

Centre for Accelerator Science Publications 2017-18**Books and Book Chapters**

Tristen Jones, Vladimir A Levchenko, Daryl Wesley, How old is X-ray art? Minimum age determinations for early X-ray rock art from the 'Red Lily' (Wulk) Lagoon rock art precinct, western Arnhem Land. In book: *The Archaeology of Rock Art in Western Arnhem Land, Australia*, Edition: Terra Australis 47, Chapter: 7, Publisher: ANU Press, Editors: Bruno David, Paul Taçon, Jean-Jacques Delannoy, Jean-Michel Geneste, pp.129 – 143 November 2017 DOI 10.22459/TA47.11.2017.07. Terra Australis (2016), accepted April 2016.

Journals**Internally Driven Research**

K.M. Wilcken, D. Fink, M.A.C. Hotchkis, D. Garton, D. Button, M. Mann, R. Kitchen, T. Hauser, A. O'Connor. Accelerator Mass Spectrometry on SIRIUS: New 6 MV spectrometer at ANSTO, Nucl. Instr. Meth. B 406 (2017) 278-282.

Jagoda Crawford, David D. Cohen, Alan D. Griffiths, Scott D. Chambers, Alastair G. Williams, Eduard Stelcer. Impact of atmospheric flow conditions on fine aerosols in Sydney, Australia. *Aerosol and Air Quality Research* 17 (2017) 1746-1759.

Jagoda Crawford, David D. Cohen, Eduard Stelcer, Armand J. Atanacio. Long term fine aerosols at Cape Grim global baseline station:1998 to 2016. *Atmos. Environ.* 166 (2017) 34-46.

Samuel Hammer, Ronny Friedrich, Bernd Kromer, Alexander Cherkinsky, Scott J. Lehman, Harro A.J. Meijer, Toshio Nakamura, V. Palonen, Ron W. Reimer, Andrew M. Smith, John R. Southen, Sönke Szidat, Jocelyn Turnbull, Masao Uchida and Ingeborg Levin, *Compatibility of atmospheric ¹⁴CO₂ measurements: comparing the Heidelberg low-level counting facility to international accelerator mass spectrometry (AMS) laboratories*, Published online 19/09/16. DOI: <https://doi.org/10.1017/RDC.2016.62>, pp. 1-9.

Zeljko Pastuovic, Rainer Siegele, David D. Cohen, Michael Mann, Mihail Ionescu, David Button, and Shane Long, The new confocal heavy ion microprobe beamline at ANSTO: The first microprobe resolution tests and applications for elemental imaging and analysis, *Nucl. Instr. Meth. Phys. Res. B* 404, 1-8 (2017). <http://dx.doi.org/10.1016/j.nimb.2017.01.059>.

Zeljko Pastuovic, Rainer Siegele, Ivana Capan, Tomislav Brodar, Shin-ichiro Sato, Takeshi Ohshima, Deep level defects in 4H-SiC introduced by ion implantation: The role of single ion regime, *J. Phys: Condens. Matter* 29, 475701 (2017). <https://doi.org/10.1088/1361-648X/aa908c>.

Carol V. Tadros, Jagoda Crawford, Pauline C. Treble, Andy Baker, David D. Cohen, Armand J. Atanacio, Stuart Hankin, Regina Roach. Chemical characterisation and source identification of atmospheric aerosols in the Snowy Mountains, south-eastern Australia. *Science of the Total Environment* 630 (2018) 432-443 <https://doi.org/10.1016/j.scitotenv.2018.02.231>.

A.J. Atanacio, M.A. Alim, T. Bak, M. Ionescu, J. Nowotny. Segregation in Titanium Dioxide Co-Doped with Indium and Niobium. *Journal of the American Ceramic Society*, 100 (2017) 419-428.

Journals**Externally Driven Research**

P. A. Cowie, R. J. Phillips, G. P. Roberts, K. McCaffrey, L. J. J. Zijerveld, L. C. Gregory, J. Faure Walker, L. N. J. Wedmore, T. J. Dunai, S. A. Binnie, S. P. H. T. Freeman, K. Wilcken, R. P. Shanks, R. S. Huisman, I. Papanikolaou, A. M. Michetti & M. Wilkinson, Orogen-scale uplift in the central Italian Apennines drives episodic behaviour of earthquake faults, *Scientific Reports*, Volume 7, 21 March 2017. DOI: 10.1038/srep44858

Isley C F, Nelson P F, Taylor M P, Mazaheri M, Morawska L, Atanacio A J, Stelcer E, Cohen D D, Morrison A L. Airborne ultrafine particles in a Pacific Island country: Characteristics, sources and implications for human exposure. *Environ. Pollution*. 231(Pt 1) (2017) 367-378. doi: 10.1016/j.envpol.2017.08.021.

