

Message from the President, Prof. Rodrigo Martins

Dear all

Advanced materials, advanced functionality, and novel applications are at the heart of the innovations of today and tomorrow. The lessons taken from pandemic times is that world-wide interactions, supply channels and added-value chains imply that we must think globally while acting locally to promote science and technology network, to preserve our sustainable environment demands.

One major lesson learned is that solutions to impact in welfare and comfort of citizens crosscutting different sectors will depend on materials as activators and in the construction of a more resilient economy by guaranteeing raw materials supplies, by higher materials durability, higher degrees of materials re-cycling and re-use, by materials-saving products “by design”, and by enhanced repair; digital computing materials and exploitation of knowledge and data base, exploiting Artificial Intelligent tools. Moreover, science and ethics in science will help us to recreate our main paradigm!

We strongly believe in the paradigm “Open to the world”, and support globalization with global sourcing, global co-operation, and global associations. Therefore, all the actions listed before have to be thought as parts of a common house where the central vector are humans that require safety, comfort and welfare from a society that may require different types of organizations and demands. Therefore, science and technology should not be just focused on how economy can growth but how this can be done in a better harmonious society that is looking after the realization of demands not focus on an activator himself but in a common house that should sustain all innovation we are looking and seeking for our progress.

The International Union of Materials Research Societies aims to be the place of this common house, where global interested, translated by its 14 adhering bodies, representing the best that has been doing in Materials worldwide as societies are concerned, representing global researchers, via Materials Research Societies from Africa, Australia, Brazil, China, Europe, India, Indonesia, Japan, Korea, Mexico, Singapore, Taiwan, Thailand, Russia.

We aim, through our events, conferences, education for young programs and awards, our contributions to the International Scientific Committee of UNESCO and to IUPAP (International Union of Pure and Applied Physics) to bring together brilliant minds from all over the world in a creative and stimulating environment. By doing so, we aiming to promote networking and accelerating progress towards a connected, sustainable future for all.

A tight hug to all

Rodrigo Martins



Relocation of IUMRS Head Office

The IUMRS Head Office has been located in Singapore since 1 January 2021, and is hosted by the Nanyang Technological University.

The office is headed by its Director, Professor B. V. R. Chowdari. The current business address of IUMRS is

School of Materials Science & Engineering,
50 Nanyang Avenue, Nanyang
Technological University, BLK N4.1,
#01-02a, Singapore 639798

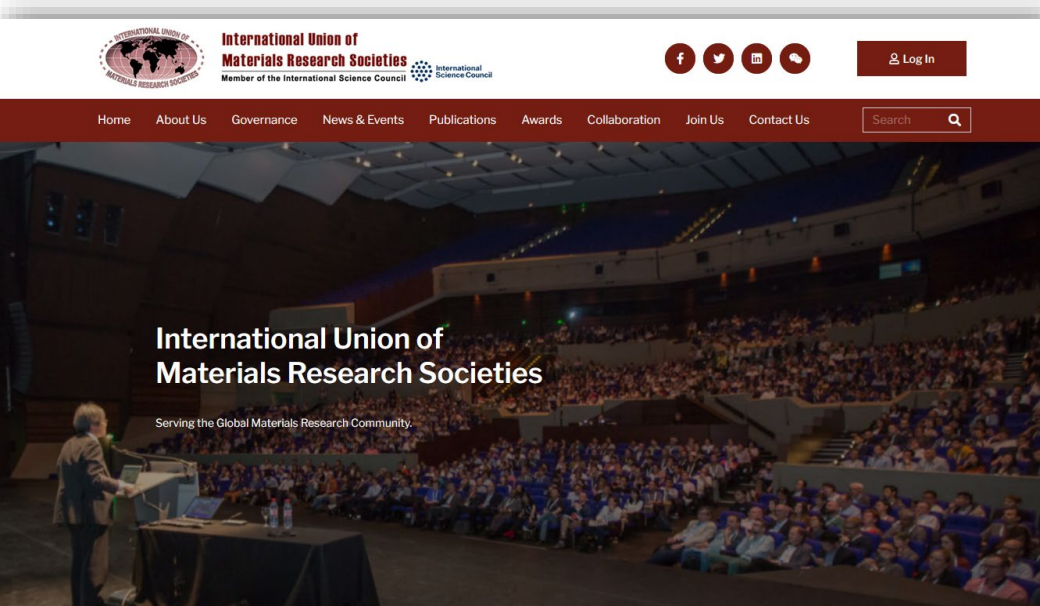
IUMRS is thankful to NTU administration for providing support and hosting IUMRS Head Office.

