

International Union of Pure and Applied Physics

To stimulate and facilitate international cooperation in physics and the worldwide development of science.

C9 Commission on Magnetism - Report September 2023

Officers 2021-2024

Chair: **Kai Liu**, U.S.A. (2014) (2017) (2021) Vice Chair: **Elisabetta Agostinelli**, Italy (2017) (2021)

Secretary: Shinji Yuasa, Japan (2021)

Members 2021-2024

Jianhua Zhao, China (2017) (2021)

Oksana Zaharko, Switzerland (2017) (2021)

Nikolay Mushnikov, Russia (2017) (2021)

Robert Stamps, Canada (2021)

Olivier Fruchart, France (2021)

Michael Farle, Germany (2021)

Anil Prabhakar, India (2021)

Jozef Spalek, Poland (2021)

Maria Luisa Fernandez-Gubieda Ruiz, Spain (2021)

Najeh Thabet Mliki, Tunisia (2021)

Liam O'Brien, UK (2021)

Associate Members

The C9 Commission on Magnetism proposed and received approval from IUPAP EC&CC and General Assembly in July 2022 for the following Associate Members to enhance interactions with major sister magnetism societies:

• IEEE Magnetics Society (MagSoc): The Past President will serve as Associate Member of C9 (usually it's a 2-year term). The 2022 Past President was Pallavi Dhagat (Oregon State University, USA, Female), whose term ended at the end of 2022. Then Masahiro Yamaguchi (Tohoku Univ. Japan) fills this role for 2023-2024, and later this will be filled by Atsufumi Hirohata (Univ. of York, UK) for 2025-2026, and Ron Goldfarb (NIST, USA) for 2027-2028.

- American Physical Society (APS) Topical Group on Magnetism (GMAG): The Chair of GMAG will serve as Associate Member (one year term). The Chair was Marcelo Jaime (Los Alamos National Lab, USA) for 2022-2023; then <u>Clarina Reloj Dela Cruz</u> (Oak Ridge National Lab, USA, Female) for 2023-2024, <u>Cristian D Batista</u> (Univ. of Tennessee, USA) for 2024-2025.
- European Magnetism Association (EMA): The President will fill this role. We have a unique situation here. One of our C9 members, Olivier Fruchart (Univ. Grenoble Alpes G-INP/CNRS/CEA, France) was elected President of EMA in August 2022 for a 3-year term. Since EMA will already be fully informed of IUPAP C9 activities through his role on C9, there was no need to appoint another person presently as Associate Member. When Olivier's service on C9 or EMA president ends, whichever happens sooner, then C9 will appoint a new Associate Member accordingly.
- Asian Union of Magnetics Societies (AUMS): The AUMS President, Shao-Xiong Zhou (China) fills this role.

Future Chair

In April 2023, C9 nominated Dr. Shinji Yuasa as the next chair of the C9 Commission for the term 1/2025-12/2027. Dr. Yuasa has been serving as Secretary of the C9 Commission since 1/2022. In this capacity he has been deeply involved with commission matters.

Conferences

Due to the COVID-19 pandemic, the main conference event sponsored by C9, the 2021 International Conference on Magnetism (ICM) in Shanghai, was initially postponed to 2022 and subsequently cancelled. The next ICM will be held in Bologna/Italy in 2024.

Always associated with the ICM is the satellite conference "International Colloquium on Magnetic Films and Surfaces (ICMFS)". This conference, planned in Okinawa, Japan, was held during July 10-15, 2022 in a hybrid format. The C9 Commission moved several major ICM events to ICMFS, including:

- the Awards ceremony;
- the two plenary lectures at the award ceremony (winners of the 2021 Magnetism Award and Néel Medal, i.e. Agnès Barthélémy and Nicola Spaldin);
- the four invited lectures by recipients of the IUPAP Young Scientist Prize in the Field of Magnetism: Julia Mundy (2019), Jiadong Zang (2020), Can Onur Avci (2021), and the 2022 Early Career Scientist Prize in Magnetism recipient, Chunhui Du;
- the business meeting of the C9 Commission.

Business Meeting

2022-2023

The C9 Commission on Magnetism held its business meeting during the conference "International Colloquium on Magnetic Films and Surfaces (ICMFS)" on July 13, 2022 in virtual format. The agenda is listed below.

- Introduction (10 min)
- Approval of Minutes from C9 Business Meeting at ICM 2018 (4 min)
- Approval of Agenda (1 min)
- Update from Executive Council and Commission Chair (EC & CC) Meeting (10 min)
 - New Central Office in Trieste
 - Communications
 - Associate members and interactions with other magnetics societies
 - Centennial celebration & Special General Assembly
 - New budget model
 - Other matters
- Conferences (50 min)
 - IUPAP supported Conferences & Workshops (5 min)
 - Report from ICMFS 2022 (Shinji Yuasa, Teruo Ono) (10 min)
 - Report from ICM 2018 (Allan Macdonald, Mark Stiles, Liesl Folks) (10 min)
 - Report from ICM 2024 (Valentin (Alek) Dediu, Ilaria Bergenti) (10 min)
 - Preliminary discussions on future site selection for ICM 2027 (15 min)
- Awards (10 min)
- Other business (5 min)

Conference Sponsorships

The C9 Commission has supported the proposal for the conference "Trends in Magnetism", held in person over September 4-8, 2023, in Rome, Italy.

Magnetism Awards

The IUPAP Early Career Scientist Prize in the field of Magnetism is awarded every year to a young scientist for theoretical or experimental work in fields of fundamental or applied magnetism. This award was initially established in 2006 to separately recognize theoretical/computational work and experimental work in magnetism, and awarded every three years at the International Conference on Magnetism (ICM). In 2016 it was converted to an annual competition to recognize a single winner for either theoretical or experimental work in magnetism. In 2021 the IUPAP renamed the Young Scientist Prizes across all commissions to Early Career Scientist Prizes, as the prizes are intended for "young" scientists in terms of their career stage.

The award committee consists of members of the IUPAP Commission on Magnetism, together with past recipients of the Magnetism Award and Néel Medal. All members of the magnetism community were invited to make nominations.

Recipient of the 2023 Award is:

Dr. Alannah Hallas, University of British Columbia

"For outstanding contributions to the discovery of magnetic quantum materials through advanced synthesis methods."

The award will be presented to Dr. Hallas at the 2024 International Conference on Magnetism (ICM2024), to be held in Bologna, Italy, during June 30-July 5, 2024.