231
XXVII. Montreal	2019			

**The figures given do not take into account the accompanying persons.*

Current Officers of IUGG

Bureau of the Union

<i>President:</i>	Michael Sideris	CANADA
<i>Vice-President:</i>	Kathryn Whaler	UK
<i>Secretary General:</i>	Alik Ismail-Zadeh	GERMANY/RUSSIA
<i>Treasurer:</i>	Aksel W. Hansen	DENMARK
<i>Members:</i>	Isabelle Ansorge	SOUTH AFRICA
	Pierre Hubert	FRANCE
	Chris Rizos	AUSTRALIA

Executive Committee of the Union

According to Article 10 of the Statutes of IUGG, the Executive Committee consists of:

- the Bureau (see above),
- the Immediate Past President of the Union, Harsh Gupta (INDIA)
- the Presidents of the International Associations:

<i>IACS:</i>	Charles Fierz	SWITZERLAND
<i>IAG:</i>	Harald Schuh	GERMANY
<i>IAGA:</i>	Eduard Petrovsky	CZECH REPUBLIC
<i>IAHS:</i>	Hubert Savenije	THE NETHERLANDS
<i>IAMAS:</i>	John Turner	UK
<i>IAPSO:</i>	Denise Smythe-Wright	UK
<i>IASPEI:</i>	Thorne Lay	USA
<i>IAVCEI:</i>	Donald Dingwell	GERMANY

Finance Committee of the Union

<i>Chair:</i>	David Collins	UK
<i>Members:</i>	Jan Krynski	POLAND
	Corina Riso	ARGENTINA
	Virendra Tiwari	INDIA

Secretariat of IUGG

The Secretariat of IUGG is located in Germany:

Helmholtz Centre Potsdam
GFZ German Research Centre for Geosciences
Telegrafenberg, A17
14473 Potsdam

<i>Executive Secretary/Assistant Secretary General:</i>	Franz G. Kuglitsch	GERMANY
<i>Assistant Executive Secretary</i>	Katrin Gundrum	GERMANY

The Executive Secretary/Assistant Secretary General of IUGG is a non-voting Member of the Bureau of the Union.

IUGG Liaison Officers and Representatives

IUGG Liaison Officers with Intergovernmental Organizations

(Principal Liaisons are marked by **bold**)

<i>The United Nations Geospatial Information Section:</i>	Hermann Drewes	GERMANY
<i>Consultative Committee for Time and Frequency (CCTF):</i>	Richard Biancale	FRANCE
	Claude Boucher	FRANCE

<i>Group on Earth Observations (GEO):</i>	Alik Ismail-Zadeh	GERMANY/RUSSIA
	Claude Boucher	FRANCE
	Mioara Mandea	FRANCE
	Peter Fox	USA
	Hansjörg Kutterer	GERMANY
	Göran Ekström	USA
<i>International Civil Aviation Organization (ICAO):</i>	John Eichelberger	USA
	Arnau Folch	FRANCE
<i>Pan-American Institute of Geography and History (PAIGH):</i>	Laura Sanchez	GERMANY
<i>United Nations Educational, Scientific and Cultural Organization (UNESCO):</i>		
<i>International Hydrological Programme (IHP):</i>	Christophe Cudennec	FRANCE
	Georg Kaser	AUSTRIA
<i>Intergovernmental Oceanographic Commission (IOC):</i>	Stefania Sparnocchia	ITALY
	Eugene Morozov	RUSSIA
<i>World Meteorological Organization (WMO) incl. the Global Framework for Climate Services (GFCS):</i>	Arthur Askew	SWITZERLAND
	Xiao Cunde	CHINA
	Alan Thomson	UK
	Christophe Cudennec	FRANCE
	Joyce E. Penner	USA
	Arnau Folch	SPAIN

IUGG Representatives on ICSU Committees and ICSU Regional Offices

<i>Committee on Data for Science and Technology (CODATA):</i>	Alexei Gvishiani	RUSSIA
	Bernd Richter	GERMANY
<i>Committee on Space Research (COSPAR):</i>	Andrew W. Yau	CANADA
	Geoffrey Blewitt	USA
<i>Scientific Committee on Integrated Research on Disaster Risk (IRDR):</i>	Harsh Gupta	INDIA
<i>Scientific Committee on Antarctic Research (SCAR):</i>	Ian Allison	AUSTRALIA
	John Turner	UK
<i>Scientific Committee on Oceanic Research (SCOR):</i>	Denise Smythe-Wright	UK
	John Turner	UK
<i>Scientific Committee on Solar-Terrestrial Physics (SCOSTEP):</i>	Vladimir Kuznetsov	RUSSIA
<i>World Climate Research Programme (WCRP):</i>	Tom Beer	AUSTRALIA
	Richard Essery	UK
<i>World Data System (WDS):</i>	Aude Chambodut	FRANCE
	Ruth E. Neilan	USA
<i>Regional Office for Africa (ROA):</i>	Isabelle Ansorge	SOUTH AFRICA
<i>Regional Office for Asia & the Pacific (ROAP):</i>	Sukanta Roy	INDIA
<i>Regional Office for Latin America and Caribbean (ROLAC):</i>	Jaime U. Fucugauchi	MEXICO

Accredited Delegates to the Council of IUGG

IUGG Council 2015

XXVI General Assembly, Prague (Czech Republic), 22 June - 2 July 2015

Listeners (from Associate Member Countries) are indicated by italics.

S.R. Cimbaro (ARGENTINA), C. Risso (ARGENTINA), I. Jackson (AUSTRALIA), B. Kennett (AUSTRALIA), C. Rizos (AUSTRALIA), G. Kaser (AUSTRIA), G. Babayev (AZERBAIJAN), I. Guliyev (AZERBAIJAN), K. Vanneste (BELGIUM), M. Assumpção (BRAZIL), D. Blitzkow (BRAZIL), D. Pancheva (BULGARIA), Z. Hajnal (CANADA), C. Itturiaga Saez (CHILE), R. Jara Lecanda (CHILE), J. Ramirez (CHILE), J.P. Li (CHINA), S.C. Liu (CHINA-TAIPEI), M. Protti (Costa Rica), *D.M. Wafula (D.R. CONGO)*, M. Orlic (CROATIA), V. Cermak (CZECH REPUBLIC), S. Gregersen (DENMARK), A. Hady (EGYPT), R. Room (ESTONIA), E. Kozlovskaya (FINLAND), C. Boucher (FRANCE), J. Chenal (FRANCE), *T. Chelidze (GEORGIA)*, J. Müller (GERMANY), C. Zerefos (GREECE), J. Adam (HUNGARY), L. Bozo (HUNGARY), K. Vogfjörd (ICELAND), V.P. Dimri (INDIA), H.Z. Abidin (INDONESIA), D. Murjaya (INDONESIA), D. Sukmayadi (INDONESIA), A.G. Jones (IRELAND), C. Price (ISRAEL), G. Panza (ITALY), S. Nakada (JAPAN), A. Oth (LUXEMBOURG), T. van Dam (LUXEMBOURG), A. Gogichaisvili (MEXICO), J.L. Macias Vazquez (MEXICO), R.F. Hanssen (THE NETHERLANDS), D. Rhoades (NEW ZEALAND), S. Odunuga (NIGERIA), O. Kristiansen (NORWAY), J. Krynski (POLAND), J.M.A. Miranda (PORTUGAL), C.S. Sava (ROMANIA), A.D. Gvishiani (RUSSIA), A. Soloviev (RUSSIA), M. Bielik (SLOVAK REPUBLIC), P. Moczo (SLOVAK REPUBLIC), M. Mikos (SLOVENIA), I. Ansorge (SOUTH AFRICA), P. Kotze (SOUTH AFRICA), J. Gomez Gonzalez (SPAIN), C. Lopez Moreno (SPAIN), P. Holmlund (SWEDEN), A. Wiget (SWITZERLAND), C. Promthong (THAILAND), K. Rammon (THAILAND), M. Kesap (TURKEY), H. Yildiz (TURKEY), H. Bryden (UK), J. Freymueller (USA), M.C. MacCracken (USA), N.X. Anh (VIETNAM), N.V. Giang (VIETNAM)

IUGG Council 2016-2019

MEMBER COUNTRY	Name SURNAME
ARGENTINA	Sergio CIMBARO Corina RISSO (Alternate)
AUSTRALIA	
AUSTRIA	Norbert HÖGGERL
AZERBAIJAN	Ibrahim GULIYEV Gulam BABAYEV (Alternate)
BELGIUM	Thierry CAMELBEECK
BRAZIL	Luiz Paulo Souto FORTES
BULGARIA	
CANADA	Zoltan HAJNAL
CHILE	José RIQUELME MUNOZ
CHINA	Guoxiong WU
CHINA-TAIPEI	Bor-Shouh HUANG
COLOMBIA	
COSTA RICA	Marino PROTTI
CROATIA	Mirko ORLIC
CZECH REPUBLIC	Eduard PETROVSKY
DENMARK	Søren GREGERSEN
EGYPT	Nasser M. H. ABOU ASHOUR
ESTONIA	Rein RÕOM
FINLAND	Johanna SALMINEN
FRANCE	Claude BOUCHER
GERMANY	Jürgen MÜLLER
GREECE	Christos ZEREFOS
HUNGARY	József ÁDÁM
ICELAND	
INDIA	Harsh GUPTA
INDONESIA	Priyadi KARDONO
IRAN	
IRELAND	Patrick SHANNON
ISRAEL	Colin PRICE
ITALY	Giuliano PANZA
JAPAN	Setsuya NAKADA

MEMBER COUNTRY	Name SURNAME
JORDAN	
KOREA, Rep.	
LUXEMBOURG	Tonie VAN DAM
MACEDONIA, F.Y.R.O.	
MEXICO	Avtandil GOGICHAISHVILI
MOZAMBIQUE	Viriato SAMBOCO Manuel F. KAMPINE (Alternate)
NETHERLANDS	Ramon HANSEN
NEW ZEALAND	David RHOADES
NICARAGUA	
NIGERIA	Dagogo M. J. FUBARA
NORWAY	Oddgeir KRISTIANSEN
PAKISTAN	
POLAND	Jan KRYNSKI
PORTUGAL	
ROMANIA	Constantin S. SAVA
RUSSIA	Alexei D. GVISHIANI
SAUDI ARABIA	
SLOVAK REPUBLIC	Jozef KRISTEK
SLOVENIA	Rudi COP
SOUTH AFRICA	Pieter KOTZE
SPAIN	Amador ELENA CORDOBA
SWEDEN	
SWITZERLAND	Jan SEIBERT
THAILAND	Krit RAMMON Chaiwat PROMTHONG (Alternate)
TURKEY	Burhanettin AKTI Osman ALP (Alternate)
UNITED KINGDOM	Joanna HAIGH
USA	Jeffrey FREYMUELLER
VIETNAM	Nguyen Van GIANG

Past Officers of IUGG Bureau

PAST IUGG PRESIDENTS

1919-1933	Charles Lallemand (France)
1933-1936	William Bowie (USA)
1936-1942	Dan La Cour (Denmark)
1946-1948	Bjørn Helland-Hansen (Norway)
1948-1951	Felix A. Vening-Meinesz (The Netherlands)
1951-1954	Sidney Chapman (UK)
1954-1957	Kalpathi R. Ramanathan (India)
1957-1960	John T. Wilson (Canada)
1960-1963	Vladimir V. Belousov (USSR)
1963-1967	Joseph Kaplan (USA)
1967-1971	Jean Coulomb (France)
1971-1975	Henry Charnock (UK)
1975-1979	Attia Ashour (Egypt)
1979-1983	George D. Garland (Canada)
1983-1987	Devendra Lal (India)
1987-1991	Vladimir I. Keilis-Borok (USSR)
1991-1995	Helmut Moritz (Austria)
1995-1999	Peter J. Wyllie (USA)
1999-2003	Masaru Kono (Japan)
2003-2007	Uri Shamir (Israel)
2007-2011	Tom Beer (Australia)
2011-2015	Harsh K. Gupta (India)

PAST IUGG VICE-PRESIDENTS

1919-1922	S.A.S. Prince Albert I de Monaco William Bowie (USA) Sir William Napier Shaw (UK) M. Tanakadate (Japan)
1922-1948	The Presidents of the Associations
1948-1951	Sydney Chapman (UK) Leason H. Adams (USA)
1951-1954	Gino Cassinis (Italy) Jacob Bjerknes (USA)
1954-1957	John T. Wilson (Canada)
1957-1960	Vladimir V. Belousov (USSR) Weikko Heiskanen (Finland)
1960-1963	Julius Bartels (FRG) Joseph Kaplan (USA)
1963-1967	Keith E. Bullen (Australia) Jean Coulomb (France)
1967-1969	Hisashi Kuno (Japan)
1969-1971	Liviu Constantinescu (Romania)
1971-1975	Attia Ashour (Egypt)
1975-1979	George D. Garland (Canada)
1979-1983	Nikolai V. Shebalin (USSR)
1983-1991	Carl Kisslinger (USA)
1991-1995	Peter J. Wyllie (USA)
1995-2003	Uri Shamir (Israel)
2003-2007	Tom Beer (Australia)
2007-2011	Harsh K. Gupta (India)
2011-2015	Kathryn Whaler (UK)