Highlights

- ☐ Launch of new IUMRS web site
- ☐ IUMRS Executive Council 2021-2022
- ☐ IUMRS General Assembly 2020 was held online
- ☐ First Asian Materials Summit
- ☐ IUMRS-ICA 2020 was held in Thailand
- ☐ MRS Singapore held International Conference on Materials for Humanity
- ☐ Upcoming events

About the Newsletter *This Newsletter is published by the IUMRS Head Office. The objective is to update adhering bodies and members on IUMRS activities and latest news/developments in the materials research community. The Newsletters will be distributed to adhering bodies, affiliated members, and interested parties in softcopy (PDF format). Adhering bodies, affiliated members, and members of adhering bodies are invited to contribute news items and articles. Besides activity reports, we also welcome short reviews on a research topic of current interest, book reviews, commentaries, and views on issues relevant to the materials research community, etc. Please contact the Head Office (email: admin@iumrs-ho.org) if you would like to contribute an article.*

A new look of IUMRS home page

<https://iumrs-ho.org>

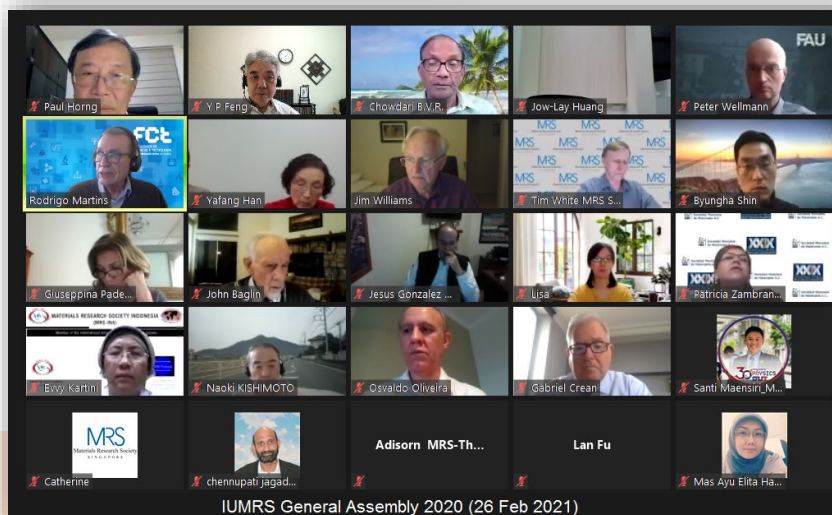
The redevelopment of the IUMRS web site has been completed recently. The new IUMRS home page, located at iumrs-ho.org, provides a more dynamics image of the Union, and easy navigation.

It is hoped that, in combination with social media, the web site will facilitate more direct communication between IUMRS and its member societies as well as materials science researchers at large.

IUMRS Adhering Bodies, individuals, are encouraged to contribute news/events items, reports on activities, and articles highlighting recent development in materials research, or topical reviews, etc.