- Kelleway, J. J., N. Saintilan, P. I. Macreadie, J. A. Baldock, H. Heijnis, A. Zawadzki, P. Gadd, G. Jacobsen, and P. J. Ralph (2017), Geochemical analyses reveal the importance of environmental history for blue carbon sequestration. *J. Geophys. Res. Biogeosci.*, 122, 1789–1805, doi:10.1002/2017JG003775.
- Michela Mariani, Simon Connor, Michael Fletcher, Martin Theuerkauf, Petr Kuneš, Geraldine Jacobsen, Krystyna Saunders, Atun Zawadzki. (2017). How old is the Tasmanian cultural landscape? A test of landscape openness using quantitative land cover reconstructions, *Journal of Biogeography* 44, (10), 2410–2420.
- Rebecca Elizabeth Smith; Jonathan J Tyler; Jessica Reeves; Simon Blockley; Geraldine E Jacobsen. (2017). First Holocene cryptotephra in mainland Australia reported from sediments at Lake Keilambete, Victoria, Australia. *Quaternary Geochronology*, 40, 82-91. doi.org/10.1016/j.quageo.2016.08.007
- xel Durand, Zanna Chase, Taryn L. Noble, Helen Bostock, Samuel L. Jaccard, Priya Kitchener, Ashley T. Townsend, Nils Jansen, Les Kinsley, Geraldine Jacobsen, Sean Johnson, Helen Neil. (2017). Export production in the New-Zealand region since the Last Glacial Maximum. *Earth and Planetary Science Letters* 469, 110-122.
- DN King; JR Goff; C Chagué-Goff; B McFadgen; GE Jacobsen; P Gadd; M Horrocks. (2017) Reciting the layers: Evidence for past tsunamis at Mataora - Wairau Lagoon, Aotearoa - New Zealand. Submitted to *Marine Geology*, 389, 1-16.
- Damien T Maher, Isaac R Santos, Kai Schulz, Mitchell Call, Geraldine E Jacobsen, Christian J Sanders. (2017). Blue carbon oxidation revealed by radiogenic and stable isotopes in a mangrove system. *Geophysical Research Letters*. 44, (10), 4889–4896
- C. F. Isley, P. F. Nelson, M.P. Taylor, E. Stelcer, A. J. Atanacio, D. D. Cohen, F.S. Manic and M. Maata. Reducing mortality risk by targeting specific air pollution sources: Suva, Fiji *Journal: Science of the Total Environment*, 612 (2017) 450-461.
- Field, Emily; Marx, Sam; Haig, Jordahna; May, Jan-Hendrik; Jacobsen, Geraldine; Zawadzki, Atun; Child, David; Heijnis, Henk; Hotchkis, Michael; McGowan, Hamish; Moss, Patrick. Untangling geochronological complexity in organic spring deposits using multiple dating methods, *Quaternary Geochronology* 43 (2018) 50–71.
- C F Isley, P F Nelson, M P Taylor, A Morrison, A J Atanacio, E Stelcer and D D Cohen. Ambient Air Quality And Indoor Exposure: PM2.5 Implications For Health In Suva Fiji. *Air Quality and Climate Change*, 52 (2018) 35-43.
- M.A. Alim, T. Bak, A. Atanacio, J.D. Plessis, M. Zhou, J. Davis, J. Nowotny. Electrical conductivity and defect disorder of tantalum-doped TiO₂. *Journal of the American Ceramic Society*, 100 (2017) 4088-4100.
- M.A. Alim, T. Bak, A.J. Atanacio, M. Ionescu, B. Kennedy, W.S. Price, J. Du Plessis, M. Pourmahdavi, M. Zhou, A. Torres, J. Nowotny. Photocatalytic properties of Ta-doped TiO₂. *Ionics*, 23 (2017) 3517-3531.
- K.A. Rahman, T. Bak, A. Atanacio, M. Ionescu, J. Nowotny. Toward sustainable energy: photocatalysis of Cr-doped TiO₂: 1. electronic structure. *Ionics*, 24 (2018) 309-325.
- K.A. Rahman, T. Bak, A. Atanacio, M. Ionescu, J. Nowotny. Toward sustainable energy: photocatalysis of Cr-doped TiO₂: 2. effect of defect disorder. *Ionics*, 24 (2018) 327-341.
- K.A. Rahman, T. Bak, A. Atanacio, M. Ionescu, J. Nowotny. Towards sustainable energy. Photocatalysis of Cr-doped TiO₂: 3. Effect of oxygen activity. *Ionics*, 24 (2018) 861-872.
- K.A. Rahman, A. Atanacio, M. Ionescu, J. Davis, T. Bak, J. Nowotny. Towards sustainable energy. Photocatalysis of Cr-doped TiO₂: 4. Electrochemical coupling. *Ionics*, 24 (2018) 873-881.
- K.A. Rahman, T. Bak, A. Atanacio, M. Ionescu, R. Liu, J. Nowotny. Towards sustainable energy: photocatalysis of Cr-doped TiO₂. 5. Effect of segregation on surface versus bulk composition. *Ionics*, 24 (2018) 1211-1219.
- Daniel S. Grant, Rainer Siegele, Kateryna Bazaka and Mohan V. Jacob, Formation of nanocrystalline and amorphous carbon by high fluence swift heavy ion irradiation of a plasma polymerized polyterpenol thin film precursor. *J. Appl. Polym. Sci* 46498(2018) *J. APPL. POLYM. SCI.* 2018, DOI: 10.1002/APP.4649846498
- C.F. Isley, P.F. Nelson, M.P. Taylor, A.A. Williams and G.E. Jacobsen. Radiocarbon determination of fossil and contemporary carbon contribution to aerosol in the Pacific islands. *Science of the Total Environment* 643 (2018) 183-192. <https://doi.org/10.1016/j.scitotenv.2018.06.182>.