PAST IUGG SECRETARIES GENERAL

1919-1930	Sir Henry Lyons (UK)
1930-1946	Harold St. J.L. Winterbotham (UK)
1946-1951	James M. Stagg (UK)
1951-1963	Georges R. Laclavère (France)
1963-1973	George D. Garland (Canada)
1973-1991	Paul Melchior (Belgium) *
1991-1999	Georges Balmino (France)
1999-2007	JoAnn Joselyn (USA)

*P. Melchior (Belgium) served as Adjoint Secretary General from 1971-1975

PAST IUGG TREASURERS

1960-1971	Einar Andersen (Denmark)
1971-1979	Elvin Kejlsø (Denmark)
1979-1987	Ole Bedsted Andersen (Denmark)
1987-1999	Søren Gregersen (Denmark)

PAST IUGG BUREAU MEMBERS

1957-1960	George Deacon (UK) J. Wallace Joyce (USA) Chuji Tsuboi (Japan)
1960-1963	M.S. Krishnan (India) Takesi Nagata (Japan)
1963-1967	Bert Bolin (Sweden) Valery A. Troitskaya (USSR)
1967-1971	Liviu Constantinescu (Romania) Thomas Malone (USA) Alexei M. Oboukhov (USSR)
1971-1975	William C. Ackermann (USA) Liviu Constantinescu (Romania) Nikolai V. Shebalin (USSR)
1975-1979	Nikolai V. Shebalin (USSR) Henri Lacombe (France) Carl Kisslinger (USA)
1979-1983	James C.I. Dooge (Ireland) Henri Lacombe (France) Carl Kisslinger (USA)
1983-1987	James C.I. Dooge (Ireland) Vladimir I. Keilis-Borok (USSR) Helmut Moritz (Austria)
1987-1991	Gordon McBean (Canada) Helmut Moritz (Austria) Ye Duzheng (China)
1991-1995	Gordon McBean (Canada) Ye Duzheng (China) Andrei S. Monin (Russia)
1995-1999	Junyong Chen (China) Andrei S. Monin (Russia) Seiya Uyeda (Japan)
1999-2001	Junyong Chen (China) Harsh K. Gupta (India) L. Vere Shannon (South Africa)
2001-2003	Tom Beer (Australia) Junyong Chen (China) Harsh K. Gupta (India)
2003-2007	Yun-tai Chen (China) Harsh K. Gupta (India) Ali A.A. Tealeb (Egypt)
2007-2011	Yun-tai Chen (China) David Jackson (USA) Ali A.A. Tealeb (Egypt)
2011-2015	Isabelle Ansoorge (South Africa) Pierre Hubert (France) Kenji Satake (Japan)

Past Officers of IUGG Finance Committee

PAST FC PRESIDENTS

1948-1954	John T. Wilson (Canada)
1957-1957	Arthur T. Doodson (UK)
1957-1963	K. Hilding Beij (USA)
1963-1967	M. Doporto (Ireland)
1967-1971	Tauno J. Kukkamäki (Finland)
1971-1975	James M. Stagg (UK)
1975-1979	Charles A. Whitten (USA)
1979-1983	Henry I.S. Thirlaway (UK)
1983-1995	Josep O. Cardus (Spain)
1995-1999	Attia A. Ashour (Egypt)
1999-2003	A. Fred Spilhaus (USA)
2003-2007	Mike Hamlin (UK)
2007-2011	Juan F. Vilas (Argentina)

PAST FC SECRETARIES

1948-1957	K. Hilding Beij (USA)
1957-1960	Martin Goldschmidt (Israel)
1960-1967	Tauno J. Kukkamäki (Finland)
1967-1975	Charles A. Whitten (USA)
1975-1979	Henry I.S. Thirlaway (UK)
1979-1987	Arthur E. Maxwell (USA)
1987-1989	József Somogyi (Hungary)
1989-1999	A. Fred Spilhaus (USA)
1999-2003	Patrick Pinet (France)

PAST FC MEMBERS

1948-1951	Gerardo Dianderas (Peru) Arthur T. Doodson (UK) Jean Vignal (France)
1951-1954	Arthur T. Doodson (UK) Martin Goldschmidt (Israel) Jean Vignal (France)
1954-1957	Martin J. Goldschmidt (Israel) Jean Vignal (France) Fritz Gassmann (Switzerland)
1957-1960	J.M. Rayner (Australia) A. Romana (Spain) Jean Vignal (France)
1960-1963	M. Doporto (Ireland) Jack M. Rayner (Australia) A. Romana (Spain)
1963-1967	Charles A. Whitten (USA) Stanislaw Krynski (Poland) A. Romana (Spain)
1967-1971	Stanislaw Krynski (Poland) James M. Stagg (UK) E. Walser (Switzerland)
1971-1975	Stanislaw Krynski (Poland) E. Walser (Switzerland) G. Yamamoto (Japan)
1975-1979	Stanislaw Krynski (Poland) G. Yamamoto (Japan) P.K. Das (India)
1979-1983	Josep O. Cardus (Spain) Jacub Rais (Indonesia) József Somogyi (Hungary)
1983-1987	Attia A. Ashour (Egypt) Jacub Rais (Indonesia) József Somogyi (Hungary)
1987-1991	Attia A. Ashour (Egypt) Jacub Rais (Indonesia) A. Fred Spilhaus (USA)
1991-1995	Attia A. Ashour (Egypt) A. Fred Spilhaus (USA) Mike J. Hamlin (UK)
1995-1999	Vinod K. Gaur (India) Erwin Groten (Germany) Mike J. Hamlin (UK)
1999-2003	Vinod K. Gaur (India) Erwin Groten (Germany) Mike J. Hamlin (UK)
2003-2007	Brian L.N. Kennett (UK) Kiyoshi Suyehiro (Japan) Juan F. Vilas (Argentina) David Jackson (USA)
2007-2011	David Collins (UK) Jan Krynski (Poland) Kiyoshi Suyehiro (Japan)
2011-2015	Zoltan Hajnal (Canada) Jan Krynski (Poland) David Rhoades (New Zealand)

Union Commissions

Union Commission on Climatic and Environmental Change (CCEC):

www.ccec-iugg.org

<i>Chair:</i>	Tom Beer	AUSTRALIA		
<i>Vice-Chair:</i>	Jianping Li	CHINA		
<i>Secretary-Treasurer:</i>	Keith Alverson	USA / KENYA		
<i>Executive Committee Members:</i>	Ian Allison	AUSTRALIA	IACS	
	Harry Bryden	UK	IAPSO	
	Eigil Friis-Christensen	DENMARK	IAGA	
	Domenico Giardini	SWITZERLAND	IASPEI	
	Michael C. MacCracken	USA	IAMAS	
	Setsuya Nakada	JAPAN	IAVCEI	
	Dan Rosbjerg	DENMARK	IAHS	
	Stephen Self	USA / UK	IAVCEI	
	Michael G. Sideris	CANADA	IAG	
	Makoto Taniguchi	JAPAN	IAHS	
	Tonie Van Dam	LUXEMBOURG	IAG	
	Guoxiong Wu	CHINA	IAMAS	
	<i>Co-opted Member:</i>	Serhat Sensoy	TURKEY	WMO

Union Commission on Mathematical Geophysics (CMG):

<http://www.iugg.org/about/commissions/cmg.php>

<i>Chair:</i>	Yehuda Ben-Zion	USA
<i>Secretary:</i>	Ilya Zaliapin	USA
<i>Vice-Chairs:</i>	Einat Aharonov	ISRAEL
	Claudia Pasquero	ITALY
<i>Past Chair:</i>	Dan Rothman	USA
<i>Executive Committee Members:</i>	Roberto Carniel	ITALY
	Ute Herzfeld	USA
	Shin-chan Han	USA
	Matthias Holschneider	GERMANY
	Dick Peltier	CANADA
	Malcolm Sambridge	AUSTRALIA
	Daniel Schertzer	FRANCE
	Gordon Swaters	USA

Union Commission on Geophysical Risk and Sustainability (GRC):

www.iugg-georisk.org

<i>Chair:</i>	Joan Marti	SPAIN
<i>Vice-Chairs:</i>	Alan Thomson	UK
	John LaBrecque	USA
<i>Secretary-Treasurer:</i>	Paula Dunbar	USA
<i>Past Chair:</i>	Kuniyoshi Takeuchi	JAPAN
<i>Executive Committee Members:</i>	Christa von Hillebrandt-Andrade	USA
	Mohsen Ghafory-Ashtiany	IRAN
	David D. Jackson	USA
	Michael Krautblatter	Germany
	Harsh Gupta	INDIA
<i>Advisory Board Members:</i>	Viacheslav Gusiakov	RUSSIA
	Gordon McBean	CANADA
	Uri Shamir	ISRAEL
	Tom Beer	AUSTRALIA
<i>Honorary Members:</i>	Alik Ismail-Zadeh	GERMANY
	Ramesh P. Singh	USA

Union Commission on the Study of the Earth's Deep Interior (SEDI):www.sedigroup.org

<i>Chair:</i>	Jonathan Aurnou	USA
<i>Vice-Chair:</i>	Christine Thomas	GERMANY
<i>Secretary:</i>	Michael Bergman	USA
<i>Executive Committee Members at large:</i>	James Badro	FRANCE
	Philippe Cardin	FRANCE
	Ulrich R. Christensen	GERMANY
	Cathy Constable	USA
	Renaud Deguen	FRANCE
	Arwen Deuss	NETHERLAND
	Matthieu Dumberry	CANADA
	Tim Elliott	UK
	Rafael Garcia	FRANCE
	Ed Garnero	USA
	Yumei He	CHINA
	George Helffrich	UK
	Richard Holme	UK
	Gauthier Hulot	FRANCE
	Dominique Jault	FRANCE
	Catherine Johnson	CANADA
	Chris Jones	UK
	Stephane Labrosse	FRANCE
	Thorne Lay	USA
Guy Masters	USA	
Yongxin Pan	CHINA	
Sebastian Rost	UK	
Hisa Shimizu	JAPAN	
Sabine Stanley	CANADA	
Paul Tackley	SWITZERLAND	
Satoru Tanaka (Past Chair)	JAPAN	
Hrvoje Tkalčić	AUSTRALIA	
James Wookey	UK	

Union Commission on Data and Information (UCDI):www.iugg-ucdi.org

<i>Chair:</i>	Peter Fox	USA
<i>Vice-Chair:</i>	Charles Barton	AUSTRALIA
<i>Secretary:</i>	Adelina Geyer Traver	SPAIN
<i>Executive Committee Members:</i>	Tim Ahern	USA
	Maria Assunção F. Silva Dias	BRAZIL
	Pierrick Givone	FRANCE
	Ruth Neilan	USA
	Mark Parsons	USA
	Bernd Richter	GERMANY
	Satheesh Sheno	INDIA
	Anatoly Soloviev	RUSSIA

Union Commission on Planetary Sciences (UCPS):<http://202.127.29.4/geodesy/ucps>

<i>Chair:</i>	Shuanggen Jin	CHINA
<i>Vice-Chairs:</i>	Athena Coustenis	FRANCE
	Jörn Helbert	GERMANY
<i>Secretary/Treasurer:</i>	Scot Rafkin	USA
<i>Executive Committee Members:</i>	Christine Schott Hvidberg	DENMARK
	Michael Purucker	USA
	Fabrizio Capaccione	ITALY
	Philippe Lognonné	FRANCE
	Josè Luis Macias-Vasquez	MEXICO

IUGG Working Group on History

<i>Chair:</i>	Hans Volkert	GERMANY	IAMAS
<i>Vice-Chair:</i>	Claude Boucher	FRANCE	IAG
<i>Associations Representatives:</i>	Marc Carey	USA	IACS
	József Ádám	HUNGARY	IAG
	Edward Cliver	USA	IAGA
	Maurits Ertsen	THE NETHERLANDS	IAHS
	John Gould	UK	IAPSO
	Roger Musson	UK	IASPEI
	Grant Heiken	USA	IAVCEI
	<i>History of Science Advisors:</i>	Ronald Doel	USA
	Gregory Good	USA	

All scientists within IUGG and all historians of science with interest in geophysics are invited to contribute to WGH. Initial contact is to be made via the chairperson.