IUMRS General Assembly 2020 was held online

Due to Covid-19, the 2020 IUMRS General Assembly (GA) was postponed to 2021 and it was held online on 26 February 2021. The virtual meeting was mainly to review progress and update IUMRS activities. The IUMRS gender equity and diversity policy was approved at the meeting. It was confirmed that the 2021 GA will be held as part of the upcoming virtual IUMRS-ICEM meeting hosted by MRS-Brazil (Aug 29-Sept 3, 2021), and this will be a regular GA with discussion and voting on a number of important issues.



Executive Council 2021-2022

Congratulations to Rodrigo Martins and Osvaldo N. Oliveira who assumed the duty of President and First Vice President of IUMRS, respectively, from 1 January 2021, and Jim Williams who was re-elected the Secretary of IUMRS. They will serve a two-year term from Jan 2021 to Dec 2022. The following is a list of current IUMRS Executive Council members.

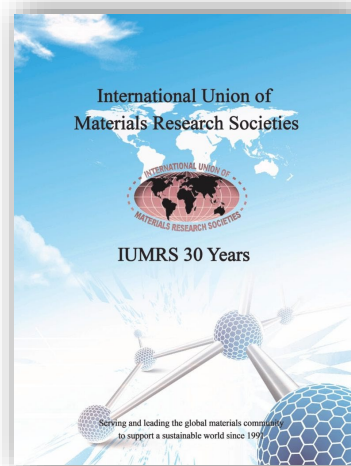
- Rodrigo Martins, President
- Yafang Han, Immediate Past President
- Osvaldo N. Oliveira, First Vice President
- Yuan Ping Feng, Second Vice President
- Jim Williams, Secretary
- Naoki Kishimoto, Treasurer
- B. V. R. Chowdari, IUMRS Head Office Director
- John Baglin, Liaison to International Science Council



IUMRS Legacy: Contributions from Volunteers

A book to commemorate the 30th anniversary of the founding of IUMRS

IUMRS was established in 1991. To commemorate the 30th Anniversary of the Founding of the Union and celebrating its achievement in the first three decades, IUMRS published a book entitled "IUMRS Legacy: contributions from volunteers". This is a collection of articles contributed by people who voluntarily served and contributed to the union and the society in one way or another. It also provides updated information about the current status of the union and its activities, as well as a futuristic outlook. It is hoped that the book will bring back fond memories of generations of volunteers who passionately served the community, and also to encourage the younger generation of materials researchers to make more impactful contributions to the course of humanity through materials research and the vehicle of IUMRS.



The PDF version of this book can be freely download from IUMRS web site <https://iumrs-ho.org/publications/iumrs-legacy-contributions-from-volunteers/>

Brief Report on IUMRS-ICA 2020



The 21st International Union of Materials Research Societies-International Conference in Asia (IUMRS-ICA 2020) was organized by Materials Research Society of Thailand (MRS-Thailand), and Materials Science Research Center, Faculty of Science, Chiang Mai University during February 23 - 26, 2021 as an online conference. The onsite venue of the conference is the Faculty of Science, Chiang Mai University, Chiang Mai.

There are 28 symposia covering a wide range of current topics in materials research. Participants include 6 plenary speakers, 38 keynote speakers, 80 invited speakers, 241 oral presentations, 252 poster presentations and 84 attendees (with no presentation). There are 14 proceeding and journals available for full paper submission.



The conference brings together a multi-disciplinary group of scientists from all over the world to present and exchange ideas relating to fundamental and applications of materials as well as the future trends in materials science research. The online conference was organized in one meeting room for plenary session & ceremonies and 16 meeting rooms for all parallel sessions. Over 700 participants of IUMRS-ICA2020 were from 25 countries as summarized in the following table.



The conference was successfully organized by over 200 local organizing committee members from Materials Science Research Center, Faculty of Science, Chiang Mai University in partnership with several universities and research institutes in Thailand, including Suranaree University of Technology, Kasetsart University, Chulalongkorn University, Naresuan University, Silpakorn University, Rajamangala University of Technology Thanyaburi, Synchrotron National Lab and National Science and Technology Development Agency. The support from industries and private sectors also includes Seagate Technology, Abex Technology, Cerntek Co. Ltd., RI Technologies and LMS Instruments Co. Ltd.