Conferences

Internally Driven

Zeljko Pastuovic, Ivana Capan, Shin-Ichiro Sato, Tomislav Brodar, Rainer Siegele, and Takeshi Ohshima: Radiation Damage Studies in Detector Grade n-type 4H-SiC SBDs exposed to ion irradiation using nuclear techniques and transient spectroscopies, International Conference on Applications of Nuclear Techniques – CRETE2017, Crete, Greece, 11- 16 June 2017.

Ivana Capan, Shin-ichiro Sato, Zeljko Pastuovic, Tomislav Brodar, Norihiro Hoshino, Hidekazu Tsuchida and Takeshi Ohshima, Deep level defects in single ion regime implanted 4H-SiC epitaxial layers, 29th International Conference on Defects in Semiconductors-ICDS2017, Matsue, Japan, 31Jul – 4Aug 2017.

Payne, T.E., Harrison, J.J., Child, D.P., Hotchkis, M.A.C., Hughes, C.E., Johansen, M.P., Mokhber Shahin, L., Silitonga, A., Thiruvoth, S., Wilsher, K. Application Of Radiochemical Techniques To Characterise A Radioactive Legacy Site, RACI National Centenary Conference, Melbourne, Australia, 23-28 July 2017.

Johansen, M.P., Caffrey E.A., Child, D.P., Collins R., Harrison, J.J., Hotchkis, M.A.C., Howard D., Howell N., Payne, T.E., Mokhber Shahin, L., Ikeda-Ohno A., Thiruvoth, S. Methods For Investigating Australia's Former Nuclear Test Sites, RACI National Centenary Conference, Melbourne, Australia, 23-28 July 2017.

Harrison, J J, Smith, B S, Saunders, K M, Child, D P, Hotchkis, M A C, Heijnis, H, Johansen, M P, Marx, S, Payne, T E, Zawadzki, A. Baseline Plutonium Concentrations And Atom Ratios: New South Wales And Tasmania, Australia, RACI National Centenary Conference, Melbourne, Australia, 23-28 July 2017.

