

Schedule Overview

Time	Dec. 2 Mon	Dec. 3 Tue	Dec. 4 Wed	Dec. 5 Thu	Dec. 6 Fri
8:20					
8:40					
9:00		Registration			General AMS application / Carbon-14 age calibration and archaeological application
9:20					
9:40			New facility and status report I		
10:00		Pre-session	Coffee and tea		
10:20					Coffee and tea
10:40			New facility and status report II		
11:00			Lunch		Space and earth environmental science III
11:20					
11:40			Lunch		Business meeting / Closing
12:00					
12:20					
12:40					
13:00		Opening / Welcome talk			Mid-Conference One-day Trip
13:20					
13:40					
14:00		Space and earth environmental science I	New facility and status report III		
14:20					
14:40					
15:00					
15:20		Coffee and tea	Coffee and tea		
15:40					
16:00	Registration / Ice Breaker	Space and earth environmental science II	AMS development / Technical development / Heavy nuclides		
16:20					
16:40					
17:00					
17:20					
17:40					
18:00		Poster session	Poster session		
18:20					
18:40					
19:00				Gala Dinner (THE KAWABUN NAGOYA)	
19:20					
19:40					
20:00					

Dec. 7 (Sat) 8:30-18:30:

Post-Conference One-day Trip to Varve Museum and Wakasa Mikata Jomon Museum

Oral Presentation

MONDAY, DECEMBER 2, 2019

16:00 Registration

Ice Breaker

TUESDAY, DECEMBER 3, 2019

8:40 Registration

Pre-session

Chair: T. Nakamura

9:40	PRE-01	Progress in AMS and Opportunities for Applications with long-lived Radionuclides	H.-A. Synal
10:00	PRE-02	Latest results of the MILEA system - a new 300 kV multi-isotope AMS facility	A.M. Müller, S. Maxeiner, M. Christl, P. Gautschi, H.-A. Synal, C. Vockenhuber, and L. Wacker
10:20	PRE-03	New Developments for the MC-SNICS Ion Sources at NEC	M. Sundquist, R. Kitchen, T. Hauser, E. Alderson, A. Gajeski, K. Kearney, S. McNamer, A. O'Conner, A. O'Dwyer, M. Sandlin, and M. Stodola
10:40	PRE-04	Recent Progress in Positive Ion Mass Spectrometry (PIMS) for Radiocarbon Measurements	M. Sundquist, S.P.H.T. Freeman, R. Shanks, C. McIntyre, P. Salou, K. Kearney, R. Kitchen, T. Hauser, R. Bosch, and E.C. Alderson
11:00	PRE-05	Low energy ^{14}C and multi-element HVE AMS systems	G. Scognamiglio, M. Klein, N. Podaru, and D. Mous
11:20	PRE-06	Performance of the HVE 1 MV AMS system for the analysis of actinides and beryllium	G. Scognamiglio, M. Klein, N. Podaru, G. Domínguez, D. Mous, Q. Liu, and X.L. Zhao

11:40 Lunch at Universal Club

13:00 Opening

T. Nakamura

Welcome talk

K. Kusano

Session 1: Space and earth environmental science I

Chair: D. Fink

13:20	O-01 Keynote	Evidence for solar-flare and other cosmic-ray events in the ^{14}C record in tree rings and in other records	A.J.T. Jull, F. Miyake, and I. Panyushkina
14:00	O-02 Invited	Simulation of $\Delta^{14}\text{C}$ peak in AD 775 using MCNPX and Estimation of the occurrence time of the ^{14}C peak in AD 775 $\Delta^{14}\text{C}$ values in sub-annual tree rings	J. Park, J.-W. Seo, W. Hong, G. Park, K. Sung, Y.J. Park, and Y.-J. Kim
14:20	O-03	Variation of cosmogenic ^{10}Be for cosmic ray event in \sim 5480 BC from Antarctic Dome Fuji ice core	K. Kanzawa, F. Miyake, Y. Tada, K. Horiuchi, K. Ohtani, K. Sasa, Y. Motizuki, K. Takahashi, Y. Nakai, H. Motoyama, and H. Matsuzaki
14:40	O-04	Variations of Beryllium-10 and Chroline-36 deposition flux at Tsukuba, Japan	Y. Ochiai, K. Sasa, Y. Tosaki, T. Takahashi, M. Matsumura, and K. Sueki
15:00	O-05	Distribution of atmospheric concentrations of ^7Be and ^{10}Be in the marine boundary layer	T. Yamagata, H. Nagai, and H. Matsuzaki

