



C.9 Commission on Magnetism - Report 2021

Officers 2021

Chair: **Burkard Hillebrands**, Germany (2014) (2017)
Vice Chair: **YoshiChika Otani**, Japan (2011) (2014) (2017)
Secretary: **Kai Liu**, U.S.A. (2014) (2017)

Members 2018-2021

Elisabetta Agostinelli, Italy (2017)
Fernando Luís Araujo Machado, Brazil (2017)
Joël Cibert, France (2014) (2017)
Luis Miguel García Vinuesa, Spain (2014) (2017)
Can-Ming Hu, Canada (2014) (2017)
Jae Il Lee, Korea (2014) (2017)
Minn-Tsong Lin, Taiwan (2017)
Nikolay Mushnikov, Russian Federation (2017)
Arun Kumar Nigam, India (2017)
Oksana Zaharko, Switzerland (2017)
Jianhua Zhao, China (2017)

Meetings

2021:

Due to the pandemic, both the main conference, the International Conference on Magnetism (ICM) in Shanghai and the meeting of the C.9 Commission on Magnetism had to be postponed to 2022. Later it turned out, that ICM2022 also has to be cancelled (see below at “Conferences”). An email-meeting was held in the period July 24 to August 7, 2021 to organize the shift. The unanimous decision was: The next meeting of the C9 Commission on Magnetism will be held during the satellite conference "International Colloquium on Magnetic Films and Surfaces (ICMFS)", planned to take place July 10-15, 2022 in Okinawa/Japan in hybrid format.

Conferences

The next planned main event sponsored by C.9 is the International Conference on Magnetism (ICM) in Shanghai. It was originally scheduled for July 4-9, 2021. Due to the COVID-19 pandemic and with C.9's approval, it was initially postponed to a year later, i.e., July 3-8, 2022. Due to the still ongoing pandemic, the organizers did not feel able to organize an on-site conference or to provide the infrastructure for an online conference. Therefore, the C.9 Commission decided through an email discussion and vote that ICM 2022 would be cancelled. The reason was that i) we cannot plan an on-site conference at this time due to the uncertainties surrounding the pandemic, and ii) it will not be possible to hold a hybrid conference format in China. 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, will now be moved to the time period July 10-15, 2022. It will be held in a hybrid format.

Due to the given exceptional circumstances, the C.9 Commission has decided to move several major ICM events to ICMFS. They include:

- a. the award ceremony session;
- b. the two plenary lectures at the award ceremony (winners of the 2021 Magnetism Award and Néel Medal, i.e. Agnès Barthélémy and Nicola Spaldin);
- c. the four invited lectures at the award ceremony (recipients of the IUPAP Young Scientist Prize in the Field of Magnetism: Julia Mundy (2019), Jiadong Zang (2020), Can Onur Avci (2021), and a future 2022 recipient);
- d. the award ceremony dinner;
- e. the meeting of the C.9 Commission.

Conference Sponsorships

The C.9 Commission has supported the proposal for the conference "Trends in Magnetism", Céfalù, Italy, originally scheduled for September 7-11, 2020. Due to the COVID-19 pandemic, this conference took place during September 6-10, 2021 in a hybrid format.

Magnetism Awards

1. The **IUPAP Magnetism Award and Néel Medal** is the highest award bestowed by the C.9 Commission on Magnetism. Established in 1991, the IUPAP Magnetism

Award is made in recognition of outstanding contributions to fundamental and applied magnetism. It is usually presented every three years at the International Conference on Magnetism (ICM). The Néel Medal is awarded together with the Magnetism Award, since 2003, sponsored by CNRS and Institut Néel. A monetary award for the winner(s) is generously sponsored by Elsevier.

The award committee consists of members of the IUPAP Commission on Magnetism, together with past recipients of the Magnetism Award and Néel Medal. In late 2020 a call for the IUPAP Magnetism Award and Néel Medal was issued. All members of the magnetism community were invited to make nominations.

In 2021, the award committee selected two awardees:

1) Agnès Barthélémy, University Paris-Saclay/Unité Mixte de Physique, CNRS-Thales

and

2) Nicola Spaldin, ETH Zurich Switzerland

The citation reads:

“For pioneering contributions to the fundamental and applied science of magnetic and ferroelectric materials, particularly multiferroics”.

The award ceremony will take place at the next "International Colloquium on Magnetic Films and Surfaces (ICMFS)" in Okinawa, Japan, July 10-15, 2022.

2. The **IUPAP Young 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.

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 2020 Award is:

Can Onur Avci, Institute of Materials Science of Barcelona (ICMAB-CSCI)

"For outstanding contributions to understand current-induced spin-orbit torques and electrical control of the magnetization in magnetic insulators, and for the discovery of unidirectional spin Hall magnetoresistance".

The award ceremony will take place at the next "International Colloquium on Magnetic Films and Surfaces (ICMFS)" in Okinawa, Japan, July 10-15, 2022.

All awards are listed on the Commission's website <https://iupap.org/who-we-are/internal-organization/commissions/c9-magnetism/c9-awards/>