Klaus Wilcken, Dioni I. Cendón, Karina Meredith, Krista Simon, Attila Stopic, Mark Peterson, and Stuart Hankin, Groundwater tracing with nucleogenic ^{36}Cl in West Canning Basin, Western Australia, Geophysical Research Abstracts Vol. 19, EGU2017, 2017

David Fink, Henrik Rother, Craig Woodward, James Shulmeister, and Klaus Wilcken, The last deglaciation in New Zealand ; revisiting the Misery moraines at Arthur's Pass in the Southern Alps of New Zealand, Geophysical Research Abstracts Vol. 19, EGU2017-11332, 2017

M.A.C. Hotchkis, D.P. Child. Challenges in low level uranium AMS, 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

M.A.C. Hotchkis, D.P. Child, M.B. Froehlich and A. Wallner. Sub-attogram sensitivity in Plutonium AMS, 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

M.A.C. Hotchkis, D.P. Child, K.M. Wilcken, M. Williams. Actinides AMS on the VEGA accelerator, 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

D.P. Child, M.A.C. Hotchkis, M. Johansen. Radiological particle composition influence on plutonium bioaccumulation in Australian nuclear weapon test contaminated environments, 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

D.P. Child, M.A.C. Hotchkis, S. Marx, J. Knight, E. Field. The Australian fallout isotopic signature – implications for sediment fallout chronometry, 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

Bin Yang & A.M. Smith, A small and flexible processing line for the separation of CO_2 and CH_4 , combustion to CO_2 and graphitisation of CO_2 for AMS target production, abstract ID 311, poster presentation at 14th International Accelerator Mass Spectrometry conference, 14th – 18th August 2017, Ottawa, Canada.

Bin Yang, A.M. Smith, Vladimir Levchenko, Melita Keywood & Fabienne Reisen, A simple apparatus for the separation of organic (OC) and elemental (EC) carbon fractions in air filters for radiocarbon measurement by AMS abstract ID: 313, poster presentation at 14th International Accelerator Mass Spectrometry conference, 14th – 18th August 2017, Ottawa, Canada.

Réka-H Fulop, David Fink, Bin Yang, Alexandr T. Codilean, Andrew Smith, Tibor Dunai, The performance of the new UOW/ANSTO in situ ^{14}C line, case study from Central Australia, abstract ID 231 oral presentation at 14th International Accelerator Mass Spectrometry conference, 14th – 18th August 2017, Ottawa, Canada.

A.M. Smith, M.A.J. Curran, D.M. Etheridge, B.K. Galton-Fenzi, U. Heikkilä, A.R. Klekociuk, C. Long, L. Mokhber Shahin, A.D. Moy, J.B. Pedro, K.J. Simon & T.D. van Ommen, *A quasi-monthly record of atmospheric cosmogenic beryllium at Law Dome, Antarctica*, abstract ID 30, oral presentation at 14th International Accelerator Mass Spectrometry conference, 14th – 18th August 2017, Ottawa, Canada.

BIERMAN, Paul BROWN, Tom, CAFFEE, Marc, CORBETT, Lee, FINK, David, FREEMAN, S, HIDY, Alan, ROOD, Dylan. WILCKEN, Klaus, WOODRUFF, Thomas, ZIMMERMAN, Repeated preparation of CRONUS-N quartz standard for 10-Be and 26-Al at the University of Vermont and analysis at four different AMS laboratories. Susan. 14th International AMS Conference, Ottawa, Aug 2017

David Fink and Klaus Wilcken, Kunihiro Nishiizumi, Marc W. Caffee and Thomas Woodruff, , Stewart P. H. T. Freeman and Sheng Xu, Hiroyuki Matsuzaki, and Susan R. Zimmerman and Alan J. Hidy. High-precision measurements of new 10Be and 26Al AMS standards performed at 5 AMS facilities - a laboratory inter-comparison of reproducibility, accuracy, and linearity. 14th International AMS Conference, Ottawa, Aug 2017

David Fink, Klaus M. Wilcken, Toshi Fujioka, Andrew Smith, Charles Mifsud, Krista Simon, Steve Kotevski, The ANSTO – University of Wollongong Cosmogenic Working Group, , 14th International AMS Conference, Ottawa, Aug 2017.

David Fink, Henrik Rother, Craig Woodward, James Shulmeister, Klaus Wilcken . The last deglaciation in New Zealand ; revisiting the Misery moraines at Arthur's Pass in the Southern Alps of New Zealand,. 14th International AMS Conference, Ottawa, Aug 2017.