15:20 Coffee and tea

Session 2: Space and earth environmental science II

Chair: H.-C. Li

15:40	O-06	Study on the natural iodine isotope system: a consideration from iodine geochemical cycle	H. Matsuzaki
16:00	O-07	Screening for Radionuclide Contamination from the Fukushima Accident by Iodine-129 Measurement in Corals from Baler	S.J. Limlingan, A.T. Bautista VII, A.M. Jagonoy, J.M. Racho, B.J. Arcilla, M.M. Bauen, J.D. Valdez, H. Kusuno, E. Dumalagan Jr., F.P. Sirigan, and H. Matsuzaki
16:20	O-08	Radiocarbon Releases from the Fukushima Dai-ichi Nuclear Power Plant	S. Xu, B. Chen, Y. Lang, G. Cook, S. Freeman, and P. Naysmith
16:40	O-09	Atmospheric $^{14}\text{CO}_2$ time series from Point Barrow, Alaska: ending of the “Bomb Radiocarbon Period” in the Northern Hemisphere	X. Xu, J.C. Walker, S. Newman, and S.E. Trumbore
17:00	O-31 Keynote	A long time-scale record of East Asian monsoon rainfall from Chinese loess ^{10}Be	W. Zhou, W.J. Beck, X. Kong, and F. Xian

17:40 Poster session

WEDNESDAY, DECEMBER 4, 2019**Session 3: New facility and status report I**

Chair: H. Matsuzaki

9:00	O-10 <i>Keynote</i>	The status report of AMS at CIAE	M. He, Q. Zhao, Y. Bao, Q. You, S. Su, S. Jiang, Y. Hu, Y. Pang, Y. Zhang, K. Li, X. Wang, S. Wu, F. Wang, and Q. Meng
9:40	O-11 <i>Invited</i>	Present status and application studies in GXNU-AMS Lab	H. Shen, Z. Zhao, Z. Li, M. Liu, M. Qi, S. Wei, Y. Bao, M. He, K. Sasa, and S. Jiang
10:00	O-12 <i>Invited</i>	Progress report and some applications of the NTUAMS Lab during 2017-2019	H.-C. Li, S.-C. Kang, C.-Y. Chou, and T. Chang

10:20 Coffee and tea**Session 4: New facility and status report II**

Chair: H. Shen

10:40	O-13 <i>Invited</i>	Status Report of Current Performance of KIGAM AMS Laboratory	W. Hong, J. Park, G. Park, Y. Park, and K. Sung
11:00	O-14 <i>Invited</i>	Current status of 6MV AMS Research at KIST	G.-H. Lee, M.-S. Oh, S.E. Song, J.H. Song, J.A. Eliades, J. Kim, J.Y. Kim, S.R. Seo, and B.-Y. Yu
11:20	O-15	Status of KOMAC-AMS	Y.-S. Cho, K. Choe, Y.S. Ha, and K.-R. Kim
11:40	O-16	AMS for New drug development support at KRICP in KIRAMS	J. Song, S. Dueker, C. Yeo, S. Bae, J.B. Park, and J. Shim

12:00 Lunch at Universal Club**Session 5: New facility and status report III**

Chair: J.-K. Kim

13:20	O-17	Status of the MALT-AMS system and analysis of environmental nuclides produced by the human nuclear activity	H. Matsuzaki, H. Tokuyama, T. Yamagata, Y.S. Tsuchiya, H. Kusuno, M. Toya, M. Kawamoto, T. Tanii, Y. Miyake, K. Nakashoji, and A.T. Bautista VII
13:40	O-18	Progress of Ultrasensitive Detection Techniques for the 6 MV multi-nuclide AMS System at the University of Tsukuba	K. Sasa, T. Takahashi, M. Matsumura, Y. Ochiai, T. Matsunaka, A. Sakaguchi, H. Shen, and K. Sueki
14:00	O-19	Present status of JAEA-AMS-TONO in 2019	N. Fujita, A. Matsubara, M. Miyake, T. Watanabe, Y. Saito-Kokubo, M. Kato, N. Okabe, N. Isozaki, C. Ishizaka, T. Nishio, A. Nishizawa, A. Shimada, and N. Ogata
14:20	O-20	A status report on a Single Stage Accelerator Mass Spectrometry at the Atmosphere and Ocean Research Institute, The University of Tokyo	Y. Yokoyama, T. Aze, Y. Miyairi, C. Sawada, Y. Ando, S. Izawa, and Y. Ueno
14:40	O-21	Radiocarbon dating at The University of Tokyo	M. Yoneda, H. Ozaki, and T. Omori
15:00	O-22	Present status and application studies with HVE ^{14}C AMS system at Nagoya University (2017/18/19)	T. Nakamura, M. Minami, H. Oda, A. Ikeda, M. Yamane, M. Nishida, Y. Wakasugi, R. Sato, H. Sawada, and H. Kitagawa