Inter-Unions Commission

Inter-Unions Commission on the Lithosphere: The International Lithosphere Program

www.scl-ilp.org

<i>President:</i>	Sierd Cloetingh	THE NETHERLANDS
<i>Secretary General:</i>	Magdalena Scheck-Wenderoth	GERMANY
<i>Executive Secretary:</i>	Alexander Rudloff	GERMANY
<i>Bureau Members (Executive):</i>	IUGG: Harsh Gupta	INDIA
	IUGS: Roland Oberhänsli	GERMANY
	IUGS: Yoshiyuki Tatsumi	JAPAN
	Chair of National Representatives:	
	Alessandro Tibaldi	ITALY
<i>(Associated):</i>	Jean-Pierre Burg	SWITZERLAND
	Patrick J. McKeever	FRANCE
	Andrey F. Morozov	RUSSIA
	François Roure	FRANCE
	Hans Thybo	DENMARK
	Mark D. Zoback	USA
<i>(Lifetime):</i>	Harsh Gupta	INDIA
	Mary von Knorring	SWEDEN
<i>(ILP-Fellow):</i>	Jörg Negendank	GERMANY
<i>Past Secretary General:</i>	Roland Oberhänsli	GERMANY
<i>Honorary President:</i>	Alan Green	SWITZERLAND

IUGG Committees

Ad-hoc Outreach Committee

<i>Chair:</i>	Kathryn Whaler	UK
<i>Members:</i>	Val Byfield	UK
	Julia H. Keller	GERMANY
	Sanjay Limaye	USA / INDIA
	Karoly Nemeth	NEW ZEALAND
	Greig Paterson	CHINA
	Franz Kuglitsch (ex-officio)	GERMANY / AUSTRIA

Capacity Building and Education Committee

<i>Chair:</i>	Laszlo Szarka	HUNGARY
<i>Members:</i>	Nasser Abou-Ashour	EGYPT
	Moira Evelina Doyle	ARGENTINA
	Teodoro Georgiadis	ITALY / GREECE
	Bernhard Heck	GERMANY
	Gerhard Navratil	AUSTRIA
	Rrapo Ormeni	ALBANIA
	Feng Tian	CHINA

Honours and Recognition Committee

<i>Chair:</i>	Athena Coustenis	FRANCE
<i>Members:</i>	Lizzette Rodriguez	PUERTO RICO / USA
	Olga Solomina	RUSSIA
	Bernard Wood	UK

Statutes and By-Laws Committee

<i>Chair:</i>	Charles Fierz	SWITZERLAND
<i>Members:</i>	Charles Barton	AUSTRALIA
	Jeffrey Freymueller	USA
	Ajai Manglik	INDIA
	Kathryn Whaler (ex-officio)	UK

Visioning Committee

<i>Chair:</i>	Chris Rizos	AUSTRALIA
<i>Members:</i>	Domenico Giardini	SWITZERLAND
	Franz Kuglitsch	GERMANY
	Andrew Mackintosh	NEW ZEALAND
	Mioara Manda	FRANCE
	Johanna Salminen	FINLAND

IUGG Award Committees

Gold Medal Committee

<i>Chair:</i>	Robert Engdahl	USA
<i>Members:</i>	Claudio Brunini	ARGENTINA
	Laura Gallardo Klenner	CHILE
	Demetris Koutsoyiannis	GREECE
	Joan Marti	SPAIN
	Lawrence Mysak	CANADA
	Olga Solomina	RUSSIA
	Mamoru Yamamoto	JAPAN
	Alik Ismail-Zadeh	GERMANY

Fellow Selection Committee

<i>Chair:</i>	Joyce E. Penner	USA
<i>Members:</i>	Isabelle Ansoerge	SOUTH AFRICA
	Hugo Delgado Granados	MEXICO
	Jan Laštovicka	CZECH REPUBLIC
	Harald Schuh	GERMANY
	Konrad Steffen	SWITZERLAND
	Kuni Takeuchi	JAPAN

Early Career Scientist Award Committee*Chair:*

Jenny Baeseman

NORWAY

Members:

Salvatore Grimaldi

ITALY

Thorne Lay

USA

Satheesh Sheno

INDIA

John Turner

UK

Laszlo Szarka (ex-officio)

HUNGARY

INTERNATIONAL ASSOCIATIONS

IUGG comprises eight semi-autonomous International Associations, each responsible for a specific range of topics or themes within the overall scope of the Union's activities and each with a sub-structure discussed below. The International Associations hold Scientific Assemblies such as those since 1969 listed in Table 5.

The eight International Associations are:

Association Internationale des Sciences Cryosphériques (AISC)
International Association of Cryospheric Sciences (IACS)

Association Internationale de Géodésie (AIG)
International Association of Geodesy (IAG)

Association Internationale de Géomagnétisme et d'Aéronomie (AIGA)
International Association of Geomagnetism and Aeronomy (IAGA)

Association Internationale des Sciences Hydrologiques (AISH)
International Association of Hydrological Sciences (IAHS)

Association Internationale de Météorologie et des Sciences de l'Atmosphère (AIMSA)
International Association of Meteorology and Atmospheric Sciences (IAMAS)

Association Internationale pour les Sciences Physiques des Océans (AISPO)
International Association for the Physical Sciences of the Oceans (IAPSO)

Association Internationale de Séismologie et de Physique de l'Intérieur de la Terre (IASPIT)
International Association of Seismology and Physics of the Earth's Interior (IASPEI)

Association Internationale de Volcanologie et de Chimie de l'intérieur de la Terre (AIVCIT)
International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

Table 5: Scientific Assemblies of the International Associations

International Association	Year	Meeting Location	Number of Participants
IASPEI	1969	Madrid, Spain	NA
IAGA	1969	Madrid, Spain	475
IAPSO	1970	Tokyo, Japan	602
IASPEI	1973	Lima, Peru	250
IAGA	1973	Kyoto, Japan	613
IAMAP	1974	Melbourne, Australia	596
IAPSO	1974	Melbourne, Australia	596
IAG	1975	Grenoble, France	398
IASPEI	1977	Durham, UK	500
IAVCEI	1977	Durham, UK	500
IAGA	1977	Seattle, USA	950
IAMAP	1977	Seattle, USA	950
IASPEI	1981	London, Canada	448
IAGA	1981	Edinburgh, UK	747
IAMAP	1981	Hamburg, Germany	921
IAG	1982	Tokyo, Japan	200
IAVCEI	1982	Reykjavik, Iceland	190
IAHS	1982	Exeter, UK	530
IAPSO	1982	Halifax, Canada	759
IASPEI	1984	Hyderabad, India	285
IASPEI	1985	Tokyo, Japan	651
IAGA	1985	Praha, Czechoslovakia	994
IAMAP/IAPSO	1985	Hawaii, USA	450
IAHS	1986	Budapest, Hungary	310
IAPSO	1988	Acapulco, Mexico	543
IAG	1989	Edinburgh, UK	NA
IASPEI	1989	Istanbul, Turkey	611
IAGA	1989	Exeter, UK	1200

Table 5 (continued): Scientific Assemblies of the International Associations

International Association	Year	Meeting Location	Number of Participants
IAMAS/IAPSO	1989	Reading, UK	1020
IAHS	1989	Baltimore, USA	440
IASPEI	1990	Nairobi, Kenya	132
IAVCEI	1991	Naples, Italy	800
IAG	1993	Beijing, China	350
IAVCEI	1993	Canberra, Australia	600
IAMAS/IAHS	1993	Yokohama, Japan	450
IAGA	1993	Buenos Aires, Argentina	505
IASPEI	1994	Wellington, New Zealand	483
IAPSO	1995	Hawaii, USA	700
IAG	1997	Rio de Janeiro, Brazil	350
IASPEI	1997	Thessaloniki, Greece	1040
IAVCEI	1997	Puerto Vallarta, Mexico	600
IAGA	1997	Uppsala, Sweden	1200
IAHS	1997	Rabat, Morocco	500
IAMAS/IAPSO	1997	Melbourne, Australia	1100
IAG	2001	Budapest, Hungary	461
IASPEI/IAGA	2001	Hanoi, Vietnam	1078
IAVCEI	2000	Bali, Indonesia	490
IAMAS	2001	Innsbruck, Austria	851
IAHS	2001	Maastricht, The Netherlands	400
IAPSO*	2001	Mar del Plata, Argentina	430
IAVCEI	2004	Pucon, Chile	936
IAG/IAPSO*	2005	Cairns, Australia	724
IAGA	2005	Toulouse, France	886
IAHS	2005	Foz de Iguassu, Brazil	459
IAMAS	2005	Beijing, China	840
IASPEI	2005	Santiago, Chile	360
IAVCEI	2008	Reykjavik, Iceland	907
IASPEI	2009	Cape Town, South Africa	347
IAMAS/IAPSO/IACS	2009	Montreal, Canada	1340
IAGA	2009	Sopron, Hungary	832
IAG	2009	Buenos Aires, Argentina	363
IAHS	2009	Hyderabad, India	500
IACS/IAMAS	2013	Davos, Switzerland	950
IAHS/IAPSO/IASPEI	2013	Gothenburg, Sweden	1087
IAG	2013	Potsdam, Germany	532
IAGA	2013	Merida, Mexico	459
IAVCEI	2013	Kagoshima, Japan	1069
IACS	2017	Wellington, New Zealand	
IAG/IASPEI	2017	Kobe, Japan	
IAGA/IAMAS/IAPSO	2017	Cape Town, South Africa	
IAHS	2017	Port Elizabeth, South Africa	
IAVCEI	2017	Portland, USA	

* With the International Association for Biological Oceanography (IABO)

International Association of Cryospheric Sciences (IACS) Association Internationale des Sciences Cryosphériques (AISC)

<http://www.cryosphericsscience.org>

On 4 July 2007, at the XXIVth IUGG General Assembly in Perugia, Italy, the IUGG Council decided to launch the International Association of Cryospheric Sciences (IACS) as the 8th IUGG Association. IACS is now a sister organization to long established Associations such as those for Hydrological Sciences (IAHS), Meteorology and Atmospheric Sciences (IAMAS) and Physical Sciences of the Oceans (IAPSO). The decision by the IUGG Council was mainly reached in recognition of the fact that the study of the Cryosphere has to be seen on equal footing to investigations of other components of the Earth system. With the initiation of IACS, its predecessors, the International Commission for Snow and Ice (ICSI) and the Union Commission on Cryospheric Sciences (UCCS) are superseded.

IACS BUREAU 2015-2017

<i>President:</i>	Charles Fierz	SWITZERLAND
<i>President Elect:</i>	Regine Hock	USA
<i>Past President:</i>	Ian Allison	AUSTRALIA
<i>Secretary General:</i>	Andrew Mackintosh	NEW ZEALAND
<i>Vice-Presidents:</i>	Ian Allison	AUSTRALIA
	Olga Solomina	RUSSIA
	Xiao Cunde	CHINA

IACS DIVISIONS

Division I – Snow and Avalanches:

<i>Head:</i>	Ethan Greene	USA
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Division II –Glaciers and Ice Sheets:

<i>Head:</i>	Liss M. Andreassen	NORWAY
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Division III – Marine and Freshwater Ice:

<i>Head:</i>	Hiroyuki Enomoto	JAPAN
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Division IV – Cryosphere, Atmosphere and Climate:

<i>Head:</i>	Valérie Masson Delmotte	FRANCE
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Division V – Planetary and other Ices of the Solar System:

<i>Head:</i>	Christine Schøtt Hvidberg	DENMARK
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IACS SERVICES

World Glacier Monitoring Service (WGMS):

<i>Director:</i>	Michael Zemp	SWITZERLAND
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JOINT COMMISSIONS

IAVCEI/IACS Commission on Volcano-Ice Interaction

<i>Chair:</i>	Christopher Hamilton	USA
<i>Vice-Chair:</i>	Hugo Delgado Granados	Mexico
<i>Ex-Officio:</i>	Dave McGarvie	UK

PAST IACS PRESIDENTS

2007-2009	Georg Kaser (Austria)
2009-2013	Ian Allison (Australia)

PAST IACS SECRETARIES GENERAL

2007-2011	Manfred Lange (Germany)
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International Association of Geodesy (IAG) Association Internationale de Géodésie (AIG)

<http://www.iag-aig.org>

In April 1862, the “Mitteleuropäische Gradmessung” was initiated by a “preliminary consultation” of representatives of the states of Prussia, Austria and Saxony. It was established at the constituent conference in Berlin, October 1864, as the first international scientific association of significance and expanded to the “Internationale Erdmessung” (Association Géodésique Internationale) in 1886. At the first General Assembly of the IUGG in Rome, May 1922, it became one of the constituent Sections of the Union. It took its present name at the IUGG General Assembly in Stockholm, August 1930.

IAG EXECUTIVE COMMITTEE 2015-2019

The IAG Executive Committee consists of the Bureau, the immediate Past President, the Commission Presidents, the Chair of the Global Geodetic Observing System, the President of the Communication and Outreach Branch, three Representatives of the Services, and two Members at Large.