Ivana Capan, Tomislav Brodar, Takeshi Ohshima, Shin-ichiro Sato, Takahiro Makino, Željko Pastuović, Rainer Siegele, Luka Snoj, Vladimir Radulović, José Coutinho, Vitor J. B. Torres, Kamel Demmouche, Radiation hardness of 4H-SiC epitaxial layers: The role of deep level defects, International Conference on Silicon Carbide and Related Materials – ICSCRM2017, Washington DC, USA, 18-22 Sep17.

Mathew P. Johansen, David P. Child, Jennifer Harrison, Michael A.C. Hotchkis, Nicholas Howell, Scott D. Whiting. Plutonium in marine and terrestrial organisms at the Montebello Islands nuclear test sites: dose rates to sea turtles in a hot-particle environment, International Conference on Radioecology and Environmental Radioactivity, Berlin, Germany, 3-8 September 2017.

Rainer Siegele, Zeljko Pastuovic, Armand Atanacio, David D. Cohen, Heavy ion PIXE yields and cross sections on thin samples for 4.8-30 MeV oxygen and 3-112 MeV lithium ions. 23rd International Conference on Ion Beam Analysis, Shanghai, China, 8-13 October 2017.

Zeljko Pastuovic (invited). Deep level defects in 4H-SiC introduced by ion implantation: The role of single ion regime, Institute Jozef Stefan (IJS), Ljubljana, Slovenia, Oct2017;

David Cohen (fully funded, invited). Fine Particles - What are they and why should we better understand them?. Dept of Environmental Science, Chinese Institute for Atomic Energy (CIAE), Beijing, China , 16 October 2017.

David Cohen (fully funded, invited). Fine Particles – Accelerator Science at ANSTO. Dept Radiation Metrology, Chinese Institute for Atomic Energy (CIAE), Beijing, China , 19 October 2017.

Zeljko Pastuovic (invited). Applications of IBA microscopy to interdisciplinary research in fields of material science, bio-med, geology and cultural heritage, NSTLI talk, Lucas Heights, Australia, Oct2017;

David Cohen (invited), Armand Atanacio, Eduard Stelcer, David Garton, Judith Greenwood, Yvonne Scorgie. Characterising and sourcing fine particles in Sydney, and can particle sensors help. New Smart Sensing Network Air Sensing Workshop, Sydney Nanoscience Hub, University of Sydney, 16 November 2017.

Micro Conventional Furnace III and the application for Separation/Combustion of <0.5% volume CO₂ and CH₄ gas, Bin Yang and A. M. Smith, oral presentation at The 7th East Asia Accelerator Mass Spectrometry Symposium (EA-AMS-7), 19-25 November 2017, Guangxi Normal University.

Michael A.C. Hotchkis, David P. Child, Mathew P. Johansen, Atsushi Ikeda-Ohno, Nicholas Howell, Daryl L. Howard, Richard N. Collins. Markers from Australia's nuclear legacy in marine wildlife, 1st ANSTO User Meeting, Melbourne, 22-24 November 2017.

Zeljko Pastuovic (invited). The new SIRIUS accelerator system at ANSTO: Design, capabilities and recent applications for material modification and characterisation using accelerated ions, ANSTO User Meeting (AUM2017), Melbourne, Australia, Nov2017;

Vladimir A. Levchenko (invited), Dik J Kok, Alan Williams, Filomena Salvemini, Rainer Siegele, Penelope King, Ulrike Troitzsch, Anna Carnerup . The story of two stones – nuclear techniques reveal the secrets of renal calculi. AUM2017, 22-24 November 2017, National Centre for Synchrotron Science, Melbourne Australia.

Zeljko Pastuovic (invited). The new CHIMP beamline at ANSTO: The first nanobeam and applications for material characterisation, University of Wollongong, Wollongong, Australia, Nov2017;

D. Button (invited, partially funded), “Revision of 2016 Meeting Information”, *JACoW Team Meeting 2018*, IHEP, Beijing, China, Nov 28th 2017.

D. Button(invited, partially funded) , M. Marx,” Processing Transparencies & Embedding Animations”, *JACoW Team Meeting 2018*, IHEP, Beijing, China, Nov 28th 2017.

