



## Sections and topics

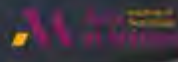
The ICSMA conference will make assessment on the state of art. of strength of materials research in the following main topics

- Characterization of deformation processes
- Elementary deformation mechanisms in engineering materials
- Fracture and fatigue
- Friction and wear
- Composite materials
- Glasses and non-crystalline solids
- High temperature deformation and creep
- Materials under extreme conditions
- Mechanical behavior associated with phase transformations
- Mechanistic foundations for multiscale modeling
- Integrated computational materials engineering
- Micro- and nano-scale mechanical testing
- Effects of grain boundaries and interfaces
- Reinforcements at the sub-nanometer scale
- Strength of biomedical and bio-inspired materials
- Mechanical behaviour of high entropy alloys
- SPD materials
- Light weighting of structures
- Tamas UNGAR Honorary Symposium
- Symposium on SPD Materials
- Symposium on Composition-Aware Plasticity Mechanisms in Alloys
- Atul CHOKSHI Honorary Symposium
- Alain JACQUES † Honorary Symposium

## Important deadlines

Deadline for abstracts submission: February 22, 2022  
 Manuscript submission deadline for publication in the special issue "Strength of Materials" of Episcience: before the conference starts

## Organizer



2022 June 26<sup>th</sup> - July 1<sup>st</sup>  
 Metz - France



## Contact

[icsma2022-local-committee@sciencesconf.org](mailto:icsma2022-local-committee@sciencesconf.org)

Address: LabEx DAMAS  
 Design of Alloy Metals for low-mAss Structures  
 7 rue Félix Savart, F-57070 Metz, France

## Registration fees

	Early March 1	Regular March 1 - April 15	Late April 15
Regular	580 €	630 €	680 €
Student	330 €	380 €	430 €
Accompany	100 €	100 €	100 €
Banquet	80 €	80 €	80 €
Excursion	40 €	40 €	40 €

## Conference Place



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The 19<sup>th</sup> International Conference  
 on Strength of Materials

[icsma2022.sciencesconf.org](http://icsma2022.sciencesconf.org)



## Invitation

ICSMA 19 is part of a traditional conference series organized every third year since 1967, so more than 50 years. It provides a comprehensive coverage on the research progress in the field of material strength. ICSMA is forging the interface between the mechanics and materials science communities by uniting the research forces to improve material performance. This conference is an international forum for exchanging on material strength of all engineering materials; from solid to bio-materials, from nanoscale to real size structures. The latest achievements obtained in experiments, characterization, simulation and modeling, as well as new applications for technology transfer will be presented and discussed. The Laboratory of Excellence "DAMAS" (Design of Alloy Metals for low-mAss Structures) of the Université de Lorraine and CNRS is in charge of the organization. The conference will be held in Metz, a thrilling city of France, where art and science is living in harmony since two thousand years.

The Organizers, composed of the International Scientific Committee, and the Local Organizing Committee are continuously working on making this event a real success. However, the final scientific success will depend mostly on your contribution, so we hope to welcome you in Metz in 2022!

## Supporting organizations



## Chairs of the Conference

**Prof. Laszlo S. Toth** – Chair, Univ. Lorraine.  
**Prof. Sabine Denis Co-Chair**, Univ. Lorraine.  
**Prof. Mikhail Lebyodkin Co-Chair**, CNRS.

## Local Organizing Team

Sébastien Allain, Benoît Beausir, Stéphane Berbenni, Olivier Bouaziz, Jacqueline Decker, Jean-Jacques Fundenberger, François Ganghoffer, Guillaume Geandier, Lionel Germain, Nathalie Gey, Thierry Grosdidier, Mahdia Hattab, Alain Jacques†, Nathalie Kasprzak Collay, Roxane Massion, Fodil Meraghni, Sébastien Mercier, Nathalie Niclas, Sylvie Niquet, Thiebaud Richeton, Thomas Schenk, Hamid Zahrouni, Yudong Zhang

## Members of the ICSMA International Scientific Committee

Angus J. Wilkinson, UK - Chair  
Michael Mills, USA - Vice Chair  
Irene Beyerlein, USA  
Andrea Hodge, USA  
Easo George, USA  
Peter Anderson, USA  
Chris Hutchinson, Australia  
Martin Heilmeier, Germany  
Werner Skrotzki, Germany  
Guenther Eggeler, Germany  
Marc Legros, France  
Reinhard Pippan, Austria  
Nobuhiro Tsuji, Japan  
Satyam Suwas, India  
Maria-Teresa Perez-Prado, Spain  
Cathy Rae, UK  
David Wilkinson, Canada  
Bill Curtin, Switzerland  
Lei Lu, China

## The local organizer: LABEX DAMAS

The Labex DAMAS was created in 2012 as part of the Program Investing in the Future of the French government. It is uniting the academic research forces of the LEM3 (Metz) and IJL (Nancy) laboratories; both are part of the Lorraine University. In this Labex 85 researchers and about 70 doctorate students are doing excellent research in the areas of mechanical, chemical and physical metallurgy. The LEM3 component of DAMAS developed strong expertise in mechanics of materials expertise, while the SI2M component of IJL is more specialized in material sciences. The four research axes of the Labex DAMAS cover the entire scale of material behavior, from molecular dynamics to mechanical behavior of structures in metals. The main objective is lightening of metal structures, which is possible in two ways: by increasing materials strength, or developing new materials with lower density. Therefore, material strength is the main research field in the Labex DAMAS.

Website of the Labex DAMAS: [labex-damas.com](http://labex-damas.com)

## Venue

