

# Technical Meeting on Developments in Non-Radiocarbon Accelerator Mass Spectrometry Techniques and Relevant Applications

(EVT1904256)

VIRTUAL Meeting; 11 – 14 October 2021

## MEETING AGENDA

Monday, October 11, 2021		
Time CET/Vienna <i>(speaker's local)</i>	Topic of presentation / discussion	Presenter / Participant and affiliation
13:00 – 13:10	<i>Opening – welcome addresses</i>	<b>Mr. Danas Ridikas</b> , Section Head, Physics Section, NAPC, IAEA
13:10 – 13:30 <i>(13:10 – 13:30)</i>	<i>Objectives and expected outputs of the Technical Meeting</i>	<b>Mr. Sotirios Charisopoulos</b> , Physics Section, NAPC, IAEA
13:30 – 13:50 <i>(07:30 – 07:50)</i>	<i>Applications of Fluoride Matrices in Target Materials for Heavy Element AMS Analysis</i>	<b>Mr. William Edward Kieser</b> , A. E. Lalonde AMS Laboratory, Univ. of Ottawa, 25 Templeton St, Ottawa, Ontario, Canada K1N 6N5
13:50 – 14:10 <i>(13:50 – 14:10)</i>	<i>Measurements of <sup>129</sup>I in coastal Pacific Ocean waters in California and US Pacific Northwest sites.</i>	<b>Mr. Anthony John Timothy Jull</b> , University of Arizona, Department of Geosciences, 1040 East 4th St, Tucson, AZ 85721, USA
14:10 – 14:30 <i>(22:10 – 22:30)</i>	<i>Tracing biological uptake of plutonium for radioecology applications</i>	<b>Mr. David Child</b> , ANSTO, New Illawarra Rd, Lucas Heights NSW 2234, Australia
14:30 – 14:50 <i>(22:30 – 22:50)</i>	<i>Technical and operational strategies to bolster cosmogenic isotope AMS</i>	<b>Mr. Klaus Wilcken</b> , ANSTO, New Illawarra Rd, Lucas Heights NSW 2234, Australia
14:50 – 15:10 <i>(14:50 – 15:10)</i>	<i>Radiological characterization for nuclear decommissioning with accelerator mass spectrometry</i>	<b>Mr. Erik Strub</b> , University of Cologne, Division of Nuclear Chemistry, Zùlpicher Str. 45, 50674 Cologne, Germany
15:10 – 15:30 <i>(15:10 – 15:30)</i>	<i>Isobar separation limits of Accelerator Mass Spectrometry and comprehensive approach by Ion Laser Photodetachment and Electron Transfer Reactions</i>	<b>Mr. Markus Schiffer</b> , University of Cologne, Institute of Nuclear Physics, Zùlpicher Str. 77, 50937 Cologne, Germany
15:30 – 15:50 <i>(15:30 – 15:50)</i>	<i>The EU funded project RADIATE for providing easy, flexible, and efficient access for Non-Radiocarbon AMS research</i>	<b>Ms. Silke Merchel</b> , University of Vienna, Faculty of Physics, Wàhringer Strasse 17, 1090 Vienna, Austria
15:50 – 16:10 <i>(15:50 – 16:10)</i>	<i>AMS in the Czech Republic - building a new laboratory</i>	<b>Mr. Mojmír Němec</b> , Czech Technical University in Prague, Břehová 7, 11519 Prague, Czech Republic

Tuesday, October 12, 2021		
Time CET/Vienna <i>(speaker's local)</i>	Topic of presentation / discussion	Presenter / Participant and affiliation
13:00 – 13:20 <i>(21:00 – 21:20)</i>	<i>Advances in the use of multiple cosmogenic nuclide pairs driving emerging applications in Earth sciences</i>	<b>Ms. Reka-Hajnalka Fùlöp</b> , ANSTO, New Illawarra Rd, Lucas Heights NSW 2234, Australia
13:20 – 13:40 <i>(13:20 – 13:40)</i>	<i>Linking 236-Uranium global fall-out to 90-Strontium: first results from a Pacific coral core</i>	<b>Mr. Stephan Winkler</b> , Helmholtz-Zentrum Dresden-Rossendorf, Bautzner Landstrasse 400, 01328 Dresden, Germany