D. Button (invited, partially funded) , “Editing Papers, Current Tools, Tips & Tricks”, *JACoW Team Meeting 2018*, IHEP, Beijing, China, Nov 29th 2017.

Zeljko Pastuovic (invited). Recent developments and new capabilities for IBA at Centre for Accelerator Science of ANSTO, Consultancy Meeting of IAEA Physics Section, Vienna, Austria, Dec2017.

D. Button (invited, partially funded), “Lessons learned for next Team Meeting Feedback, *JACoW Team Meeting 2018*, IHEP, Beijing, China, Dec 1st 2017.

D.P. Child, M.P. Johansen, M.A.C. Hotchkis, A. Ikeda-Ohno, E. Young, Australia’s radiological particle nuclear weapon test legacy – particle characteristics and environmental impact, MARC XI 2018, Hawaii, USA, April 9-13 2018.

D.P. Child, M.A.C. Hotchkis, M.B. Froehlich and A. Wallner. Sub-attogram sensitivity in Actinides AMS, MARC X1, Hawaii, USA, April 9-13 2018

David Cohen (invited, fully funded). Fine-Coarse particle elemental and source databases at ANSTO. Victorian EPA Source Apportionment – why, what and how workshop, 2-3 May 2018, Melbourne, Victoria, Australia.

David Cohen (invited, fully funded). Assessing the impact of industrial activities, including coal-fired power stations, on urban air quality in the Asian region. IAEA Regional Meeting on Air Quality and Environmental Impact Assessment of Industrial Activities in Asian Region, Jeju Island, Republic of Korea, 9-11 May 2018.

David Cohen (invited, fully funded). Measuring black carbon or soot in the atmosphere. IAEA Regional Training Workshop on Long Range Transport of Atmospheric Aerosols in the Asia-Pacific Region, Chengdu, China, 14 – 18 May 2018.

David Cohen (invited, fully funded). IAEA/ RCA Fine-Coarse Particle Elemental and Source Databases. IAEA Regional Training Workshop on Long Range Transport of Atmospheric Aerosols in the Asia-Pacific Region, , Chengdu, China, 14 – 18 May 2018.

David Cohen (invited talk). Accelerator Science at ANSTO. College of Nuclear Technology in Chengdu University of Technology, Chengdu, China, 16 May 2018.

Conferences

Externally Driven Research

A. Wallner, N. Kinoshita, J. Feige, M. Froehlich, M. Hotchkis, L.K. Fifeld, R. Golser, M. Honda, U. Linnemann, H. Matsuzaki, S. Merchel, S. Pavetich, M. Paul, G. Rugel, D. Schumann, S.G. Tims, P. Steier, T. Yamagata, S.R. Winkler. 60Fe and 244Pu in deep-sea archives - a link to nearby supernova activity and r-process sites, Nuclear Physics in Astrophysics International Conference (NPA8), Catania, Italy, 18-23 June 2017.

Silke N. Kinoshita, A. Wallner, M. B. Froehlich, J. Feige, M. Hotchkis, M. Paul, L.K. Fifield, R. Golser, M. Honda, H. Matsuzaki, S. Pavetich, G. Rugel, D. Schumann, S.G. Tims, P. Steier, T. Yamagata, S.R. Winkler. Search for Pu-244 detected in manganese crusts, Actinides-2017, Sendai, Japan, 9-14 July, 2017.

Mechernich, Tibor J. Dunai, Steven A. Binnie, Tomasz Goral, Stefan Heinze, Alfred Dewald, Lucilla Benedetti, Irene Schimmelpfennig, Fred Phillips, Shasta Marrero, Mehmet Akif Sarıkaya, Laura C. Gregory, Richard J. Phillips, Klaus Wilcken, Krista Simon, and David Fink, Carbonate and silicate rock standards for cosmogenic ^{36}Cl , Geophysical Research Abstracts Vol. 19, EGU2017-10093, 2017

A. Wallner, N. Kinoshita, M. Froehlich, M. Hotchkis, M. Paul, L.K. Fifeld, S. Pavetich, S.G. Tims. The unknown site of r-process nucleosynthesis – clues from extraterrestrial ^{244}Pu and ^{247}Cm ? 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

Wallner, N. Kinoshita, J. Feige, M. Froehlich, M. Hotchkis, L.K. Fifeld, R. Golser, M. Honda, U. Linnemann, H. Matsuzaki, S. Merchel, S. Pavetich, M. Paul, G. Rugel, D. Schumann, S.G. Tims, P. Steier, S.R. Winkler, T. Yamagata. Interstellar ^{60}Fe detected on Earth - but where is the r-process nuclide ^{244}Pu ? 14th International AMS Conference, Ottawa, Canada, August 14-18, 2017.

