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# CALL FOR PAPERS

### Welcome to the conference COMPUMAG 2023

You are cordially invited to attend the 24<sup>th</sup> Conference on the Computation of Electromagnetic Fields COMPUMAG 2023 that will be held on May 22<sup>nd</sup>-26<sup>th</sup>, 2023 in the city of Kyoto, Japan. The COMPUMAG conferences began in 1976 in Oxford, United Kingdom. This conference aims to review recent developments in numerical computation of electromagnetic fields. There have been 23 conferences held so far in different countries covering all the world continents: Europe, Asia, America and Oceania.

### Venue

Kyoto's rich culture and 1,200 years of history as the capital of Japan never fails to impress visitors. Kyoto's 17 UNESCO World Cultural Heritage Sites are situated in a cityscape dominated by over 2,000 temples & shrines. This friendly city of 1.5 million people offers endless opportunities for COMPUMAG attendees to gain meaningful hands-on experience of rich Japanese culture through tea ceremony, sake brewing, kimono wearing, swordsmanship and more. Japan is renowned for its safety and the compactness of Kyoto makes for wonderful strolling during free time. From the moment of arrival at Kansai International Airport, guests of Kyoto can travel easily with clear multilingual signs and clean efficient transportation choices. The Kyoto International Conference Center (ICC Kyoto) is located at a convenient location about 15 minutes from the city center of Kyoto.

# Submission and publication of papers

Authors are invited to submit the 2-page short paper via the online submission system. Template and more detailed information can be found on the conference website (http://www.compumag2023.com). The authors of the accepted short papers will be invited to present their research work at the COMPUMAG 2023 by oral or poster presentations, and to submit 4-page full papers for possible publication in an issue of IEEE Transactions on Magnetics through a peer reviewing process.

# **Important dates**

Two-page digest submission due: December 9<sup>th</sup>, 2022 Notification of acceptance: February 15<sup>th</sup>, 2023 Early-bird registration due: February 27<sup>th</sup>, 2023 On-demand conference: A week after On-site Conference 4-page full paper for IEEE Trans. Magnetics due: June 11<sup>th</sup>, 2023

### Venue: Kyoto, Japan

#### **ICC Kyoto**

(Kyoto International Conference Center) 422 Iwakura Oosagi-cho, Sakyo-ku, Kyoto city 606-0001, Japan https://www.icckyoto.or.jp/en/



### **Conference organizers**

#### **General Chairs**

#### Chair:

Tetsuji Matsuo (Kyoto U., Japan)

#### Co-chair:

Hajime Igarashi (Hokkaido U., Japan)

### **Editorial Board Chairs**

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The aim of the conference is to discuss recent developments and practical applications in the numerical computation of electromagnetic fields for engineers and physicists engaged in the design of electromagnetic devices and systems. Reflecting the new trends and rapid progress in the field, authors from all over the world are encouraged to submit original and previously unpublished contributions. The conference will feature oral and poster presentations. With your valuable contribution and active participation, we believe that you will benefit from the excellent quality of technical presentations and fruitful discussions, experience pleasant moments by meeting friends/colleagues and establishing new scientific relationships and networking. The COMPUMAG 2023 will be held on-site. On-demand (online) sessions are planned for the researchers who cannot visit Japan for unavoidable reasons such as the country policy responses to COVID 19.

### Exhibition

Exhibitions on computational electromagnetics software and computer tools, scientific instruments for electromagnetic testing and validation in conjunction with COMPUMAG 2023 are planned to be held during the conference. The objective is to give the participants the opportunity to be acquainted with the latest innovations offered by state-of-the-art products available on the market. Potential exhibitors are cordially asked to contact the organizers for further information or refer to the COMPUMAG 2023 website providing the details of exhibition guidelines.

### **Topic list**

- 1. Mathematical modelling and formulations.
- 2. Static and quasi-static fields.
- 3. Wave propagation.
- 4. Electromagnetic compatibility.
- 5. Nano-electromagnetic computation.
- 6. Bio-electromagnetic computation.
- 7. Electromagnetic sensors, sensing and metrology.
- 8. Photonics and optoelectronics.
- 9. Material modelling.
- 10. Multi-physics and coupled problems.
- 11. Multi-scale modelling and homogenization.
- 12. Optimization and design.
- 13. Numerical techniques.
- 14. Software methodology.
- 15. AI and machine learning technologies.
- 16. Quantum and quantum-inspired computing in electromagnetics.
- 17. Novel computational methods for electric machines and devices.
- 18. Education.