<b>13:40 – 14:00</b> (14:40 – 15:00)	<i>Accelerator mass spectrometry of noble gases and medium-heavy nuclides</i>	<b>Mr. Michael Paul</b> , <i>The Hebrew University of Jerusalem, Racah Institute of Physics, E. Safra Campus, Jerusalem, Israel 91904</i>
<b>14:00 – 14:20</b> (21:00 – 21:20)	<i>Development of Non-Radiocarbon Accelerator Mass Spectrometry at the University of Tsukuba</i>	<b>Mr. Kimikazu Sasa</b> , <i>University of Tsukuba, 1-1-1 Tennodai, Tsukuba, Ibaraki, 305-8577, Japan</i>
<b>14:20 – 14:40</b> (08:20 – 08:40)	<i>Actinides &amp; Fission Products AEL-AMS AMS Research Capabilities</i>	<b>Ms. Barbara Bruna Alves Francisco</b> , <i>University of Ottawa, 25 Templeton St, Ottawa, Ontario, Canada K1N 6N5</i>
<b>14:40 – 15:00</b> (08:40 – 09:00)	<i>The AMS program at the Institute for Structure and Nuclear Astrophysics (ISNAP) at the University of Notre Dame</i>	<b>Mr. Philippe Alexandre Collon</b> , <i>University of Notre Dame, 225 Nieuwland Science Hall, Notre Dame, IN 46556, USA</i>
<b>15:00 – 15:20</b> (15:00 – 15:20)	<i>The HVE low-energy multi-element AMS system with charge state selector in its high voltage terminal</i>	<b>Mr. Matthias Georg Klein</b> , <i>High Voltage Engineering Europa B.V., Amsterdamseweg 63, 3812 RR Amersfoort, The Netherlands</i>
<b>15:20 – 15:40</b> (15:20 – 15:40)	<i>MILEA: Data from the new compact 300 kV multi-isotope AMS system</i>	<b>Mr. Sascha Maxeiner</b> , <i>Ionplus AG, Lerzenstrasse 12, 8953 Dietikon, Switzerland</i>
<b>15:40 – 16:00</b> (15:40 – 16:00)	<i>Accelerator mass spectrometry – an ultra-sensitive radionuclide analysis technology for new frontiers in science</i>	<b>Mr. Pavel Povinec</b> , <i>Comenius University in Bratislava, Faculty of Mathematics, Physics and Informatics, 84248 Bratislava, Slovakia</i>

### Wednesday, October 13, 2021

<b>Time</b> <b>CET/Vienna</b> <i>(speaker's local)</i>	<b>Topic of presentation / discussion</b>	<b>Presenter / Participant and affiliation</b>
<b>13:00 – 13:20</b> (20:00 – 20:20)	<i>Geochemistry of Anthropocene: Novel application field of AMS</i>	<b>Mr. Hiroyuki Matzusaki</b> , <i>The University Museum, The University of Tokyo, 7-3-1, Hongo, Bunkyo-ku, Tokyo 113-0033, Japan</i>
<b>13:20 – 13:40</b> (13:20 – 13:40)	<i>AMS as a tool in marine radioactivity investigations</i>	<b>Ms. Mercedes López-Lora</b> , <i>Linköping University, Radiation Physics, 581 83 Linköping, Sweden</i>
<b>13:40 – 14:00</b> (13:40 – 14:00)	<i>Application of Accelerator Mass Spectrometry to the characterization of nuclear residues</i>	<b>Mr. José María López Gutiérrez</b> , <i>Universidad de Sevilla, Centro Nacional de Aceleradores. c/ Thomas Alva Edison, nº 7, 41092 Sevilla, Spain</i>
<b>14:00 – 14:20</b> (08:00 – 08:20)	<i>Separation of Isobars via Ion-Molecule Reactions</i>	<b>Mr. Jean-François Alary</b> , <i>Isobarex Corp., 60 Equator Crescent, Vaughan, ON, Canada L6A2Y9</i>
<b>14:20 – 14:40</b> (14:20 – 14:40)	<i>Identifying water masses in the western Arctic Ocean using <math>^{233}\text{U}</math> and <math>^{236}\text{U}</math></i>	<b>Ms. Elena Chamizo Calvo</b> , <i>Universidad de Sevilla, Centro Nacional de Aceleradores. c/ Thomas Alva Edison, nº 7, 41092 Sevilla, Spain</i>
<b>14:40 – 15:00</b> (08:40 – 09:00)	<i>Regulatory applications of accelerator mass spectrometry</i>	<b>Mr. Matthew Herod</b> , <i>Canadian Nuclear Safety Commission, 280 Slater St, Ottawa, ON, Canada K1P 5S9</i>
<b>15:00 – 15:30</b>	<i>Round table: Recap of the meeting – Conclusions and next steps</i>	<b>All participants</b>
<b>15:30 – 16:00</b>	<i>Round table: Recommendations to the IAEA and drafting the meeting report</i>	<b>All participants</b>

**Thursday, October 14, 2021**

<b>Time CET/Vienna <i>(speaker's local)</i></b>	<b>Topic of presentation / discussion</b>	<b>Presenter / Participant and affiliation</b>
<b>13:00 – 13:45</b>	<i>Round table: Writing committee for a TECDOC on Non-Radiocarbon AMS Techniques and Applications - Need for an IAEA Coordinated Research Project?</i>	<b>All participants</b>
<b>13:45 – 14:45</b>	<i>Round table: Reviewing the draft meeting report and finalizing conclusions and recommendations</i>	<b>All participants</b>
<b>14:45</b>	<i>Closing of the Meeting</i>	<b>Ms. Melissa Denecke, Director, NAPC, IAEA</b>