

## Conference Program

Sunday, 8 September 2002

## **17:00-20:00      Registration and Reception**

**Monday, 9 September 2002**

## 【Toyoda Auditorium】 (Plenary session)

08:00-09:00 Registration

## 09:00-09:30      **Opening of AMS-9** (chair: T. NAKAMURA)

## **SESSION 1: Keynote Address**

(chair: D.J. DONAHUE)

09:30-10:30 **25 years of AMS - Where do we stand?** O1-1  
M. SUTER\*

10:30-11:00 Coffee break

(chair: D. ELMORE)

11:00-12:00 **Developments in applications of AMS** O1-2  
L. K. FIFIELD\*

12:00-14:00      Lunch break

## **SESSION 2: New AMS Facility**

(chair: G. KORSCHINEK and K. KOBAYASHI)

14:00-14:15 The compact  $^{14}\text{C}$  AMS system at the University of Georgia O2-1  
M.L. ROBERTS\*, R.A. CULP, D.K. DVORACEK, G.W.L.  
HODGINS, M.P. NEARY and J.E. NOAKES

**14:15-14:30 Low-energy  $^{14}\text{C}$  AMS in Poznan Radiocarbon Laboratory, Poland** O2-2

14:30-14:45 T. GOSLAR\*, J. CZERNIK and E. GOSLAR  
The LLNL compact AMS system for biochemical  $^{14}\text{C}$  02-3

## **THE LIQUID COMPACTION SYSTEM FOR BIOMOLECULAR measurements**

14:45-15:00	<b>Status of the new AMS at Oxford</b>	02-4
	C. BRONK RAMSEY* and R. E. M. HEDGES	

15:00-15:15 **A new accelerator mass spectrometry facility in Lecce, Italy** O2-5  
C. BRONK RAMSEY\* and R. E. M. HEDGES  
L. CALCAGNILE\*, G. QUARTA, M. D'ELIA, A. RIZZO, M.  
KLEIN and D. JW. MOSES

15:15-15:30 KLEIN and D. J.W. MOOS  
**A small and compact AMS facility for depth profiling of tritium and other light elements** O2-6  
M. FRIEDRICH\*, W. PILZ, N. BEKRIS, M. GLUGLA, M. KIISK and V. LIECHTENSTEIN

15:30-16:00	Coffee break	
<b>SESSION 3: New AMS Facility and Technical Developments</b>		
	(chair: W.KRETSCHMER and H.MATSUZAKI)	
16:00-16:15	<b>AMS at the Institute of Physics, Bhubaneswar, India</b>	O3-1
	D. P. MAHAPATRA*, R. K. CHOUDHURY, A. K. BEHERA, B. L. K. SOMAYAJULU, S. CHAKRABORTY and K. GOPALAN	
16:15-16:30	<b>The 3MV NEC Pelletron AMS and other developments at Arizona</b>	O3-2
	D. J. DONAHUE*, A. J. T. JULL, J. W. BECK, G. S. BURR, D. BIDDULPH, L. R. MCHARGUE and A. L. HATHEWAY	
16:30-16:45	<b>A new environmental sciences AMS laboratory in Scotland</b>	O3-3
	S. FREEMAN*, P. BISHOP, C. BRYANT, G. COOK, T. FALLICK, D. HARKNESS, S. METCALFE, M. SCOTT, R. H. SCOTT and M. SUMMERFIELD	
16:45-17:00	<b>AMS at the Holifield Radioactive Ion Beam Facility</b>	O3-4
	A. GALINDO-URIBARRI*, B. E. FUENTES DE ROSADO, J. GOMEZ DEL CAMPO, P. A. HAUSLADEN, J. LIANG, R. L. AUBLE, J. R. BEENE, R. C. JURAS, Y. LAROCHELLE, M. J. MEIGS, G. D. MILLS, S. RAMAN and D. W. STRACENER	
17:00-17:15	<b>Isobar separation in accelerator mass spectrometry</b>	O3-5
	J. P. DOUPÉ, A. E. LITHERLAND*, I. TOMSKI and X-L. ZHAO	
17:30-20:00	<b>SESSION 4: Poster-1</b> <b>Open lab. of Nagoya AMS facility</b>	

## **Tuesday, 10 September 2002**

### **【Toyoda Auditorium】 (Plenary session)**

#### **SESSION 5: Future Problems**

(chair: R. J. SCHNEIDER and T. NAKAMURA)

