

IAGA Annual Report for 2019

International Association for Geomagnetism and Aeronomy

January 28, 2020

1 Introduction

IAGA, the International Association of Geomagnetism and Aeronomy (AIGA - Association Internationale de Géomagnétisme et d'Aéronomie) is one of the eight Associations of the International Union of Geodesy and Geophysics (IUGG). It is a non-governmental body funded through the subscriptions paid to IUGG by its Member Countries. IAGA has a long history and can trace its origins to the Commission for Terrestrial Magnetism and Atmospheric Electricity, part of the International Meteorological Organisation, which was established in 1873.

IAGA is the premier international scientific association promoting the study of terrestrial and planetary magnetism, and space physics. IAGA is concerned with the understanding and knowledge that result from studies of the magnetic and electrical properties of:

- the Earth's core, mantle and crust
- the middle and upper atmosphere
- the ionosphere and the magnetosphere
- the Sun, the solar wind, the planets and interplanetary bodies.

More information on IAGA is provided on its websites: <http://www.iaga-aiga.org>.

2 Administration

Since 2015, IAGA is organised in six Divisions and four Inter-divisional Commissions, each led by a Chair and a Co-Chair. Each Division may form Working Groups in given specialised topics and elects officers to run the business of the Working Groups. The terms of office are linked to the IUGG General Assemblies, and new officers were elected during the XXVII IUGG General Assembly in Montréal in July 2019. Lists of the Division/Inter-divisional Commission leadership and the Working Group names and officers can be found on the following website:

<http://www.iaga-aiga.org/about/>.

IAGA is administered by an Executive Committee on behalf of IUGG Member Countries in accordance with the Association's Statutes and By-Laws. The election process was conducted by a Nominations Committee chaired by Toshihiko Iyemori and approved by the Conference of Delegates. According to a change of IAGA Statutes and By-Laws adopted in 2017 the Executive Committee now additionally contains a second Vice President, a Treasurer, and an Early Career Scientist (ECS) and overall consists of 13 members. The newly elected Executive Committee members are:

President: Mioara Mandaia (France)

Vice-presidents: Alan Thomson (UK), Andrew Yau (Canada)

Secretary General: Monika Korte (Germany)

Treasurer: Aude Chambodut (France)

Members: Kusumita Arora (India), Loren Chang (ECS, Taiwan), Anna Kelbert (USA), Michael Kosch (South Africa), Huixin Liu (Japan), Klaus Spitzer (Germany), Ricardo Trindade (Brazil)

IAGA communicates with Member Countries through National Correspondents nominated by appropriate National Bodies. Member Countries are represented at IAGA Assemblies by accredited Chief Delegates who may vote on matters, according to the voting rules set out in the Statutes and By-Laws, at meetings of the Conference of Delegates. Information on the EC members and National Correspondents are found at: <http://www.iaga-aiga.org/about/>.

3 Activities

3.1 IUGG General Assembly

The main event in 2019 was the participation in the 27th IUGG General Assembly in Montréal, Canada, where IAGA activities contributed from July 12 to 18. IAGA was very well represented with 22 own symposia, 12 joint ones led by IAGA and contributions to another 6. Nearly 400 participants from 36 countries gave IAGA as their main affiliation.

The IAGA programme efficiently ran in a conference centre which provided an excellent space, giving us the chance to catch up with latest developments in our own research specialities, as well as take in some of the more inter-disciplinary topics. The meeting provided many opportunities for scientists to discuss different topics over breaks, poster sessions, and the IAGA dinner.

At the IAGA Ceremony, introduced in 2017, the IAGA awards are presented and the Shen Kuo Medalist gives an invited lecture. This year the Ceremony took place on July 15, with an exciting lecture on planetary magnetism entitled "The Magnetic Field of Mars: Progress and Puzzles" by Catherine Johnson.

3.2 IAGA Awards and Honours



Figure 1: The awardees with IAGA EC members at the IAGA Ceremony in July 2015. From left to right: M. Korte (IAGA vice president), C. Johnson (Shen Kuo Medalist), D. K. Karan and T. Gonet (Young Scientist Awardees), M. Mandea (IAGA Secretary General), K. Tlatova and E. Shirokov (Young Scientist Awardees), M. Berg (Long Service Medalist), E. Petrovsky (IAGA President) [photo: J. Simkanin].

