The 14th International Conference on Accelerator Mass Spectrometry

Monday 14 August 2017 - Friday 18 August 2017

University of Ottawa

Session Topics

New and Advanced AMS Techniques

New techniques or innovations in AMS measurement and instrumentation.
Organized by: David Fink, Hans Synal, Mark Caffee, Xiaolei Zhao.

Positive Ion AMS

Developments in techniques and instrumentation for positive ion Single Stage AMS.
Organized by: Stewart Freeman.

Ion Source and Interfaces

Developments in ion injection and instrumentation interfacing for AMS. Topics include ion production, gas source AMS, and gas chromatography interfacing.
Organized by: John Vogel, Ted Ognibene, Mark Roberts.

New Isotopes Methodologies

Development of techniques for the measurement and study of radioisotopes new to AMS.
Organized by: Keith Fifield, Xiaolei Zhao.

Sample Preparation Techniques

Sample separation and preparation methods for achieving lower backgrounds, higher yields, and stronger ion beam currents.
Organized by: Silke Merchel, Jack Cornett.

Ca-41 Techniques and Applications

Techniques for the measurement of Ca-41, elimination of its isobars, and applications.
Organized by: Jiang Shan, Mark Caffee.

Radiohalide Techniques and Applications

AMS analysis of radiohalides as environmental tracers within geological and hydrological systems.
Organized by: Hiroyuki Matsuzaki, Diedier Bourles, Jorge Niello.

Applications in Atmospheric and Environmental C-14

Applications involving modern C-14 in tracing environmental processes including greenhouse gases, soil processes, biodegradation, and groundwater.
Organized by: Andrew Smith, Vesa Palonen.

Applications in Nuclear Science

AMS methods for monitoring nuclear emissions, identifying sources of emissions, and the management of nuclear waste.
Organized by: Ian Clark, Matt Herod, and Jack Cornett

Applications of Cosmogenic Isotopes

Applications involving isotopes created via cosmic ray activation and spallation. Topics include exposure dating and groundwater tracing.
Organized by: John Gosse, Susan Ivy-Ochs, Regis Braucher.

Applications of C-14

Applications of using C-14 for radiometric dating.
Organized by: John Southon, Lucio Calcagnile.

Applications in Biomedicine

Applications of rare isotopes in tracking human diet, metabolism, and drug efficacy.
Organized by: John Vogel, Mark Caffee.

Applications in Oceanography

Using the AMS to study sedimentation rates and records, or tracing ocean currents.
Organized by: Marcus Christl, Peter Steier.

Applications in Archaeology

AMS tools to study and date ancient humans and human activity.
Organized by: Masayo Minami, Marie-Josée Nadeau.

Applications in Climate Studies

Paleoclimate, ocean and sea ice evolution, glaciations, and climate reconstruction using AMS methods.
Organized by: Edouard Bard, Anne de Vernal.

Applications in Astrophysics

From the surface of Earth to meteorites and interstellar space. Using the AMS to help understand processes and phenomena within our universe.
Organized by: Georg Rugel, Peter Steier.

Reference Materials, Carriers, Intercomparisons

The investigation of reference materials, new carriers, and AMS intercomparisons.
Organized by: Anton Wallner, Mariaelena Fedi, Jack Cornett.

New and Updated Facilities [Posters Only]

Report on new and updated AMS facilities.
Organized by: Liam Kieser, Jesper Olsen.

Actinide Techniques and Applications [Workshop]

Discussions on the sample preparation techniques of actinide series elements as well as their applications.
Organized by: Alfred Dewald, Anton Wallner, Hiroyuki Matsuzaki, Keith Fifield, Marcus Christl, Jack Cornett.

Small C-14 samples [Workshop]

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.
Organized by: Guaciara dos Santos, Ann McNichol.

IntCal and Dendrochronology [Workshop]

Discussion at the IntCal and dendrochronology open workshop will 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. The formal IntCal committee (which will meet earlier in Belfast) will have representatives at this workshop.

Organized by: Timothy Jull, Charlotte Pearson, Alan Hogg, Paula Reimer