9:00-9:30	<b>E/Q and ME/Q<sup>2</sup> interferences in the two models of <sup>14</sup>C Tandetron systems</b> M.-J. NADEAU, H. W. LEE, K. H. PURSER* and A. E. LITHERLAND	O5-1
9:30-10:00	<b>The old carbon project: how old is old?</b> R.P. BEUKENS, H.E. GOVE*, A.E. LITHERLAND, W.E. KIESER and X.-L. ZHAO	O5-2
10:00-10:30	<b>Calibration - past, present and future</b> J. VAN DER PLICHT	O5-3
10:30-10:45	<b>Radiocarbon AMS towards its low energy limits</b> H.-A. SYNAL*, M. DÖBELI, S. JACOB, M. STOCKER and M. SUTER	O5-4
10:45-11:00	<b>Isotopic fractionation in <sup>14</sup>C AMS measurements: how can we live with it?</b> M.-J. NADEAU*, A.E. LITHERLAND, A. RIECK, A. GOTTDANG and P. M. GROOTES	O5-5
11:00-11:30	Coffee break	

### **【Toyoda Auditorium】 (Parallel session)**

#### **SESSION 6A: Current AMS Labs**

(chair: H.-A. SYNAL and Y. NAGASHIMA)

11:30-11:45	<b>A status report on the Gif-sur-Yvette AMS facility</b> G. RAISBECK*, F. YIOU, C. EYMAS and J. LESTRINGUEZ	O6A-1
11:45-12:00	<b>Status report of the Seoul National University AMS facility</b> J.C.KIM*, M.Y.YOUN, I.C.KIM, J.H.PARK, H.R.CHOI, Y.M.SONG, J.KANG and Y.H.LIU	O6A-2
12:00-12:15	<b>Plans for expanded <sup>14</sup>C analyses at the NOSAMS facility - from paleoceanography to tracer biogeochemistry</b> K. F. VON REDEN*, J. DONOGHUE, K. ELDER, A. GAGNON, D. GERLACH, V. GRIFFIN, R. HEALY, P. LONG, A. P. McNICHOL, D. PERCY, M. L. ROBERTS, R. J. SCHNEIDER, L. XU and J. M. HAYES	O6A-3
12:15-12:30	<b>AMS measurement of <sup>10</sup>Be concentration in Chinese loess using PKUAMS</b> K.X.LIU*, H.L.GAO, F.XU, S.X.PENG, LP.ZHOU and Z.Y.GUO	O6A-4

12:30-14:00      Lunch break

## **SESSION 7A: Current AMS Labs and Technical Progresses**

(chair: S. SIE and S. MITARAI)

14:00-14:15	<b>The new Purdue ion source for AMS</b> D. ELMORE*, M. CAFFEE, K. MUELLER, R. DE BONTE, G. S. JACKSON, P. MUZIKAR, B. ALEXANDER and X. LU	O7A-1
14:15-14:30	<b>A gas ion source for continuous-flow AMS</b> R. J. SCHNEIDER*, S-W KIM, K. F. VON REDEN, J. M. HAYES, J. S. C. WILLS, V. GRIFFIN, A. SESSIONS and S. SYLVA	O7A-2
14:30-14:45	<b>The measurement of <math>^{36}\text{Cl}</math> with gas-filled TOF detection method</b> X. RUAN*, Y. GUAN, K. DONG, Y. ZHENG, M. HE, K. LIU , X. HAN and S. JIANG	O7A-3
14:45-15:00	<b><math>^{14}\text{C}</math>-AMS at the Leibniz-Labor: radiometric dating and isotope research</b> P. M. GROOTES*, M-J. NADEAU, A. RIECK and The LEIBNIZ-TEAM	O7A-4
15:00-15:15	<b>Status of the NRL TEAMS facility</b> D.L. KNIES*, K.S. GRABOWSKI, C.A. KENNEDY, C. CETINA, G.K. HUBLER, S.J. TUMEY, A.C. MIGNEREY, J.W. POHLMAN, R.B. COFFIN and M. GETANEH	O7A-5
15:15-15:30	<b>VERA, an AMS facility for all isotopes</b> P. STEIER*, R. GOLSER, W. KUTSCHERA, V. LIECHTENSTEIN, A. PRILLER, C. VOCKENHUBER and S. WINKLER	O7A-6
15:30-15:45	<b>Progress in AMS research at Kyoto University</b> M. NAKAMURA* , Y. TAZAWA, H. MATSUMOTO, M. HIROSE, K. OGINO and T. NAKANISHI	O7A-7
15:45-16:00	<b>Measurement of the half-life of <math>^{79}\text{Se}</math> with PX-AMS</b> M. HE* , S. JIANG, S. JIANG and S. WU	O7A-8
16:00-16:30	Coffee break	