First Asia Advanced Materials Summit

The First Asia Advanced Materials Summit was initiated by China Association for Science and Technology (CAST), and organized by Advanced Materials Alliance of CAST Member Societies (AMAC), Asia Pacific Academy of Materials (APAM) and International Union of Materials Research Societies (IUMRS) Regional Office in Asia. The goal of the summits was to provide a platform for materials scientists, governmental officials and entrepreneurs from Asia and the world to exchange recent research and technological achievements, and to promote cooperation. The summit was held in Marriott Shanghai Parkview Hotel, Shanghai, China, March 8-10, 2021. The conference program included a plenary session and six parallel sessions covering areas in advanced materials research including Energy materials, Advanced process of light alloys, New electronic ceramic materials, Sensor system materials, Biomedical materials and Advanced biomaterials. The summit attracted over 220 participants, including 16 plenary speakers and 72 invited speakers.

The inaugural conference received generous support from China Textile Engineering Society, Chinese Materials Research Society, Chinese Society of Micro-Nano Technology, Donghua University, Fudan University, Shanghai Institute of Ceramics, CAS, Shanghai Jiao Tong University, Shanghai University, The Chinese Society for Metals, The Chinese Ceramic Society and The Nonferrous Metals Society of China.



Recent Events

- **International Conference on Materials for Humanity (MH21)**, a virtual conference organized by MRS Singapore, was held during 6-9 July 2021. With 8 plenary lectures, 18 symposia organized into 6 themes, MH21 emphasized the role of materials innovation and deployment in tackling global challenges in health, climate change and the environment. Over 800 participants from various parts of the world attended the 4-day events.
- **AAMS 2021** The first Asia Advanced Materials Summit (AAMS) was held in Shanghai, China, from 8 to 10 March 2021. The inaugural meeting was organized by IUMRS Regional in Asia, together with some Chinese organizations (see above).
- **IUMRS-ICA 2020** The 20th IUMRS-ICA was postponed to 2021 and took place from 23 to 26 February 2021 in Chiang Mai, Thailand. The conference was organized by MRS-Thailand, in hybrid format. (see report on previous page).
- **Nanotechnology Research & Innovation Bootcamp 2021** was organized by African MRS from 10 to 13 August 2021.
- **XXIX International Materials Research Congress**, the annual joint conference of MRS Mexico and MRS (USA) was held during 15-18 August, 2021 in Cancun, Mexico.

Upcoming Events

- **IUMRS-ICA 2021** (22nd) will be organized by MRS Korea and will be held at the Jeju International Convention Center (ICC) during 3-8 Oct. 2021. Meeting web site: <http://www.iumrs-ica2021.org/>
- **IUMRS-ICEM 2020** was postponed to 2021, and will be held online from 30 Aug. to 3 Sept. 2021, together with the XIX Brazilian MRS meeting. Web site: <https://www.sbpmat.org.br/19encontro/>.
- **IUMRS-ICYRAM 2022** will be organized by MRS Japan and will be held during 3 - 6 August, 2022 in Fukuoka, Japan. Conference web site: <https://icyram2022.wixsite.com/official-site>.
- **International Conference on Frontier Materials** will be organized by IUMRS Regional Office in Asia in Zhuhai, China, from 8 to 12 Dec. 2021. Web site: <http://www.icfm.org.cn/>.
- **EMRS 2021 Fall Meeting** will take place, in virtual format, from 20th to 23rd September 2021. Conference web site: <https://www.european-mrs.com/meetings/2021-fall-meeting>.
- **11th International Conference of the African Materials Research Society (AMRS2022)**, will be held in Dakar, Senegal, 12-15 December 2022. Web site: <https://africanmrs.net/senegal-2022/>.