15:20 Coffee and tea**Session 6: AMS development / Technical development / Heavy nuclides**

Chair: W. Hong

15:40	O-23	Research on Miniaturized AMS Measurement of ^{129}I	Q. Zhao, M. He, Y. Pang, J. Gong, Y. Bao, Q. You, K. Li, S. Su, and Y. Hu
16:00	O-24	Low Energy AMS for ^{10}Be and ^{26}Al at Tianjin University	K. Dong, S. Xu, and Y. Lang
16:20	O-25	Limits of sensitivity in Actinides AMS	M.A.C. Hotchkis, D.P. Child, M. Froehlich, D. Koll, A. Wallner, and M. Williams
16:40	O-26	Cryogenic trapping of CO_2 in the presence of other gases	B. Yang, R. Kazemi, and A.M. Smith
17:00	O-27	The sample preparation and the ICP-MS and AMS measurement of uranium at MALT	L. Zheng, H. Matsuzaki, M. Toya, T. Yamagata, H. Tokuyama, and Q. Yang

17:20 Poster session

THUSDAY, DECEMBER 5, 20198:20 **Mid-Conference One-day Trip**18:00 **Gala Dinner at THE KAWABUN NAGOYA****FRIDAY, DECEMBER 6, 2019****Session 7: General AMS application / Carbon-14 age calibration and archaeological application**

Chair: H. Kitagawa

- 9:00 **O-28** Constraining the age of Aboriginal rock art using cosmogenic Be-10 and Al-26 dating of rock shelter collapse in the Kimberley region, Australia D. Fink, G. Cazes, R.H. Fülöp, and A.T. Codilean
- 9:40 **O-29** Expansion and demise of the Angkorian Khmer Empire Q. Hua, M. Hendrickson, D. Penny, D. Cook, and T. Hall
Invited
- 10:00 **O-30** Radiocarbon dating Ancient Loulan City B. Xu, and Z. Gu

10:20 Coffee and tea**Session 8: Space and earth environmental science III**

Chair: Q. Hua

- 10:40 **O-32** A high-resolution radiocarbon dating sand-loess sequence at Yulin, north-central China and East Asian winter monsoon variations Y. Gu, H. Lu, H. Zhang, C. Liang, and J. Wu
- 11:00 **O-33** Determining diurnal fossil fuel CO₂ and biological CO₂ by Δ¹⁴CO₂ observation on certain summer and winter days at Chinese background sites Z. Niu, and W. Zhou
- 11:20 **O-34** Chemometric Analysis of ¹⁴C and Fourier Transform Infrared Spectra to improve the chronology of Lake Biwa sediment core H. Kitagawa, W. Hong, A. Hayashida, and K. Takemura