IAG Bureau:

<i>President:</i>	Harald Schuh	GERMANY
<i>Vice-President:</i>	Zuheir Altamimi	FRANCE
<i>Secretary General:</i>	Hermann Drewes	GERMANY

Immediate Past President:

<i>President 2011-2015:</i>	Chris Rizos	AUSTRALIA
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Commission Presidents:

<i>Commission 1:</i>	Geoffrey Blewitt	USA
<i>Commission 2:</i>	Roland Pail	GERMANY
<i>Commission 3:</i>	Manabu Hashimoto	JAPAN
<i>Commission 4:</i>	Marcelo Santos	CANADA

President of the Inter-Commission Committee on Theory:

<i>ICCT President</i>	Pavel Novák	CZECH REPUBLIC
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Chair of the Global Geodetic Observing System (GGOS):

Hansjörg Kutterer	GERMANY
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President of the Communication and Outreach Branch:

József Ádám	HUNGARY
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Representatives of the IAG Services:

Riccardo Barzaghi	ITALY
Ruth Neilan	USA
Axel Nothnagel	GERMANY

IAG Members at Large:

Ludwig Combrinck	SOUTH AFRICA
Maria Cristina Pacino	ARGENTINA

Non-voting Members:

<i>Assistant Secretaries:</i>	Helmut Hornik	GERMANY
	Franz Kuglitsch	GERMANY
<i>IAG Past Presidents:</i>	Helmut Moritz	AUSTRIA
	Ivan I. Mueller	USA
	Wolfgang Torge	GERMANY
	Fernando Sansó	ITALY
	Gerhard Beutler	SWITZERLAND
	Michael Sideris	CANADA
<i>Past Secretaries General:</i>	Michel Louis	FRANCE
	Claude Boucher	FRANCE

IAG COMMISSIONS

Commission 1: Reference Frames

President: Geoffrey Blewitt USA
Vice-President: Johannes Böhm AUSTRIA

Commission 2: Gravity Field

President: Roland Pail GERMANY
Vice-President: Shuanggen Jin CHINA

Commission 3: Earth Rotation and Geodynamics

President: Manabu Hashimoto JAPAN
Vice-President: Cheng-Li Huang CHINA

Commission 4: Positioning and Applications

President: Marcelo Santos CANADA
Vice-President: Allison Kealy AUSTRALIA

IAG INTER-COMMISSION COMMITTEE ON THEORY (ICCT)

President: Pavel Novák CZECH REPUBLIC
Vice-President: Mattia Crespi ITALY

IAG SERVICES

Bureau Gravimetric International (BGI):

Director: Sylvain Bonvalot FRANCE

Bureau International de Poids et Mesures (BIPM), Time Department:

Director of Department: Elisa Felicitas Arias FRANCE

International Geodynamics and Earth Tide Service (IGETS)

Chair: TBD
Director Central Bureau: J.-P. Boy FRANCE

International Centre for Global Earth Models (ICGEM):

Director: Franz Barthelmes GERMANY

International Digital Elevation Model Service (IDEMS):

Director: TBD

International DORIS Service (IDS):

Chair Governing Board: Pascal Willis FRANCE
Director Central Bureau: Laurent Soudarin FRANCE

International Earth Rotation and Reference Systems Service (IERS):

Chair of Directing Board: Brian Luzum USA
Director of Central Bureau: Daniela Thaller GERMANY

International Service for the Geoid (ISG):

President: Mirko Reguzzoni ITALY
Director: Giovanna Sona ITALY

International Gravity Field Service (IGFS):

Chair: Riccardo Barzaghi ITALY
Director of Central Bureau: Iginio Marson ITALY

International GNSS Service (IGS):

Chair of Governing Board: Gary Johnston AUSTRALIA
Director of Central Bureau: Ruth E. Neilan USA

International Laser Ranging Service (ILRS):

Chair of Governing Board: Guisepppe Bianco ITALY
Director of Central Bureau: Michael Pearlman USA

International Service for Geodesy and Astrometry (IVS):

Chair of Directing Board: Axel Nothnagel GERMANY
Director of Coord. Centre: Dirk Behrend USA

Permanent Service for Mean Sea Level (PSMSL):

Director: Lesley J. Rickards UK

IAG GLOBAL GEODETIC OBSERVING SYSTEM (GGOS)

<i>Chair:</i>	Hansjörg Kutterer	GERMANY
<i>Vice-Chair:</i>	Ruth Neilan	USA

IAG OFFICE**Deutsches Geodätisches Forschungsinstitut (DGFI)**

<i>Secretary General:</i>	Hermann Drewes	GERMANY
<i>Assistant Secretary:</i>	Helmut Hornik	GERMANY
	Franz Kuglitsch	GERMANY
<i>Assistant Treasurer:</i>	Wolfgang Küffner	GERMANY

IAG COMMUNICATION AND OUTREACH BRANCH**Hungarian Academy of Sciences (HAS) / Budapest University of Technology and Economics (BUTE)**

<i>President:</i>	József Ádám	HUNGARY
<i>Secretary:</i>	Szabolcs Rózsa	HUNGARY

JOURNAL OF GEODESY

<i>Editor in Chief:</i>	Jürgen Kusche	GERMANY
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IAG SYMPOSIA SERIES

<i>Editor in Chief:</i>	Jeff Freymueller	USA
<i>Assistant Editor:</i>	Laura Sanchez	GERMANY

PAST IAG & FORERUNNER PRESIDENTS

1864-1868	Peter Andreas Hansen (Thuringia)
1869-1874	August von Fligely (Austria)
1874-1891	Carlos Ibanez de Ibero (Spain)
1892-1902	Hervé Faye (France)
1903-1918	Léon Bassot (France)
1919-1933	William Bowie (USA)
1933-1945	Felix A. Vening Meinesz (The Netherlands)
1945-1951	Walter D. Lambert (USA)
1951-1954	Carl F. Baeschlin (Switzerland)
1954-1957	James de Graaf Hunter (UK)
1957-1960	Gino Cassinis (Italy)
1960-1963	Charles A. Whitten (USA)
1963-1967	Guy Bomford (UK)
1967-1971	Antonio Marussi (Italy)
1971-1975	Yuri D. Boulanger (USSR)
1975-1979	Tauno J. Kukkamäki (Finland)
1979-1983	Helmut Moritz (Austria)
1983-1987	Peter V. Angus-Leppan (Australia)
1987-1991	Ivan I. Mueller (USA)
1991-1995	Wolfgang Torge (Germany)
1995-1999	Klaus-Peter Schwarz (Canada)
1999-2003	Fernando Sansó (Italy)
2003-2007	Gerhard Beutler (Switzerland)
2007-2011	Michael Sideris (Canada)
2011-2015	Chris Rizos (Australia)

PAST CENTRAL BUREAU DIRECTORS

1864-1885	Johann Jacob Baeyer (Prussia/Germany)
1886-1917	Friedrich Robert Helmert (Germany)

PAST PERMANENT SECRETARIES

1886-1900	Adolf Hirsch (Switzerland)
1900-1918	Hendricus G. Van de Sande-Bakhuysen (The Netherlands)

**PAST SECRETARIES GENERAL AND
CENTRAL BUREAU DIRECTORS**

1919-1945	George Perrier (France)
1946-1960	Pierre Tardi (France)
1960-1975	Jean-Jacques Levallois (France)
1975-1991	Michel Louis (France)
1991-1995	Claude Boucher (France)
1995-2007	Carl Christian Tscherning (Denmark)

International Association of Geomagnetism and Aeronomy (IAGA) Association Internationale de Géomagnétisme et d'Aéronomie (AIGA)

<http://www.iugg.org/IAGA/>

At the First IUGG General Assembly (Rome, 1922), the *Section de Magnétisme et Electricité Terrestres* became one of the constituent *sections* of the Union. At the IV IUGG General Assembly (Stockholm, 1930), it became the *International Association of Terrestrial Magnetism and Electricity*. It took its present name at the X IUGG General Assembly (Rome, 1954).

IAGA EXECUTIVE COMMITTEE 2015-2019

<i>President:</i>	Eduard Petrovsky	CZECH REPUBLIC
<i>Vice-President:</i>	Monika Korte	GERMANY
<i>Secretary General:</i>	Mioara Manda	FRANCE
<i>Past President:</i>	Kathryn Whaler	UK
<i>Members:</i>	Inez S. Batista	BRAZIL
	Archana Bhattacharyya	INDIA
	Brian J. Fraser	AUSTRALIA
	Pieter Kotze	SOUTH AFRICA
	Renata Lukianova	RUSSIA
	Alan Thomson	UK
	Andrew Yau	CANADA

IAGA DIVISIONS

IAGA Division I – Internal Magnetic Fields

<i>Chair:</i>	Cathy Constable	USA
<i>Co-Chair:</i>	Harald Boehnel	MEXICO

Working Group I-1: Theory of Planetary Magnetic Fields

<i>Chair:</i>	Ján Šimkanin	CZECH REPUBLIC
<i>Co-Chair:</i>	Nicolas Gillet	FRANCE

Working Group I-2: Palaeomagnetism

<i>Chair:</i>	Fabio Florindo	ITALY
<i>Co-Chair:</i>	Julie Carlut	FRANCE

Working Group I-3: Rock- and Environmental Magnetism

<i>Chair:</i>	Neli Jordanova	BULGARIA
<i>Co-Chair:</i>	Ramon Egli	AUSTRIA

IAGA Division II – Aeronomical Phenomena

<i>Chair:</i>	Paulo Roberto Fagundes	BRAZIL
<i>Co-Chair:</i>	Christoph Jacobi	GERMANY

Working Group II-A: Electrodynamics of the Middle Atmosphere

<i>Chair:</i>	Martin Füllekrug	UK
<i>Co-Chair:</i>	Mitsuteru Sato	JAPAN

Working Group II-C: Meteorological Effects on the Ionosphere

<i>Chair:</i>	Petra Knizova	CZECH REPUBLIC
<i>Co-Chairs:</i>	Erdal Yigit	TURKEY
	Christina Arras	GERMANY

Working Group II-D: External Forcing of the Middle Atmosphere

<i>Chair:</i>	Christoph Jacobi	GERMANY
<i>Co-Chairs:</i>	Katja Matthes	GERMANY
	Nick Pedatella	USA

Working Group II-E: Ionospheric Irregularities, Fields and Waves

<i>Chair:</i>	Maxim Klimenko	RUSSIA
<i>Co-Chair:</i>	Biqiang Zhao	CHINA

Working Group II-F: Long-term Trends in the Mesosphere, Thermosphere and Ionosphere (IAGA/ICMA/SCOSTEP)

<i>Chair:</i>	Gufran Beig	INDIA
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Co-Chair: Jan Lastovicka CZECH REPUBLIC

IAGA/URSI Working Group: (VERSIM) VLF/ELF Remote Sensing of the Ionosphere and Magnetosphere

IAGA Chair: Jacob Bortnik USA
Co-Chair: Mark Clilverd UK

IAGA Division III – Magnetospheric Phenomena

Chair: Clare E. J. Watt UK
Co-Chair: Simon Wing USA

IAGA Division IV – Solar Wind & Interplanetary Field

Chair: Spiros Patsourakos GREECE
Co-Chair: Bogdan Hnat UK

IAGA Division V – Geomagnetic Observatories, Surveys & Analysis

Chair: Aude Chambodut FRANCE
Co-Chair: Kusumita Arora INDIA

Working Group V-OBS: Geomagnetic Observation

Chair: Arnaud Chulliat USA
Co-Chair: Jürgen Matzka GERMANY

Working Group V-MOD: Geomagnetic Field Modeling

Chair: Erwan Thebault FRANCE
Co-Chair: Patrick Alken USA

Working Group V-DAT: Geomagnetic Data and Indices

Chair: Masahito Nosé JAPAN
Co-Chair: Ellen Clarke UK

IAGA Division VI – Electromagnetic Induction in the Earth and Planetary Bodies

Chair: Nikolay Palshin RUSSIA
Co-Chair: Ute Weckmann GERMANY

IAGA Inter-divisional Commissions

Inter-divisional Commission on Developing Countries

Chair: S. Gurubaran INDIA
Co-Chairs: Ahmed Abdel Hady EGYPT
Marta M. Zossi ARGENTINA
K. Veeraswamy INDIA

Inter-divisional Commission on History

Chair: Anatoly Soloviev RUSSIA
Co-Chair: Justin Mabie USA

Inter-divisional Commission on Education and Outreach

Chair: Edgar A. Bering, III USA

Inter-divisional Commission on Space Weather

Chair: tbd

IAGA - Joint Interassociation Working Groups

IAGA/IASPEI/IAVCEI Working Group on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)

