

The 16th International Conference on Accelerator Mass Spectrometry



Sunday, 20 October 2024 – Saturday, 26 October 2024

Session Topics

New and Advanced AMS Techniques

New techniques or innovations in AMS measurement and instrumentation.

Chaired by: Hans-Arno Synal, Ming He, Xiaolei Zhao

Positive Ion AMS

Developments in techniques and instrumentation for positive ion Single Stage AMS.

Chaired by: Shan Jiang, Hiroyuki Matuszaki

RFQ Ion Cooler Techniques

Developments in RFQ Ion Cooler Techniques for AMS.

Chaired by: Peter Steier, Dennis Mücher

New Isotopes Methodologies

Development of techniques for the measurement and study of radioisotopes new to AMS.

Chaired by: Stefan Pavetich, Philippe Collon

Sample Preparation Techniques

Sample separation and preparation methods for achieving lower backgrounds, higher yields, and stronger ion beam currents.

Chaired by: Régis BRAUCHER, Hongtao Shen

Small C-14 Sample Techniques and Applications

Discussions will focus on milligram to microgram C fractions of natural and anthropogenic biomarkers, compound specific samples and aerosol fractions. Improvements on analytical separations to better isolate C fractions for subsequent AMS analyses, accuracy and precision validation (including blank assessment and background corrections) and/or applications of smaller targets in a wide variety of research areas are welcome.

Chaired by: Xiaomei Xu, Mariaelena Fedi

Radiohalide Techniques and Applications

AMS analysis of radionuclides as environmental tracers within geological, hydrological, and atmospheric systems.

Chaired by: Kimikazu Sasa, Xiaolin Hou, Tim Jull

Actinide Techniques and Applications

Discussions on the applications of actinide series elements.
Chaired by: Elena Chamizo, Stephan Winkler, Marcus Christl

Applications of Atmospheric and Environmental C-14

Applications involving modern C-14 in tracing environmental processes including greenhouse gases, soil processes, biodegradation, and groundwater.
Chaired by: Jocelyn Turnbull, Sheng Xu

Applications in Archaeology

AMS tools to study and date ancient humans and human activity.
Chaired by: Hong-Chun Li, Mariaelena Fedi

Applications in Climate Studies

Paleoclimate, ocean and sea ice evolution, glaciations, and climate reconstruction using AMS methods.
Chaired by: Weijian Zhou, Hiroyuki Matuszaki

Applications of Cosmogenic Isotopes

Applications involving isotopes created via cosmic ray activation and spallation. Topics include exposure dating and groundwater tracing.
Chaired by: Régis BRAUCHER, David Fink

Applications in Biomedicine

Applications of rare isotopes in tracking human diet, metabolism, and drug efficacy.
Chaired by: Mark Caffee; Hongtao Shen

Applications in Oceanography

Using the AMS to study sedimentation rates and records, or tracing ocean currents.
Chaired by: Marcus Christl, Stephan Winkler, Liping Zhou

Applications in Astrophysics and Nuclear Sciences

From the surface of Earth to meteorites and interstellar space. Using the AMS to help understand processes and phenomena within our universe; AMS methods for monitoring

nuclear emissions, identifying sources of emissions, and the management of nuclear waste.

Chaired by: Anton Wallner, Dennis Mücher

Reference Materials, Carriers, Intercomparisons

The investigation of reference materials, new carriers, and AMS intercomparisons.

Chaired by: David Fink, Anton Wallner

New and Upgraded Facilities

Report on new and updated AMS facilities.

Chaired by: Hans-Arno Synal, Xiaolei Zhao, Ming He, Kimikazu Sasa

IntCal and Dendrochronology

Discussion at the IntCal and dendrochronology focus on what dendrochronological datasets to be included in the next IntCal calibration curve, regional or laboratory offset corrections, and whether a single year curve for some time period is feasible.

Chaired by: Tim Jull; Mark Caffee

Manufacturers Session

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Chaired by: Hans-Arno Synal, Hongtao Shen

Memorial Session

This session will be dedicated to honoring the memory of our late predecessors who have made significant contributions to the field of accelerator mass spectrometry. It will be an opportunity for us to reflect on their legacy and celebrate their achievements that have paved the way for current and future advancements in AMS.

Organized by prof. Ala Aldahan