11:40 Business meeting
Closing

Poster Presentation

Tuesday, December 3, 17:00 - 18:40

Wednesday, December 4, 17:20 - 18:40

New facility and status report

- P-01** A new compact radiocarbon AMS (MIni CArbon DAting System) recently installed at Nanjing University Z. Hongyan, G. Yao, L. Chenghong, and L. Huayu
- P-02** Research and performance with YU-AMS system T. Moriya, M. Takeyama, H. Sakurai, H. Miyahara, M. Ohyama, H. Saitoh, Y. Okada, and F. Tokanai
- P-03** Status report of the compact AMS facility at GIG, CAS S. Zhu, Z. Cheng, P. Ding, N. Wang, Y. Sun, G. Zhang, and C. Shen
- P-04** MALT Accelerator Report 2019 H. Tokuyama, H. Matsuzaki, Y. Tsuchiya, H. Kusuno, M. Toya, T. Yamagata, M. Kawamoto, L. Zhen, Y. Qi, L. Wang, T. Tani, Q. Yang, Y. Miyata, N. Miyauchi, A. Horiuchi, and K. Yoshida
- P-05** A New Accelerator Mass Spectrometry Facility in Qingdao National Laboratory for Marine Science and Technology, China X. Wang, S. Sun, Y. Xue, and H. Song
- P-06** Status of the QNLM-AMS facility and the process blank assessment of small sized samples for ^{14}C analysis S. Sun, L. Xu, Y. Xue, H. Song, and X. Wang
- P-07** Current status of the compact-AMS system at Paleo Labo Co., Ltd. S. Itoh, M. Sato, M. Hirota, Z. Lomtatidze, H. Yamagata, and K. Nakamura
- P-08** Performance of a newly installed MICADAS at the Ocean University of China Z. Wang, H. Zhang, X. Ning, X. Xu, H. Li, and M. Zhao
- P-09** OUC-CAMS: An introduction of the MICADAS installed at the Ocean University of China H. Zhang, X. Ning, Z. Wang, X. Xu, H. Li, and M. Zhao
- P-10** AMS program in Tianjin University Y. Lang, L. Cui, K. Dong, M. Zhang, J. Zhong, and S. Xu
- P-11** A new capability for ^{41}Ca analysis using CaF_3^- at the Xi'an-AMS Y.-C. Fu, W.-J. Zhou, P. Cheng, and L. Zhang

Technical development

- P-12** A Study of Surface Stripper for the AMS System with a Footprint below 2 m \times 2 m A. Matsubara, N. Fujita, and K. Kimura
- P-13** Ion Source development at the compact AMS at PKU X.F. Ding, D.P. Fu, L.P. Zhou, and K.X. Liu
- P-14** A performance report of the automatic pressing machine developed at the Atmosphere and Ocean Research Institute, The University of Tokyo C. Sawada, Y. Yokoyama, Y. Miyairi, and T. Aze
- P-15** Development of an automated system for conventional ABA treatment K. Sung, W. Hong, G. Sung, Y. Park, J. Park, and G. Park
- P-16** New procedure of CO_2 extraction for radiocarbon analysis of DIC in water samples at Nagoya University and Geological Survey of Japan H.A. Takahashi, H. Handa, M. Minami, R. Sato, and T. Nakamura

Space and earth environmental science

- P-17** Halogen isotopes analysis in Greenland SE dome ice core M. Toya, H. Matsuzaki, K. Horiuchi, Y. Iizuka, A.T. Bautista VII, L. Wang, and W. Xiao
- P-18** Interpreting ^{10}Be records in sediments with a chemometric analysis of optical properties M. Yamane, Y. Yokoyama, H. Matsuzaki, K. Takemura, and H. Kitagawa
- P-19** Tracing study and source analysis of atmospheric fossil fuel CO_2 by radiocarbon and air pollutants in Xi'an, China Y. Hou, W. Zhou, P. Cheng, and X. Xiong

Carbon-14 age calibration and archaeological application

- P-20** Potential ^{14}C excursions in the available radiocarbon calibration curve data J. Pawlyta, and A. Rakowski
- P-21** Applications of Miyake effect in construction of absolute dendrochronological scale A. Rakowski, M. Krapiec, J. Pawlyta, and D. Wiktorowski
- P-22** 775 and 994 ^{14}C event in the tree-rings of northern Japanese trees M. Hakozaiki, F. Miyake, and T. Nakamura
- P-23** Radiocarbon dating of a shrine pavilion and offerings at Abushina shrine in Gifu prefecture, Japan Y. Saito-Kokubu, T. Nisio, N. Fujita, and A. Matsubara
- P-24** AMS ^{14}C dating on Collagen, TOC and carbonate of bone and tooth samples at the NTUAMS Lab C.-Y. Chou, H.-C. Li, S.-C. Kang, and T. Chang
- P-25** The spatial distribution of shell ^{14}C ages in China. P. Cheng, and J. Dong
- P-26** Radiocarbon dating and diet analysis of cremated bones excavated from archaeological sites in Japan M. Minami, S. Wakaki, H. Mukumoto, and T. Nakamura

