### IMPORTANT DATES

Feb 15, 2024

Abstract Submission opens

April 15, 2024

Abstract Submission closes

June 15, 2024

Notification of abstract acceptance

June 16, 2024

Online registration opens

July 31, 2024

"Early bird" registration closes

Nov 24, 2024

Conference commences

## **PROCEEDINGS**

The proceedings of ICACS and SHIM 2024 are anticipated to be published as a Special Issue in Nuclear Instruments and Methods in Physics Research Section B (NIM B). Manuscripts are submitted to EES through the Special Issue portal and go through a peer review process to the same standard as for regular NIM B articles.









































Australian National ICACS & SH M 2024

University 24 - 29 Nov, 2024 | Canberra, Australia

30th International Conference on Atomic Collisions in Solids & 12th International Symposium on Swift Heavy Ions in Matter





**Research School of Physics** 

**Australian National University** 

Canberra, Australia



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For more info

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# **TOPICS**

- · Charge-exchange processes;
- · Particle excitation and ionization;
- Energy loss, scattering and channelling of primary and secondary particles;
- Electron, atom, ion and photon emission processes;
- Slow highly-charged-ion interactions at surfaces;
- Radiation damage and materials modification, including nuclear-energy materials;
- High energy density physics with intense ion beams and in relation to plasma physics;
- Collision-induced physical, chemical and biological reactions
- Interactions of swift heavy ions with gases, liquids, solids and plasma;
- Electronic excitation, charge transfer processes, and local energy deposition;
- Conversion of electronic excitation energy into atomic motion, and atomic displacements;
- · Material modifications, ion track formation and modification;
- Creation of point defects and defect clusters, sputtering, mixing and recrystallisation:
- · Materials response in extreme environments;
- · Chemical and biological radiation effects;
- Swift heavy ion-induced processes in organic and inorganic materials;
- Radiobiology and tumour therapy with ion beams
- · Heavy-ion micro-and nanotechnology;
- · Effects of swift heavy ions on electronic devices;
- Geological, astrophysical and other applications based on high-energy accelerators;
- Dynamics of nuclear reactions and investigation of nuclear structure and dark matter

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- . Russia Christian Notthoff
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More to come