

IAGA Annual Report for 2022

International Association for Geomagnetism and Aeronomy

February 14, 2023

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 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.

As a basis for these studies the IAGA community is also strongly involved in present and past magnetic field observations from ground observatories, magnetic surveys, space missions and paleomagnetic data measured in laboratories.

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 Division may form Working Groups in specialised topics and elects officers to run the business of the Working Groups. The terms of office are linked to the IUGG General Assemblies. 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/>. There were no changes to the IAGA Divisions, Commissions and Working Groups in 2022.

IAGA is administered by an Executive Committee (EC) on behalf of IUGG Member Countries in accordance with the Association's Statutes and By-Laws. The current Executive Committee members are:

President: Mioara Manda (France)

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

Secretary General: Monika Korte (Germany)

Treasurer: Aude Chambodut (France)

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

The EC had virtual meetings in February, June, August and December 2022 and communicated frequently by e-mail.

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 Sponsored topical meetings

After two years when many topical workshops had to be cancelled or conducted virtually due to the pandemic, IAGA sponsored several international in-person workshops again in 2022 as listed below.



Participants of the 17th Castle Meeting on Paleo-, Rock and Environmental Magnetism in summer 2022

| Workshop title | Location | Dates |
|--|-----------------------------|---------------------------|
| Long-term Changes and Trends in the Atmosphere | Helsinki, Finland | May 30 – June 3 |
| Vertical Coupling in the Atmosphere-Ionosphere System | Sopron, Hungary | July 11 – 15 |
| 17 th Castle Meeting on Paleo, Rock and Environmental Magnetism | Trakošćan, Croatia | August 28 – September 3 |
| 25 th Electromagnetic Induction Workshop | Çeşme, Turkey | September 11 – 17 |
| Radiation Belt Dynamics and Remote Sensing of the Earth’s Plasmasphere | L’Aquila, Italy | September 26 – 30 |
| XIII Latin American Conference on Space Geophysics (COLAGE) | São José dos Campos, Brazil | November 27 – December 02 |

3.2 Outreach activities

The IAGA Social Media Working Group, founded in 2019 and consisting mainly of early career scientists, is very active in promoting IAGA and our scientific activities to a broad audience. Katia Pinheiro created an outreach film describing the “Magnetic Mosaic” of the Earth through interviews with scientists, which was shortlisted into the top 3 films in the “Women in Geoscience” category and came 5th in the People’s Choice award at the Earth Futures Festival (<https://www.earthfuturesfestival.com/the-films/v/magnetic-mosaic>). Katia Pinheiro and Shivangi

Sharan won an outreach grant from IUGG in fall 2022 to continue producing outreach videos. They aim at producing a documentary and short movies connecting the science from all 8 IUGG associations through interviews mainly of early career researchers from many different countries, which should be presented at the IUGG General Assembly in Berlin in July 2023.



Two screenshots from Magnetic Mosaic, an IAGA outreach film created by Katia Pinheiro

3.3 Interaction with the International Association of Physics Students (IAPS)

Since July 2021, IAGA has established a formal collaboration with the International Association of Physics Students, IAPS. IAPS is a student-run educational associations that aims to encourage students in academic and professional growth as well as build connections between physics students to break social and cultural barriers. IAGA supported the most recent edition of “PLANCKS” in 2022 in Munich (Germany), which is an international theoretical physics competition of four to five days for Bachelor and Master students. Moreover, IAGA established contacts with potential speakers with high expertise and reputation in IAGA sciences to give presentations at IAPS events, e.g. at the “IAPS4Materials” together with the Institute of Physics (IOP) in London in November 2022.

3.5 Publications and outreach

The latest issue of the annual IAGA Newsletter, nr. 59, was distributed in December 2022. It can be downloaded from the IAGA website <http://www.iaga-aiga.org/publications>. Current versions of a IAGA Flyer and Poster are also available on the website.

IAGA operates websites at <http://www.iaga-aiga.org> and is active on the following social media
www.facebook.com/IAGAandAIGA/
www.twitter.com/IAGA_AIGA
www.instagram.com/iaga_aiga/
<https://iaga-aiga.blogspot.com/>

4 Future activities

Current and future activities include the preparation of the programme for the 2023 IUGG General Assembly in Berlin and the 6th IAGA School to be held in the week before the General Assembly. IAGA will also be involved in a few topical meetings in 2023.

Monika Korte
IAGA Secretary General