General AMS application

- P-27** A plan on accurate radiocarbon dating of ivory products in Japan and estimation of the original areas for providing ivory for legal international trading of ivory products T. Nakamura, H. Koike, M. Minami, and S. Nishida
- P-28** Radiocarbon ages of organic carbon in sediments, suspended particles, and benthic invertebrates in Otsuchi Bay, northeastern Japan N. Satoh, H. Fukuda, M. Hirose, Y. Miyairi, Y. Yokoyama, and T. Nagata
- P-29** Radiocarbon ages of POC, DOC, and DIC in ground ice in Siberian permafrost R. Sato, M. Minami, G. Iwahana, and T. Hiyama
- P-30** A $^{129}\text{I}/^{127}\text{I}$ data collection of marine biota H. Kusuno, H. Matsuzaki, M. Toya, and H. Tokuyama
- P-31** Preliminary test for ^{129}I measurement of CaCO_3 samples in JAEA-AMS-TONO T. Mitsuguchi, N. Okabe, M. Miyake, A. Matsubara, N. Fujita, T. Watanabe, and Y. Saito-Kokubu
- P-32** Iodine-129 time series records from coastal Taiwan G.S. Burr, H. Matsuzaki, B.-S. Wang, H. Kusuno, H. Tokuyama, and Y. Takeyasu
- P-33** Holocene activity of the Sagiriko fault detected from sediment cores and a ground penetrating radar profiling, Izu Peninsula, central Japan H. Kimura, T. Nakanishi, M. Yukawa, T. Hosoya, S. Ki-Suck, and W. Hong
- P-34** Radiocarbon age offsets of plants and shells in the Holocene sediments from the Lake Harutori, Pacific coast of Hokkaido, northeast Japan T. Nakanishi, W. Hong, K. Shigeno, and F. Nanayama
- P-35** Marine reservoir effects in transgressive sediments from the Miyazaki Plain, southeast coast of Kyushu, Japan T. Nakanishi, M. Niwa, N. Okabe, M. Kato, A. Matsubara, and N. Fujita
- P-36** Bomb $\Delta^{14}\text{C}$ record of a *Tridacna gigas* from South China Sea: chronology and paleceanography studies C.Y. Lin, and H.C. Li
- P-37** Small sample graphitization for ^{14}C dating using EA-AGE3 at JAEA-AMS-TONO T. Watanabe, Y. Saito-Kokubu, N. Fujita, C. Ishizaka, T. Nishio, A. Matsubara, M. Miyake, N. Isozaki, and A. Nishizawa
- P-38** 1.2-MV Carbon AMS Experiment in KOMAC-AMS K.-R. Kim, Y.S. Ha, K. Choe, and Y.-S. Cho
- P-39** AMS Prereatment Method for Biosample Analysis in KRICP C.S. Yeo, J.H. Song, S. Dueker, and J.H. Shim
- P-40** Assessing problems of AMS ^{14}C dating on peat samples by dating Carex species S. Kashyap, H.-C. Li, H.-L. Zhang, Z.-C. Wang, and X.-Y. Ning
- P-41** Chronology construction of a stalagmite from southwest China by ^{14}C , $^{230}\text{Th}/\text{U}$ and ^{210}Pb dating methods M.-Q. Liang, H.-C. Li, H.-S. Mii, and Z.-B. Ma
- P-42** Using ^{14}C dated stalagmite records to reconstruct paleoclimate change in South Siberia Y.-S. Chen, H.-C. Li, J.-J. Yin, H.-S. Mii, T. Blyakharchuk, and C.-C. Shen

Guides for Presentation and Proceedings

Posters:

The size of the presentation board is 170 cm high and 120 cm wide. Posters can be on the board from the start (Tuesday morning) till the end (Friday 13:00) of the symposium. After Friday 13:00, all posters leaving on the board will be shredded.

Oral Presentations:

Please bring your own computer for presentation. If it is impossible to bring it, please consult to the EA-AMS 8 organizing committee in advance.

Keynote lectures: 35 min + 5 min for Q&A (40 min in total).

Invited and other oral presentations: 15 min + 5 min for Q&A (20 min in total).

Proceedings:

All presenters have an opportunity to publish short paper (2-4 pages, written in English or Japanese) in the Proceedings of the 22nd Japanese symposium on Accelerator Mass Spectrometry (JAMS-22). We are planning to publish the Proceedings by April, 2020. We welcome submission of proofread manuscript from all the participants, using a web online system (<https://www.nendai.nagoya-u.ac.jp/eaams8/proceedings.html>) by February 28, 2020.