The following awards were presented at the IAGA Ceremony during the IUGG General Assembly:

Shen Kuo Medal Catherine Johnson (Canada), for intrinsically interdisciplinary contributions, targeted at a holistic understanding of bodies throughout the Solar System, especially with respect to the magnetic field of the planet Mercury, and the Earth's magnetic field within the past five million years.

Long Service Medal Martin Berg (Norway), for his dedicated continuous efforts to produce the highest quality geomagnetic field data and for his devoted work at the Dombas observatory for over 35 years.

Young Scientist Award Tomasz Gonet (UK), Deepak Kumar Karan (India), Kseniia Tlatlova (Russia), Evgenii Shirokov (Russia)

IAGA Honorary Members Archana Bhattacharyya (India) and Toshihiko Iyemori (Japan) were appointed new Honorary Members of IAGA at the first Conference of Delegates during the IUGG General Assembly.

3.3 4th IAGA School

The 4th IAGA School, prior to the IUGG General Assembly in Montréal, Canada, was held at the Station de biologie des Laurentides (SBL), ca. 80 km NW of Montreal. The School was attended by 20 students, with 5 from Europe (France, Germany, Poland), 3 from Russia, 5 from Asia (India, Japan, China), 6 from North America (USA, Mexico, Canada) and 1 from South America (Brazil). Topics across all the disciplines of IAGA were covered by lectures given by experts in their fields, and both the students and the lecturers gave very positive feedback on the event.



Figure 2: Group photo taken at the 4th IAGA School

3.4 Sponsored Topical Meetings

Traditionally, IAGA provides few or no sponsoring during years of IUGG General Assemblies, such as 2019. This year, IAGA sponsored three topical meetings. Reports from them are published in the IAGA Newsletter which can be found at <http://www.iaga-aiga.org/publications>.

*note: The 6th Latinmag had to be cancelled at short notice due to unexpected developments in the socio-political situation in Chile. III PANGEO also was cancelled due to infrastructure problems.

Workshop Title	Dates	Location	Organiser /Support Applicant
AGS Conference on Space Weather 6 th Latinmag* III PANGEO	25-28 March 18-22 November 11-15 November	Cairo, Egypt Rancagua, Chile Pilar and Cordoba, Argentina	Ayman M. Mahrous Fernando Poblete Camila Farias

3.5 Publications

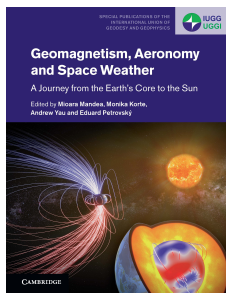
3.5.1 IAGA Newsletters

The latest issue of the annual IAGA Newsletter, nr. 56, was distributed in December. It can be downloaded from the IAGA website <http://www.iaga-aiga.org>.

3.5.2 Contribution to IUGG Centennial Special Issue

A special issue of the open access journal History of Geo- and Space Sciences (HGSS) was published on the occasion of the IUGG centennial in 2019. The IAGA contribution is authored by M. Mandea and E. Petrovsky, entitled "IAGA: A major role in understanding our magnetic planet" (Hist. Geo Space. Sci., 10, 163–172, <https://doi.org/10.5194/hgss-10-163-2019>).

3.5.3 IAGA Books



On the occasion of the IUGG centennial IAGA published a book with Cambridge University Press providing a comprehensive overview of the IAGA fields of research. The volume, edited by M. Mandea, M. Korte, A. Yau and E. Petrovsky and entitled "Geomagnetism, Aeronomy and Space Weather – A Journey from Earth's Core to the Sun" was published in November 2019.

3.5.4 IAGA Flyer and Poster

Current versions of an IAGA Flyer and Poster are also available on the website.

4 Future activities

In 2020 IAGA will be involved in organising several topical meetings, as well as in preparing an attractive programme for the 2021 IAGA-IASPEI Joint Scientific Assembly.

From December 2019 on IAGA is now advertising its activities also on Facebook, Twitter and Instagram:

- Facebook: <https://www.facebook.com/IAGAandAIGA/>
- Twitter: https://twitter.com/IAGA_AIGA
- Instagram: https://www.instagram.com/iaga_aiga/

Monika Korte
IAGA Secretary General