<http://www.emsev-iugg.org/emsev/>

Chair: Jacques Zlotnicki FRANCE
Vice-Chair: Malcolm Johnston USA
Secretary: Toshiyasu Nagao JAPAN
IAGA Liaison: Jann-Yenq Liu CHINA-TAIPEI
IAGA WG I-2 Liaison: Tirumalachetty Harinarayana INDIA

IASPEI/IAPSO/IAGA International Ocean Network (ION)

Chair: Yoshiyuki Kaneda JAPAN
IAGA Liaison: Hisashi Utada JAPAN

PAST IAGA PRESIDENTS

1919-1922 Aikitsu Tanakadate (Japan)
1922-1927 Charles Chree (UK)
1927-1930 Louis A. Bauer (USA)
1930-1948 John A. Fleming (USA)
1948-1951 Sydney Chapman (UK)
1951-1954 Jean Coulomb (France)
1954-1957 Julius Bartels (F.R. Germany)
1957-1960 Joseph Kaplan (USA)
1960-1963 Viggo Laursen (Denmark)
1963-1967 Marcelle Nicolet (Belgium)
1967-1971 Takesi Nagata (Japan)
1971-1975 Valery A. Troitskaya (USSR)
1975-1979 Juan G. Roederer (USA)
1979-1983 Keith D. Cole (Australia)
1983-1987 Denis I. Gough (Canada)
1987-1991 Roger E. Gendrin (France)
1991-1995 D. J. Williams (USA)
1995-1999 Masaru Kono (Japan)
1999-2003 David J. Kerridge (UK)
2003-2007 Charles Barton (Australia)
2007-2011 Eigil Friis-Christensen (Denmark)
2011-2015 Kathryn Whaler (UK)

PAST IAGA GENERAL SECRETARIES

1919-1927 Louis A. Bauer (USA)
1927-1933 Charles Maurain (France)
1933-1936 Dan La Cour (Denmark)
1936-1939 A.H.R. Goldie (UK)
1939-1951 J. Wallace Joyce (USA)
1951-1957 Viggo Laursen (Denmark)
1957-1963 Josep O. Cardus (Spain)
1963-1975 Leroy Alldredge (USA)
1975-1983 Naoshi Fukushima (Japan)
1983-1995 Michael Gadsden (UK)
1995-1999 JoAnn Joselyn (USA)
1999-2001 Herbert W. Kroehl (USA)
2001-2009 Bengt Hultqvist (Sweden)

International Association of Hydrological Sciences (IAHS) Association Internationale des Sciences Hydrologiques (AISH)

<http://iahs.info>

At the First IUGG General Assembly (Rome, 1922), the *Section d'Hydrologie Scientifique* became one of the constituent sections of the Union. At the IV IUGG General Assembly (Stockholm, 1930) it became the *International Association of Scientific Hydrology*. It took its present name at the XV IUGG General Assembly (Moscow, 1971).

IAHS OFFICERS, 2015-2017

<i>President:</i>	Hubert Savenije	THE NETHERLANDS
<i>President-Elect:</i>	Günter Blöschl	AUSTRIA
<i>Vice-Presidents:</i>	Georgia (Gia) Destouni	SWEDEN
	Elango Lakshmanan	INDIA
	Eric Servat	FRANCE
<i>Honorary Vice-President:</i>	Jun Xia	CHINA
<i>Secretary General:</i>	Christophe Cudennec	FRANCE
<i>Treasurer:</i>	Chuck Onstad	USA
<i>Incoming Treasurer:</i>	Cate Gardner	UNITED KINGDOM
<i>Editors:</i>	Mike Acreman	UNITED KINGDOM
	Attilio Castellarin	ITALY
	Demetris Koutsoyiannis	GREECE
<i>Chair IAHS Ltd.:</i>	Des E. Walling	UNITED KINGDOM

IAHS INTERNATIONAL COMMISSIONS

International Commission on Continental Erosion (ICCE)

<i>President:</i>	Michael Stone	CANADA
<i>Vice-Presidents:</i>	Kazimierz Banasik	POLAND
	Sergey Chalov	RUSSIA
	Dieter Rickenmann	SWITZERLAND
<i>Secretary:</i>	Paolo Porto	ITALY
<i>President-Elect:</i>	Adrian Collins	UNITED KINGDOM

International Commission on Coupled Land-Atmosphere Systems (ICCLAS)

<i>President:</i>	Eva Boegh	DENMARK
<i>Vice-Presidents:</i>	Chris White	AUSTRALIA
	Kaniska Mallick	LUXEMBOURG
	Richard Petrone	CANADA
<i>Secretary:</i>	Koray K. Yilmaz	TURKEY
<i>President-Elect:</i>	Harald Kunstmann	GERMANY

International Commission on Groundwater (ICGW)

<i>President:</i>	Aldo Fiori	ITALY
<i>Vice-Presidents:</i>	Corinna Abesser	UNITED KINGDOM
	Gunnar Nützmann	GERMANY
	Jichun Wu	CHINA
<i>Secretary:</i>	Laura Foglia	GERMANY

International Commission on Remote Sensing (ICRS)

<i>President:</i>	Christopher Neale	USA
<i>Vice-Presidents:</i>	Chris Hopkinson	CANADA
	Maria Jose Polo Gomez	SPAIN
	Zhongbo (Bob) Su	THE NETHERLANDS
<i>Secretary:</i>	Frédérique Seyler	FRANCE
<i>President-Elect:</i>	Yangbo Chen	CHINA

International Commission on Statistical Hydrology (ICSH)

<i>President:</i>	Salvatore Grimaldi	ITALY
<i>Vice-Presidents:</i>	Ebru Eris	TURKEY
	Yuanfang Chen	CHINA
	Krzysztof Kochanek	POLAND
<i>Secretary:</i>	Elena Volpi	ITALY
<i>President-Elect:</i>	Ashish Sharma	AUSTRALIA

International Commission on Snow and Ice Hydrology (ICSIH)

<i>President:</i>	Danny Marks	USA
<i>Vice-Presidents:</i>	Tim Link	USA
	Sebastian Mernild	CHILE
	Melody Sandells	UNITED KINGDOM
<i>Secretary:</i>	Alexander Gelfan	RUSSIA
<i>President-Elect:</i>	Tobias Jonas	SWITZERLAND

International Commission on Surface Water (ICSW)

<i>President:</i>	Hafzullah Aksoy	TURKEY
<i>Vice-Presidents:</i>	Ennio Ferrari	ITALY
	David Hannah	UNITED KINGDOM
	Thomas Skaugen	NORWAY
<i>Secretary:</i>	Yan Huang	CHINA
<i>President-Elect:</i>	Gil Mahe	FRANCE

International Commission on Tracers (ICT)

<i>President:</i>	Piotr Maloszewski	GERMANY
<i>Vice-Presidents:</i>	Maki Tsujimura	JAPAN
	Zhonghe Pang	CHINA
	Josep Mas-Pla	SPAIN
<i>Secretary:</i>	Przemyslaw Wachniew	POLAND
<i>President-Elect:</i>	Christine Stumpp	GERMANY

International Commission on Water Quality (ICWQ)

<i>President:</i>	Kate Heal	UK
<i>Vice-Presidents:</i>	A.B. Gupta	INDIA
	Matt Hipsey	AUSTRALIA
	Xiaohong Chen	CHINA
<i>Secretary:</i>	Per Stålnacke	NORWAY
<i>President-Elect:</i>	Wouter Buytaert	UNITED KINGDOM

International Commission on Water Resources Systems (ICWRS)

<i>President:</i>	Alberto Montanari	ITALY
<i>Vice-Presidents:</i>	Barry Croke	AUSTRALIA
	Magdalena Rogger	AUSTRIA
	Zongxue Xu	CHINA
<i>Secretary:</i>	Alberto Viglione	AUSTRIA
<i>President-Elect:</i>	Andreas Schumann	GERMANY

IAHS WORKING GROUPS

“Panta Rhei – Everything Flows” - Change in Hydrology and Society

<i>Chair:</i>	Hilary McMillan	NEW ZEALAND
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Education in Hydrological Sciences

<i>Chair:</i>	Thorsten Wagener	UNITED KINGDOM
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MOXXI (Measurements and Observations in the XXIst century)

<i>Chair:</i>	Flavia Tauro	ITALY
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PAST IAHS PRESIDENTS

1922-1933	E. Wade (UK)
1933-1936	Jan Smetana (Czechoslovakia)
1936-1947	Otto Lütschg (Switzerland)
1947-1948	Gustaf Slettenmark (Sweden)
1948-1951	Merrill Bernard (USA)
1951-1957	Johannes T. Thijsse (The Netherlands)
1957-1960	Harold G. Wilm (USA)
1960-1963	W. Friedrich (F.R. Germany)
1963-1967	Adriaan Volker (The Netherlands)
1967-1970	Károly Szeztay (Hungary)
1970-1971	William C. Ackermann (USA)
1971-1975	Jean Rodier (France)
1975-1979	James C.I. Dooge (Ireland)
1979-1983	Mark F. Meier (USA)
1983-1987	György Kovacs (Hungary)
1987-1991	Vit Klemes (Canada)
1991-1995	Uri Shamir (Israel)
1995-2001	John C. Rodda (UK)
2001-2005	Kuniyoshi Takeuchi (Japan)
2005-2009	Arthur Askew (Australia)
2009-2013	Gordon Young (Canada)

PAST IAHS SECRETARIES GENERAL

1922-1933	Giovanni Magrini (Italy)
1933-1947	Frédéric Diénert (France)
1947-1948	Auguste Vibert (France)
1948-1971	Léon J. Tison (Belgium)
1971-1975	György Kovacs (Hungary)
1975-1979	Jean Rodier (France)
1979-1987	John C. Rodda (UK)
1987-1995	Henny J. Colenbrander (The Netherlands)
1995-2000	Gordon J. Young (Canada)
2000-2011	Pierre Hubert (France)

International Association of Meteorology and Atmospheric Sciences (IAMAS) Association Internationale de Météorologie et des Sciences de l'Atmosphère (AIMSA)

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

Right at the start of IUGG in July 1919, the *Section de Météorologie* became one of the constituent *sections* of the Union. At the fourth IUGG General Assembly (Stockholm, 1930) it became the *International Association of Meteorology*. It was renamed *International Association of Meteorology and Atmospheric Physics* at the eleventh IUGG General Assembly (Toronto, 1957) and, more general, *International Association of Meteorology and Atmospheric Sciences* in 1993.

IAMAS EXECUTIVE COMMITTEE 2015-2019

<i>President:</i>	John Turner	UK
<i>Vice-Presidents:</i>	Joyce E. Penner	USA
	Laura Gallardo Klenner	CHILE
<i>Past President:</i>	Athena Coustenis	FRANCE
<i>Secretary General:</i>	Teruyuki Nakajima	JAPAN
<i>Deputy Secretary General:</i>	Peter Pilewski	USA
<i>Assistant Secretary General (not voting):</i>	Yoshinobu Sasaki	JAPAN
<i>Members at large:</i>	Lisa Alexander	AUSTRALIA
	Keith Alverson	USA / KENYA
	Iracema Cavalcanti	BRAZIL
	Daren Lu	CHINA
	Colin Price	ISRAEL
<i>Commission presidents (ex officio):</i>	see below	see below

IAMAS COMMISSIONS

Atmospheric Chemistry and Global Pollution (ICACGP)

<http://www.icacgp.org>

<i>President:</i>	John P. Burrows	GERMANY
<i>Vice-President:</i>	Melitta Keywood	AUSTRALIA
<i>Secretary:</i>	James R. Drummond	CANADA

Atmospheric Electricity (ICAE)

<http://icae.jp/>

<i>President:</i>	Dahong Wang	CHINA
<i>Secretary:</i>	Tomoo Ushio	JAPAN /

Climate (ICCL)

<http://www.iccl-iamas.net>

<i>President:</i>	Neil Holbrook	AUSTRALIA
<i>Secretary:</i>	Jianping Li	CHINA

Clouds and Precipitation (ICCP)

<http://www.iccp-iamas.org>

<i>President:</i>	Andrea Flossmann	FRANCE
<i>Vice-President:</i>	Robert Rauber	USA
<i>Secretary:</i>	Darrel Baumgardner	MEXICO

ICCP - Committee on Nucleation and Atmospheric Aerosols

<http://www.icnaa.org>

<i>Co-Chairs:</i>	Colin O'Dowd	IRELAND
	Paul DeMott	USA

Dynamic Meteorology (ICDM)

<http://icdm.atm.ucdavis.edu/ICDM.html>

<i>President:</i>	Richard Grotjahn	USA
<i>Secretary:</i>	Nili Harnik	ISRAEL

Middle Atmosphere (ICMA)<http://www.icma-iamas.org>*President:*

Elisa Manzini

GERMANY

Vice-President:

Bernd Funke

SPAIN

Ozone (IO₃C)<http://ioc.atmos.illinois.edu>*President:*

Christos Zerefos

GREECE

Vice-President:

Richard Stolarski

USA

Secretary:

Sophie Godin-Beekmann

FRANCE

Director of Information:

Donald Wuebbles

USA

Planetary Atmospheres and their Evolution (ICPAE)<http://www.atm.ox.ac.uk/icpae/>*President:*

Sanjay Limaye

USA

Vice-President:

Leigh Fletcher

UK

Secretaries :

Feng Tian

CHINA

Christina Plainaki

ITALY

Polar Meteorology (ICPM)<http://www.icpm-iamas.aq>*President:*

Tom Lachlan-Cope

UK

Secretary:

Matthew Lazzara

USA

Radiation (IRC)<http://www.irc-iamas.org>*President:*

Werner Schmutz

SWITZERLAND

Vice-President:

Byung-Ju Sohn

KOREA

Secretary:

Peter Pilewskie

USA

PAST IAMAS PRESIDENTS

1919-1930	William Napier Shaw (UK)
1930-1936	Axel Wallen (Sweden)
1936-1948	Sidney Chapman (UK)
1948-1951	Jacob Bjerknes (USA)
1951-1954	Kalpathi R. Ramanathan (India)
1954-1957	Carl-Gustaf Rossby (Sweden)
1957-1960	Jacques van Mieghem (Belgium)
1960-1963	Horace R. Byers (USA)
1963-1967	Alexei M. Oboukhov (USSR)
1967-1971	Reginald C. Sutcliffe (UK)
1971-1975	Sigmund Fritz (USA)
1975-1979	Christian Junge (F.R.Germany)
1979-1983	Warren L. Godson (Canada)
1983-1987	Hans-Jürgen Bolle (Austria)
1987-1991	G. Brian Tucker (Australia)
1991-1995	Brian J. Hoskins (UK)
1995-1999	Robert A. Duce (USA)
1999-2003	Huw C. Davies (Switzerland)
2003-2007	Michael C. MacCracken (USA)
2007-2011	Guoxiong Wu (China)
2011-2015	Athena Coustenis (France)

PAST IAMAS SECRETARIES GENERAL

1919-1922	Charles F. Marvin (USA)
1922-1927	Filippo Eredia (Italy)
1927-1936	Philippe Wehrlé (France)
1936-1948	Jacob Bjerknes (USA)
1948-1954	Jacques van Mieghem (Belgium)
1954-1960	Reginald C. Sutcliffe (UK)
1960-1975	Warren L. Godson (Canada)
1975-1987	Stanley Ruttenberg (USA)
1987-1995	Michael Kuhn (Austria)
1995-2007	Roland List (Canada)
2007-2015	Hans Volkert (Germany)

International Association for the Physical Sciences of the Oceans (IAPSO) Association Internationale pour les Sciences Physiques des Océans (AISPO)

<http://iapso.iugg.org>

At the First IUGG General Assembly (Rome, 1922), the *Section d'Océanographie* became one of the constituent Sections of the Union. At the IV IUGG General Assembly (Stockholm, 1930) it became the *International Association of Physical Oceanography*. It took its present name at the XIV IUGG General Assembly (Zurich, 1967).

IAPSO BUREAU 2015 – 2019

<i>President:</i>	Denise Smythe-Wright	UK
<i>Past President:</i>	Evgeny G. Morozov	RUSSIA
<i>Secretary General:</i>	Stefania Sparnocchia	ITALY
<i>Treasurer:</i>	Ken Ridgway	AUSTRALIA

IAPSO EXECUTIVE COMMITTEE 2015 – 2019

<i>Vice-Presidents:</i>	Isabelle Ansorge	SOUTH AFRICA
	Trevor McDougall	AUSTRALIA
<i>Members:</i>	Agatha de Boer	SWEDEN
	Toshiyuki Hibiya	JAPAN
	Chris Meinen	USA
	Satheesh Chandra Shenoi	INDIA
	Hans van Haren	THE NETHERLANDS
	Christa von Hillebrandt-Andrade	USA

IAPSO COMMISSIONS

Mean Sea Level & Tides

<i>President:</i>	Gary T. Mitchum	USA
<i>Vice-President:</i>	Simon Holgate	UK

JOINT COMMISSIONS & WORKING GROUPS

IAPSO/IASPEI/IAVCEI Joint Tsunami Commission

<i>Chair:</i>	Vasily V. Titov	USA
<i>Vice-Chairs:</i>	Fumihiko Imamura	JAPAN
	Ahmet Yalciner	TURKEY
<i>Secretary:</i>	Phil Cummins	AUSTRALIA
<i>IAPSO Representative:</i>	Efim Pelinovsky	RUSSIA

IASPEI/IAPSO/IAGA International Ocean Network (ION)

<i>Chair:</i>	Yoshiyuki Kaneda	JAPAN
<i>Secretary:</i>	Heinrich Villinger	GERMANY
<i>IAPSO Representative:</i>	Satheesh Chandra Shenoi	INDIA

IASPEI/IAVCEI/IAPSO International Heat Flow Commission (IHFC)

<i>Chair:</i>	Yuri Popov	RUSSIA
<i>Vice-Chair:</i>	Shaopeng Huang	CHINA / USA
<i>Past Chair:</i>	Christoph Clauser	GERMANY
<i>Secretary:</i>	Sukanta Roy	INDIA
<i>Vice-Secretary:</i>	Heinrich Villinger	GERMANY

SCOR/IAPSO WG 145 on Chemical Speciation Modelling in Seawater to Meet 21st Century Needs (MARCHEMSPEC)

<i>Chair:</i>	David R. Turner	Sweden
<i>Vice-Chairs:</i>	Simon L. Clegg	UK
	Sylvia Sander	New Zealand

Joint Committee on the Properties of Seawater, JCS (with SCOR and IAPWS)

<i>Chair:</i>	Rich Pawlowicz	CANADA
<i>Vice-Chairs:</i>	Trevor McDougall	AUSTRALIA
	Rainer Feistel	GERMANY

SERVICES**Permanent Service for Mean Sea Level (to be affiliated to the World Data System of ICSU)**<http://www.psmsl.org>

<i>Director:</i>	Lesley J. Rickards	UK
<i>IAPSO Liaison:</i>	Philip L. Woodworth	UK

IAPSO Standard Seawater Service

<i>Director:</i>	Paul S. Ridout	UK
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PAST IAPSO PRESIDENTS

1919-1922	S.A.S. Prince Albert 1 ^{er} (Monaco)
1924-1930	Odón de Buen (Spain)
1930-1936	Martin Knudsen (Denmark)
1936-1946	Bjørn Helland-Hansen (Norway)
1946-1951	Harald U. Sverdrup (Norway)
1951-1954	Joseph Proudman (UK)
1954-1960	Håkon Mosby (Norway)
1960-1963	George E.R. Deacon (UK)
1963-1967	Roger Revelle (USA)
1967-1970	Günter Dietrich (F.R. Germany)
1970-1975	Henri Lacombe (France)
1975-1979	Robert W. Stewart (Canada)
1979-1983	Devendra Lal (India)
1983-1987	Wolfgang M. Krauss (F.R. Germany)
1987-1991	James J. O'Brien (USA)
1991-1995	Robin D. Muench (USA)
1995-1999	L.Vere Shannon (South Africa)
1999-2003	Paola Rizzoli (Italy/USA)
2003-2007	Shiro Imawaki (Japan)
2007-2011	Lawrence Mysak (Canada)
2011-2015	Evgeny G. Morozov (Russia)

PAST IAPSO SECRETARIES GENERAL

1919-1930	Giovanni Magrini (Italy)
1930-1933	Rolf Witting (Finland)
1933-1948	Joseph Proudman (UK)
1948-1954	Håkon Mosby (Norway)
1954-1957	Richard H. Fleming (USA)
1957-1963	Börje Kullenberg (Sweden)
1963-1967	Ilmo Hela (Finland)
1967-1970	Arthur E. Maxwell (USA)
1970-1987	Eugene C. LaFond (USA)
1987-1995	Robert E. Stevenson (USA)
1995-2007	Fred E. Camfield (USA)
2007-2015	Johan Rodhe (Sweden)

International Association of Seismology and Physics of the Earth's Interior (IASPEI) Association Internationale de Séismologie et de Physique de l'Intérieur de la Terre (AISPLIT)

<http://www.iaspei.org>

At the Sixth International Congress of Geography (London, 1895), Professor G. Gerland (Germany) pointed out the necessity of an international cooperation in seismology. At the Seventh Congress (Berlin, 1899) a *Commission séismologique permanente* was created. The first meeting of the Commission was held in Strasbourg in 1901 under the name of *Première Conférence Séismologique Internationale*. Subsequent conferences were held in Strasbourg (1903) and Berlin (1905). During the Strasbourg meeting, an international convention had been drafted to form the *Association Internationale de Séismologie* by signatures of member states. After being signed by 18 states the convention came in power on 1 April 1904. It consisted of a permanent *Bureau* located in Strasbourg, *General Assemblies* and a *Commission Permanente*. The *Commission Permanente* was formed during the Berlin conference and met in Rome (1906), The Hague (1907), Zermatt (1910), Manchester (1911), and Strasbourg (1922). General Assemblies were held jointly in The Hague, Manchester, and Strasbourg. The Association was dissolved by the Strasbourg General Assembly. At the first IUGG General Assembly (Rome, 1922), seismology became one of the constituent Sections of the Union. It changed its name to *International Association of Seismology* at the IV IUGG General Assembly (Stockholm, 1930). It took its present name at the IX IUGG General Assembly (Bruxelles, 1951). For a detailed account of the history of the International Association of Seismology and Physics of the Earth's Interior, see: J.H. Hodgson, *Our Association, its Past as a Guide to its Future*, published in *Comptes Rendus de l'AISPLIT*, n15, Première Partie, pp. 12-28, and *Fifty Years of the International Association of Seismology (1901-1951)* by J.-P. Rothé (18 pages).

IASPEI BUREAU 2015 – 2019

<i>President:</i>	Thorne Lay	USA
<i>First Vice-President:</i>	Kenji Satake	JAPAN
<i>Second Vice-President:</i>	Michelle Grobbelaar	SOUTH AFRICA
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IASPEI COMMISSIONS

Commission on Tectonophysics and Crustal Structure

Chair: TBD

Task Group on Active Monitoring

<i>Chair:</i>	Mineo Kumazawa	JAPAN
<i>Co-Chairs:</i>	Victor Seleznev	RUSSIA
	Junzo Kasahara	JAPAN

Task Group on Seismic Imaging of the Lithosphere

Chair: Walter D. Mooney USA

Task Group on World Stress Map Project

Chair: Oliver Heidbach GERMANY

Commission on Earthquake Hazard, Risk & Strong Ground Motion (SHR)

Chair: Gary Gibson AUSTRALIA

Working Group on Earthquake Predictability

<i>Co-Chairs:</i>	David D. Rhoades	NEW ZEALAND
	David Jackson	USA

IASPEI/IAEE Joint Working Group on Effects of Surface Geology on Strong Ground Motion

<i>Co-Chairs:</i>	Hiroshi Kawase	JAPAN
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ASC/SHR Joint Working Group on Seismic Hazard & Risk Assessment for Asian-Pacific Regions

Co-Chairs: Fabio Romanelli ITALY
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Working Group on Earthquake Loss Estimates, Real-Time and Scenario Mode Worldwide

Chair: Max Wyss SWITZERLAND

Commission on Earth Structure & Geodynamics

Co-Chairs: George Helffrich JAPAN
 Allen McNamara USA

Working Group on Reference Earth Models

Chair: Gabi Laske USA

Commission on Seismological Observation & Interpretation (CoSOI)

Chair: Thomas Meier GERMANY

Working Group on Seismic Scattering & Heterogeneity

Chair: Hisashi Nakahara JAPAN

Working Group on Utilization of Global 3-D Models for Seismic Observatory Applications

Chair: Steve C. Myers USA

Working Group on Magnitude Measurements

Chair: Domenico Di Giacomo UK

Working Group on New Manual of Seismological Observatory Practice

Chair: Torsten Dahm GERMANY

Working Group on Triggered and Induced Seismicity

Chair: Stanislaw Lasocki POLAND

Working Group on Historical Seismicity

Co-Chairs: Paola Albini ITALY
 Kenji Satake JAPAN

Working Group on Reference Events for Improved Locations

Chair: Kostas Lentas UK

Working Group on IASPEI Seismic bulletin Format

Chair: James Harris UK

Working Group on Seismic Moment Tensors

Chair: Torsten Dahm GERMANY

Commission on Earthquake Generation Process - Physics, Modelling and Monitoring for Forecast