Vladimir A. Levchenko and A. Alan Williams. Dating human samples for biomedical studies using the radiocarbon bomb pulse. 14th International Conference on Accelerator Mass Spectrometry, Ottawa, Canada, August 14-18, 2017.

Silke Mechernich, Tibor J. Dunai, Steven A. Binnie, Tomasz Goral, Stefan Heinze, Alfred Dewald, Lucilla Benedetti, Irene Schimmelpfennig, Fred Phillips, Shasta Marrero, Mehmet Akif Sarıkaya, Laura C. Gregory, Richard Phillips, Klaus Wilcken, Krista Simon, David Fink, Carbonate and silicate rock standards for cosmogenic ^{36}Cl , 14th International AMS Conference, Ottawa, Aug 2017.

Grethyl CATIPAY, Grace BETITO, Simonas KECORIUS, Thomas MUELLER, Preciosa Corazon PABROA, Melliza CRUZ, James SIMPAS, Maria Obiminda CAMBALIZA, Genevieve LORENZO, Sherdon Niño UY, Jackie IBAÑEZ, Arvin JAGONOY, Eduard STELCER, David COHEN, Armand ATANACIO, Alfred WIEDENSOHLER. Mass Closure Of PM_{2.5} Measurements During MACE 2015. Asia Ocean Geosciences Society (AOGS) 14th Annual Meeting at SUNTEC Singapore, 6-11 Aug, 2017.

N Mahahowald et al ..D.D.Cohen.. COARSE-MAP-Synthesis of observations and models for coarse-mode aerosols. American Geophysical Union Meeting (AGU), New Orleans, USA, 11-15 December 2017.

Vasilii V. Petrenko, Lee T. Murray, Brian Vasel, Edward J. Dlugokencky and Andrew M. Smith, *Using atmospheric ^{14}CO to constrain OH variability: concept and potential for future measurements*, abstract submitted for a poster presentation at the AGU Fall Meeting, New Orleans, USA, 11th - 15th December 2017.

Dyonisius, Michael; Petrenko, Vasilii V.; Smith, Andrew M.; Hmiel, Ben; Beck, Jonas; Seth, Barbara; Bock, Michael; Hua, Quan; Yang, Bin; Harth, Christina; Beaudette, Ross; Lee, James; Erhardt, Tobias; Schmitt, Jochen; Brook, Edward J.; Weiss, Ray; Fischer, Hubertus; Severinghaus, Jeffrey; *Methane triple isotopes mass balance from ice cores to constrain the sources of abrupt methane increase during the Oldest Dryas-Bølling transition*, abstract submitted for an oral presentation at the AGU Fall Meeting, New Orleans, USA, 11th - 15th December 2017.

O. C. Lind, J. A. Galván Moreno, R. Garcia-Tenorio, M. P. Johansen, D. P. Child, P. Roos, J. Jaroszewicz, G. Nuyts, S. Cagno, K.. Janssens, B. Salbu, Quantification of radioactive particle transformation processes of relevance for contaminated desert, semi-desert and Arctic ecosystems, 7th International Conference on Radioactivity in the Arctic & other Vulnerable Environments, Oslo, Norway, June 9-13 2018

Reports

Ettore VITTONI, Zeljko PASTUOVIC, Gyorgy VIZKELETHY, Milko JAKSIC, Mark BREESE, Javier GARCIA LOPEZ, Rainer SIEGELE, Veljko GRILJ, Natko SKUKAN, Carmen JIMENEZ RAMOS:

IAEA Technical report on “The determination of radiation hardness of semiconductor materials and devices with ion beams”, IAEA coordinated research project #F11016: Utilization of ion accelerators for studying and modelling of radiation induced defects in semiconductors and insulators”, 4Aug2017.

Armand Atanacio, David Cohen, David Button, Nikolas Paneras, David Garton. Multi-wavelength Absorption Black Carbon Instrument (MABI) Manual. pp1-43, December 2017.