Chair: Eleftheria Papadimitriou GREECE

Commission on Earthquake Source Mechanics

Chair: TBD
Responsible: Satoshi Ide JAPAN

Commission on Education & Outreach

Co-Chairs: Matthias Ohrnberger GERMANY
 John Taber USA

INTER-ASSOCIATION ACTIVITIES

IASPEI/IAVCEI/IAPSO International Heat Flow Commission (IHFC)

Chair: Shaopeng Huang USA/CHINA
Vice-Chair: Massimo Verdoya ITALY
Past Chair: Yuri Popov RUSSIA
Secretary: Sukanta Roy INDIA
Vice-Secretary: Graeme Beardsmorer AUSTRALIA

IASPEI/IAVCEI Commission on Physics & Chemistry of Earth Materials

Chair & IASPEI Representative: Juhua Chen USA

IASPEI/IAVCEI Joint Commission on Volcano Seismology

http://volc_seis_commission.leeds.ac.uk/

Co-Chair & IASPEI Representative: Jürgen Neuberg UK

IAPSO/IASPEI/IAVCEI Joint Tsunami Commission

<http://research.jisao.washington.edu/tsunamicommission/>

Chair & IASPEI Representative: Vasily V. Titov USA

Vice-Chairs: Fumihiko Imamura JAPAN

Ahmet Yalciner TURKEY

Secretary: Phil Cummins AUSTRALIA

IASPEI/IAVCEI Working Group on Subduction Zones Located in Developing Countries (SZLDC)

Chair: Raymond P. Maximo USA

Vice-Chair: Jorge E. Clavero CHILE

IAGA/IASPEI/IAVCEI Working Group on Electromagnetic Studies of Earthquakes & Volcanoes (EMSEV)

<http://www.emsev-iugg.org/emsev/>

Chair: Jacques Zlotnicki FRANCE

Vice-Chair & IASPEI Representative: Malcolm J.S. Johnston USA

Secretary: Toshiyasu Nagao JAPAN

IASPEI/IAPSO/IAGA International Ocean Network (ION)

<http://msg.who.edu/ION/index.html>

Chair: Mairi Best CANADA

IASPEI Liaison: Johannes Schweitzer NORWAY

FURTHER GROUPS WITH IASPEI COMMISSION STATUS

International Federation of Digital Seismograph Networks (FDSN)

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

Chair: Göran Ekström USA

Secretary General: Michelle Grobbelaar SOUTH AFRICA

European Seismological Commission (ESC)

<http://www.esc-web.org>

President: Wolfgang Lenhardt AUSTRIA

Vice-President: Marco Mucciarelli ITALY

Secretary General: Stefano Parolai GERMANY

Assistant Secretary: Päivi Mäntyniemi FINLAND

Asian Seismological Commission (ASC)

<http://www.afsc-web.org.za/>

President: Gary Gibson AUSTRALIA

First Vice-President: Yun-tai Chen CHINA

Second Vice-President: Bartolome C. Bautista PHILIPPINES

Secretary General: Rajenda Kumar Chadha INDIA

African Seismological Commission (AfSC)

President: Atalay Ayele ETHIOPIA

First Vice-President: Bekoa Ateba CAMEROON

Second Vice-President: Ahmed Hosny Ali EGYPT

Secretary General: Michelle Grobbelaar SOUTH AFRICA

Latin American and Caribbean Seismological Commission (LACSC)

President: Marino Protti COSTA RICA

First Vice-President: Diana Comte BRASIL

Secretary General: Marcelo Assumpção BRAZIL

Past President: Carlos Vargas COLOMBIA

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IAU/IUGG Working Group on Non-Rigid Earth Nutations

Representative: Bruce A. Buffett USA

ISC Executive Committee*Representative:* Peter Suhadolc ITALY**IUGG Committee on Data and Information***Representative:* Andreas Rietbrock UK**Joint IUGG/IUGS International Lithosphere Program (ILP)***Representative:* Kevin Furlong USA**IUGG Committee on Mathematical Geophysics***Representative:* Malcolm Sambridge AUSTRALIA**IUGG GeoRisk Commission***Representative:* Zhongliang Wu CHINA**SCAR (Solid Earth Geophysical Working Group)***Representative:* Masaki Kanao JAPAN**IUGG Committee on Study of the Earth's Deep Interior (SEDI)***Representative:* Thorne Lay USA**IUGG Working Group on History***Representative:* Roger Musson UK**IUGG Commission on Climatic and Environmental Changes***Representative:* Domenico Giardini SWITZERLAND**IUGG Commission on Planetary Science***Representative:* Philippe Lognonné FRANCE**PAST IASPEI PRESIDENTS**

1905-1907 Luigi Palazzo (Italy)
 1907-1911 Arthur Schuster (UK)
 1911-1916 Boris Galitzin (Russia)
 1916-1922 Georges Lecointe (Belgium)
 1922-1930 Herbert H. Turner (UK)
 1930-1936 Emilio Oddone (Italy)
 1936-1940 Nicholas H. Heck (USA)
 1940-1951 Robert Stoneley (UK)
 1951-1954 Beno Gutenberg (USA)
 1954-1957 Keith E. Bullen (Australia)
 1957-1960 Harold Jeffreys (UK)
 1960-1963 Perry Byerly (USA)
 1963-1967 John Hodgson (Canada)
 1967-1971 Kiyoo Wadati (Japan)
 1971-1975 Vladimir A. Magnitsky (USSR)
 1975-1979 Hans Berckhemer (F.R. Germany)
 1979-1983 Bruce A. Bolt (USA)
 1983-1987 Ziro Suzuki (Japan)
 1987-1991 Stephan Müller (Switzerland)
 1991-1995 Alexei V. Nikolaev (Russia)
 1995-1999 Claude Froidevaux (France)
 1999-2003 Brian L.N. Kennett (Australia)
 2003-2007 E. Robert Engdahl (USA)
 2007-2011 Zhongliang Wu (China)
 2011-2015 Domenico Giardini (Switzerland)

PAST IASPEI SECRETARIES GENERAL

1907-1922 Radó de Kovesligethy (Hungary)
 1922-1942 Edmond Rothé (France)
 1942-1971 Jean P. Rothé (France)
 1971-1979 Jean-Claude de Bremaecker (USA)
 1979-1991 Robin D. Adams (UK)
 1991-2003 E. Robert Engdahl (USA)
 2003-2015 Peter Suhadolc (Italy)

International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

Association Internationale de Volcanologie et de Chimie de l'Intérieur de la Terre (AIVCIT)

<http://www.iavcei.org>

At the First General Assembly of IUGG (Rome, 2-10 May 1922), the *Section de Vulcanologie* became one of the constituent sections of the Union. This name was changed into *Association Internationale de Vulcanologie* at the Fourth General Assembly (Stockholm 1930). It took its present name at the Moscow General Assembly (1971).

IAVCEI BUREAU 2015 – 2019

<i>President:</i>	Donald Dingwell	GERMANY
<i>Vice-Presidents:</i>	Patrick Allard	FRANCE
	Shanaka de Silva	USA
<i>Secretary General:</i>	Roberto Sulpizio	ITALY
<i>Members:</i>	Michael Ort	USA
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	Jan Lindsay	NEW ZEALAND
	Eliza Calder	UK
<i>Past President:</i>	Ray Cas	AUSTRALIA
<i>Editor, Bulletin of Volcanology:</i>	James D.L. White	NEW ZEALAND
<i>Webmaster & Membership Secretary:</i>	Eugenio Nicotra	ITALY

IAVCEI COMMISSIONS

Commission on Volcanic Gases

<i>Co-Leaders:</i>	Franco Tassi	ITALY
	Nicole Bobrowski	GERMANY
<i>Secretary:</i>	Taryn Lopez	USA

Committee on Cities and Volcanoes

<i>Leader:</i>	Graham Leonard	NEW ZEALAND
<i>Secretary:</i>	Tom Wilson	NEW ZEALAND

Commission on Statistics in Volcanology

<i>Leader:</i>	Henry Odber	UK
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Commission on Collapse Calderas

<i>Co-Leaders:</i>	Shanaka de Silva	USA
	Nobuo Geshi	JAPAN

Commission on Explosive Volcanism

<i>Co-Leaders:</i>	Amanda Clarke	USA
	Lucia Gurioli	FRANCE

Commission on Large Igneous Provinces

<i>Chair:</i>	Richard E. Ernst	CANADA
<i>Vice Chairs:</i>	Ingrid Ukstins Peate	USA
	Mike Widdowson	UK

Commission on Monogenetic Volcanism

<i>Coordinators:</i>	Karoly Nemeth	NEW ZEALAND
	Ian E. Smith	NEW ZEALAND
	Adrian Pittari	NEW ZEALAND

Commission on Remote Sensing

<i>Chair:</i>	Fred Prata	NORWAY
<i>Secretary:</i>	Simon Carn	USA

Commission on Submarine Volcanism

<i>Co-Leaders:</i>	Rebecca Carey	AUSTRALIA
	Michael Perfit	USA
	Steffen Kutterolf	GERMANY

Commission on Tephra Hazard Modelling

<i>Co-Leaders:</i>	Arnau Folch	SPAIN
	Raffaello Cioni	ITALY
	Simona Scollo	ITALY

Commission on Volcanic Lakes

<i>Leader:</i>	Dimitry Rouwet	USA
<i>Secretary:</i>	Greg Tanyileke	CAMEROON
<i>Webmaster:</i>	Alain Bernard	BELGIUM

IAVCEI/IACS Commission on Volcano-Ice Interaction

<i>Co-Leaders:</i>	Dave McGarvie	UK
	Christopher Hamilton	USA

Commission on Volcanic Hazards and Risk

<i>Co-Leaders:</i>	Eliza Calder	UK
	Jan Lindsay	NEW ZEALAND
	Jo Gottsmann	UK

Commission on Volcanogenic Sediments

<i>Leader:</i>	Gert Lube	NEW ZEALAND
<i>Secretary:</i>	Richard Brown	UK

Commission on Geochemistry

<i>Leader:</i>	Ben Andrews	USA
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Commission on Volcano Geology

<i>Co-Leaders:</i>	Joan Marti	SPAIN
	Gianluca Groppelli	ITALY

Commission on Volcano Geoheritage and Protected Volcanic Landscapes

<i>Co-Leaders:</i>	Joan Marti	SPAIN
	Karoly Nemeth	NEW ZEALAND

Commission on Volcano Acoustics

<i>Leader:</i>	David Fee	USA
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IAGA/IASPEI/IAVCEI Working Group on Electromagnetic Studies of Earthquakes and Volcanoes (EMSEV)

<http://www.emsev-iugg.org/emsev/>

<i>Chair:</i>	Jacques Zlotnicki	FRANCE
<i>Vice-Chair:</i>	Malcolm J.S. Johnston	USA
<i>Secretary:</i>	Toshiyasu Nagao	JAPAN
<i>Past Chair:</i>	Seiya Uyeda	JAPAN
<i>IAVCEI Liaison:</i>	Takeshi Hashimoto	JAPAN

IASPEI/IAVCEI Commission on Volcano Seismology

<i>Chair:</i>	Jürgen Neuberg	UK
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IASPEI/IAVCEI Joint Commission on Physics and Chemistry of Earth Materials

<i>IAVCEI Liaison:</i>	Tomoo Katsura	GERMANY
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IAPSO/IASPEI/IAVCEI Joint Tsunami Commission

<i>Chair:</i>	Vasily V. Titov	USA
<i>Vice-chairs:</i>	Fumihiko Imamura	JAPAN
	Ahmet Yalciner	TURKEY
<i>Secretary:</i>	Phil Cummins	AUSTRALIA
<i>IAVCEI Representative:</i>	Yuichi Nishimura	JAPAN

The International Volcanic Health Hazard Network (IVHHN)

Leader: Claire Horwell UK

World Organization of Volcano Observatories

Co-Chairs: Susana Falsaperla ITALY
 Gill Jolly NEW ZEALAND

IASPEI /IAVCEI /IAPSO International Heat Flow Commission

Chair: Yuri Popov RUSSIA
Vice-Chairs: Shaopeng Huang CHINA / USA
Past Chair: Christoph Clauser GERMANY
Secretary: Sukanta Roy INDIA
Vice-Secretary: Heiner Villinger GERMANY

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1919-1922 Annibale Riccò (Italy)
 1922-1927 Antoine Lacroix (France)
 1927-1933 Alessandro Malladra (Italy)
 1933-1936 Constantine A. Ktenas (Greece)
 1936-1948 Auguste Michel-Lévy (France)
 1948-1954 Berend G. Escher (The Netherlands)
 1954-1963 Alfred Rittmann (Switzerland/Italy)
 1963-1967 Hisashi Kuno (Japan)
 1967-1971 Gordon A. MacDonald (USA)
 1971-1975 Georgii S. Gorshkov (USSR)
 1975-1979 Robert W. Decker (USA)
 1979-1983 Sergei A. Fedotov (USSR)
 1983-1987 Ian G. Gass (UK)
 1987-1991 Shigeo Aramaki (Japan)
 1991-1995 Paolo Gasparini (Italy)
 1995-1999 Grant Heiken (USA)
 1999-2003 Steve J. Sparks (UK)
 2003-2007 Oded Navon (Israel)
 2007-2011 Setsuya Nakada (Japan)
 2011-2015 Ray Cas (Australia)

PAST IAVCEI SECRETARIES GENERAL

1919-1936 Alessandro Malladra (Italy)
 1936-1960 Francesco Signore (Italy)
 1960-1967 Francesco Penta (Italy)
 1967-1975 Pierre Evrard (Belgium)
 1975-1983 Peter E. Baker (UK)
 1983-1991 Hans-Ulrich Schmincke (F.R. Germany)
 1991-1999 R. Wally Johnson (Australia)
 1999-2007 Steve R. McNutt (USA)
 2007-2015 Joan Marti (Spain)

NATIONAL COMMITTEES, ADHERING ORGANIZATIONS, NATIONAL CORRESPONDENTS OF THE ASSOCIATIONS

ANNUAIRE 2016 YEARBOOK

The composition of the National Committees and, in consequence, the names of the officially accredited national representatives to the Union and its eight Associations are in conformity with what was communicated to the IUGG Secretariat in 2015.

La composition des Comités Nationaux et par voie de conséquence les noms des représentants nationaux officiellement accrédités auprès de l'Union et de ses huit Associations sont conformes à ce qui a été communiqué au Secrétariat de l'UGGI en 2015.

ALBANIA - ALBANIE

ADHERING ORGANIZATION

The Academy of Sciences
Sheshi Fan S. Noli
Tirane

NATIONAL COMMITTEE

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IASPEI:	E. DUSHI	IAVCEI:			

ARGENTINA - ARGENTINE

ADHERING ORGANIZATION

Instituto Geografico Nacional
Comité Nacional de la Unión Geodésica y Geofísica Internacional
Cabildo 381
1426 Buenos Aires
Web: www.ign.gob.ar

NATIONAL COMMITTEE

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IASPEI:	N. SABBIONE	IAVCEI:	I. PETRINOVIC		

REPUBLIC OF ARMENIA - REPUBLIQUE D'ARMENIE**ADHERING ORGANIZATION**

National Survey for Seismic Protection, MES RA
 Davidashen 4 massiv
 P.O. 0054
 Yerevan
Web: www.mes.am

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IASPEI:	A. ARAKELYAN	IAVCEI:	S. NAZARETYAN		

AUSTRALIA - AUSTRALIE**ADHERING ORGANIZATION**

Australian Academy of Science
 Ian Potter House - Gordon Street
 GPO Box 783
 Canberra, ACT, 2601

Contact: M. DZUNDZA**Web:** www.science.org.au**NATIONAL COMMITTEE****Chair:** S. O'REILLY**National Correspondents of the Associations**

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IASPEI:	I. JACKSON	IAVCEI:	R. CAS		

AUSTRIA - AUTRICHE**ADHERING ORGANIZATION**

Österreichische Geodätische Kommission
 Austrian Geodetic Commission
 Bundesministerium für Wissenschaft, Forschung und Wirtschaft
 Abteilung I/11
 Stubenring 1
 1010 Vienna

NATIONAL COMMITTEE**President:** W. LENHARDT**Secretary:** N. HÖGGERL**National Correspondents of the Associations**

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IAHS:	G. BLÖSCHL	IAMAS:	M. ROTACH	IAPSO:	
IASPEI:	W. LENHARDT	IAVCEI:	I. FRITZ		

AZERBAIJAN - AZERBAIDJAN**ADHERING ORGANIZATION**

Azerbaijan National Academy of Sciences (ANAS)
Istiglaliyyat Str., 10
Baku

Contact: G. BABAYEV

NATIONAL COMMITTEE

President: I. GULIYEV

Secretary: G. BABAYEV

National Correspondents of the Associations

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IAHS:	Y. ISRAFILOV	IAMAS:		IAPSO:	R. MAMMEDOV
IASPEI:	G. YETIRMISHLI	IAVCEI:	A. ISMAYIL-ZADE		

BELGIUM - BELGIQUE**ADHERING ORGANIZATION**

The Royal Academies of Science and the Arts of Belgium (RASAB)
Palais des Académies-Paleis der Academiën
Hertogsstraat 1 Rue Ducale
1000 Brussels

Contact: L. HANSEN

Web: <http://bncgg.oma.be>

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IASPEI:	T. CAMELBEECK	IAVCEI:	P. DELMELLE		

BOLIVIA - BOLIVIE**ADHERING ORGANIZATION**

Academia Nacional de Ciencias de Bolivia
P.O. Box 11253
La Paz

NATIONAL COMMITTEE

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Secretary General: R. AYALA

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IAHS:	E. RAMIREZ	IAMAS:	E. PALENQUE	IAPSO:	
IASPEI:	E. MINAYA	IAVCEI:			

BOSNIA & HERZEGOVINA - BOSNIE & HERZEGOVINE

ADHERING ORGANIZATION

Union of Associations of Geodetic Professionals in Bosnia and Herzegovina
Stjepana Tomica 1 / III
71000 Sarajevo

NATIONAL COMMITTEE

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Vice-President: N. TUNO

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IAHS:	E. KUPUSOVIC	IAMAS:	Z. MAJSTOROVIC	IAPSO:	
IASPEI:	I. BRLEK	IAVCEI:			

BRAZIL - BRESIL

ADHERING ORGANIZATION

Diretoria de Geociencias
Instituto Brasileiro de Geografia e Estatistica
Avenida Brasil 15671, Bloco III-B
Parada de Lucas, Rio de Janeiro, 21241-051
Web: <http://www.ibge.gov.br>

NATIONAL COMMITTEE

Director: L.P.S. FORTES

National Correspondents of the Associations

IACS:	J. SIMÕES	IAG:	D. BLITZKOW	IAGA:	S. FONTES
IAHS:	C.A.G. SANTOS	IAMAS:	T. AMBRIZZI	IAPSO:	A. MESQUITA
IASPEI:	M. ASSUMPÇÃO	IAVCEI:	R. CONCEIÇÃO		

BULGARIA - BULGARIE

ADHERING ORGANIZATION

Bulgarian Academy of Sciences
bul. 15 Noemvri, 1
1040 Sofia

NATIONAL COMMITTEE

President: D. PANCHEVA **Secretary:** I. GEORGIEV

National Correspondents of the Associations

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IAHS:	D. DIMITROV	IAMAS:	V. SPIRIDONOV	IAPSO:	A. PALAZOV
IASPEI:	D. SOLAKOV	IAVCEI:			

CANADA

ADHERING ORGANIZATION

National Research Council of Canada
Bureau of International Relations
1200 Montreal Road
Ottawa, ON K1A 0R6

Contact: N. ARBOUR

Web: www.cgu-ugc.ca/cnc-iugg

NATIONAL COMMITTEE

President: Z. HAJNAL

National Correspondents of the Associations

IACS:		IAG:	J. HENTON	IAGA:	A. YAU
			J.W. KIM		P.J.A. McCAUSLAND
IAHS:	R. PETRONE	IAMAS:	J. GYAKUM	IAPSO:	J. KLYMAK
	G. ALI		J. DRUMMOND		P. GALBRAITH
IASPEI:	D.W. EATON	IAVCEI:	M.D. HIGGINS		
	C. PERRY		B. COUSENS		

CHILE - CHILI

ADHERING ORGANIZATION

Instituto Geografico Militar
Nueva Santa Isabel 1651
Santiago

Contacts: H. MANRIQUEZ, E. HUNT

Web: www.igm.cl

NATIONAL COMMITTEE

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IAHS:		IAMAS:	G.N. SCHLOTTERBECK	IAPSO:	P. CARRASCO Hellwig
IASPEI:	D. COMTE	IAVCEI:	J. A. NARANJO		

CHINA - CHINE

ADHERING ORGANIZATION

China Association for Science and Technology (CAST)
Institute of Atmospheric Physics (IAP)
Chinese Academy of Sciences (CAS)
Bldg. 40 Huayanli, Beichenxilu
Beijing, 100029

Contact: J.P. LI

NATIONAL COMMITTEE

President: G.X. WU

Secretary General: J.P. LI

Vice-Presidents: D.H. QIN, J.Y. ZHANG

National Correspondents of the Associations

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IAHS:	J.Y. ZHANG	IAMAS:	D.R. LU	IAPSO:	J.P. ZHAO
IASPEI:	Z.F. DING	IAVCEI:	Y.G. XU		

CHINA - CHINE
The Academy of Sciences Located in TAIPEI

ADHERING ORGANIZATION

Academia Sinica
 128, Academy Road, Sec. 2
 Taipei, Taiwan

NATIONAL COMMITTEE

President: S.C. LIU

Executive Secretary: B.-S. HUANG

National Correspondents of the Associations

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IAHS:	C.-W. LIU	IAMAS:	S. C. LIU	IAPSO:	A.C.T. CHEN
IASPEI:	C.-Y. WANG	IAVCEI:	S.-R. SONG		

COLOMBIA - COLUMBIE

ADHERING ORGANIZATION

Instituto Geográfico Agustín Codazzi
 Colombian Committee of Geodesy and Geophysics (CCGG)
 Carrera 30 No. 48-51
 Bogotá, D.C.

NATIONAL COMMITTEE

President: I. D. GOMEZ-GUZMAN

Secretary General: L. SANCHEZ

Vice-President: A. CARDENAS

National Correspondents of the Associations

IACS:		IAG:	W. MARTÍNEZ-DIAZ	IAGA:	A. CANEVA
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Russian Academy of Sciences
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King Abdulaziz City for Science and Technology (KACST)
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Riyadh 11442

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845 28 Bratislava 45

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P.O. Box 2600
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28003 Madrid

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Web: www.hgk.msb.gov.tr

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The Royal Society
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London SW1Y 5AG

Contact: R. COOPER **Web:** www.royalsociety.org

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National Academy of Sciences
Board on International Scientific Organizations
The National Academies
500 Fifth Street
Washington D.C., 20001

Contact: E. SZTEIN **Web:** http://www.nas.edu

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VIETNAM**ADHERING ORGANIZATION**

Institute of Geophysics
Vietnam Academy of Science and Technology (VAST)
Nha A8-18, Hoang Quoc Viet, Cau Giay
Hanoi

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IAHS:	N.X. ANH	IAMAS:	N.X. ANH	IAPSO:	B.C. QUE
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LIST OF ACRONYMS

AGU	American Geophysical Union
BGI	International Gravimetric Bureau
BIPM	Bureau International des Poids et Mesures
CCEC	Commission on Climatic and Environmental Change
CMG	Commission on Mathematical Geophysics
CODATA	Committee on Data for Science and Technology
COSPAR	Committee on Space Research
EMSEV	IAGA/IASPEI/IAVCEI Inter-Association Working Group on Electromagnetic Studies of Earthquakes and Volcanoes
FAGS	Federation of Astronomical and Geophysical Data Analysis Services
GGOS	Global Geodetic Observing System
GOOS	Global Ocean Observing System
GRC	Commission on Geophysical Risk and Sustainability
IACS	International Association of Cryospheric Sciences
IAG	International Association of Geodesy
IAGA	International Association of Geomagnetism and Agronomy
IAHS	International Association of Hydrological Sciences
IAMAS	International Association of Meteorology and Atmospheric Sciences
IAPSO	International Association for the Physical Sciences of the Ocean
IASPEI	International Association of Seismology and Physics of the Earth's Interior
IAU	International Astronomical Union
IAVCEI	International Association of Volcanology and Chemistry of the Earth's Interior
ICAO	International Civil Aviation Organization
ICET	International Council of Earth Tides
ICSU	International Council for Science
IGES	International Geoid Service
IHP	International Hydrological Programme
ILP	International Lithosphere Program
IOC	International Oceanographic Commission
ION	International Ocean Network
IPGH	Instituto Panamericano de Geografia Historia (also PAIGH)
ISGI	International Service of Geomagnetism Indices
IUGG	International Union of Geodesy and Geophysics
IUGS	International Union of Geological Sciences
PAIGH	PanAmerican Institute of Geography and History
SCAR	Scientific Committee on Antarctic Research
SCL	Scientific Committee on the Lithosphere
SCOR	Scientific Committee on Ocean Research
SCOSTEP	Scientific Committee on Solar-Terrestrial Physics
SEDI	Study of the Deep Interior of the Earth
UCDI	Union Commission on Data and Information
UCPS	Union Commission on Planetary Sciences
UNESCO	United Nations Educational, Scientific and Cultural Organization
URSI	Union Radio Scientifique Internationale
WCRP	World Climate Research Programme
WDC	World Data Center
WDS	ICSU World Data System
WMO	World Meteorological Organization