## 【Toyoda Auditorium】 (Plenary session)

### SESSION 8: Technical Progresses

(chair: L. FIFIELD and Y. SHIBATA)

16:30-16:45	<b>Can a tandem accelerator measure masses?</b> P. A. HAUSLADEN*, J. R. BEENE, A. GALINDO-URIBARRI, T. A. LEWIS, D. C. RADFORD and D. SHAPIRA	O8-1
16:45-17:00	<b>Calorimetric low temperature detectors for AMS</b> S. KRAFT, R. GOLSER*, A. BLEILE, P. EGELHOF, O. KISSELEV, W. KUTSCHERA, V. LIECHTENSTEIN, H. J. MEIER, A. PRILLER, A. SHRIVASTAVA, P. STEIER, C. VOCKENHUBER and M. WEBER	O8-2
17:00-17:15	<b>Analysis of doubly-charged negative molecules by AMS</b> R. GOLSER*, H. GNASER, W. KUTSCHERA, A. PRILLER, P. STEIER and C. VOCKENHUBER	O8-3
17:15-17:30	<b>Measurement of carrier-free <math>^{10}\text{Be}</math> samples with AMS: the method and its potential</b> C. MADEN*, M. DÖBELI, P. W. KUBIK, M. FRANK and M. SUTER	O8-4
17:30-17:45	<b>Measurement of <i>in-situ</i> produced <math>^{14}\text{C}</math> in terrestrial rocks</b> Y. YOKOYAMA*, M. W. CAFFEE, R. C. FINKE, F. J. RYERSON, J. R. SOUTHON and K. NISHIZUMI	O8-5
17:45-18:00	<b>The development of a novel aluminum-26 ion source target material</b> R. FLAREND* and C. REED	O8-6
18:00-18:15	<b>Extraction and AMS measurement of carrier free <math>^{129}\text{I}/^{127}\text{I}</math> from seawater</b> F. YIOU*, G. RAISBECK and H. IMBAUD	O8-7

**【Symposion】** (Parallel session)

**SESSION 6B: Atmospheric Science**

(chair: K. VAN DER BORG and H. NAGAI)

11:30-11:45	<b>THEODORE, a two-step heating combustion system for the EC/OC separated determination of radiocarbon in the environment</b> S. SZIDAT*, H.W. GÄGELER and H.-A. SYNAL	O6B-1
11:45-12:00	<b>Inter-annual variation of atmospheric <math>^{14}\text{CO}_2</math> at latitude 15 degrees south sampled by ships-of-opportunity in the Western Pacific since 1994</b> H. KITAGAWA*, H. MUKAI, Y. NOJIRI, Y. SHIBATA, T. KOBAYASHI and T. NOJIRI	O6B-2
12:00-12:15	<b>Radiocarbon in tropical tree rings during the Little Ice Age</b> Q. HUA*, M. BARBETTI, U. ZOPPI, D. FINK and G. JACOBSEN	O6B-3
12:15-12:30	<b>Levels and behaviour of <math>^{129}\text{I}</math> in atmospheric samples from Southern Spain</b> J.M. LÓPEZ-GUTIÉRREZ*, F. J. SANTOS, M. GARCÍA-LEÓN, C. SCHNABEL, H. -A. SYNAL, S. SZIDAT and Th. ERNST	O6B-4
12:30-14:00	Lunch break	

**SESSION 7B: Archaeology**

(chair: S. KUZMIN and M. YONEDA)

14:00-14:15	<b><math>^{14}\text{C}</math> wiggle-matching analysis of charred wood samples related with the recent major eruption of Changbai Volcano, China/North Korea</b> T. NAKAMURA*, Y. ISHIZUKA, M. OKUNO, H. MORIWAKI, K.H. KIM, B. L. JIN, K. KIMURA, H. ODA and T. MITSUTANI	O7B-1
14:15-14:30	<b>Dating of s-type Haji ware</b> Z. LOMTATIZE*, H. FUJINE and E. NIU	O7B-2
14:30-14:45	<b>Radiocarbon dating of extinct fauna in the Americas recovered from tar pits</b> J. M. O'MALLEY, A. J. T. JULL*, P. S. MARTIN, R. D. E. MCPHEE and G. McDONALD.	O7B-3
14:45-15:00	<b>The mystery of the Persian mummy: original or fake?</b> W. KRETSCHMER*, G. MORGENROTH, A. SCHARF and T. UHL	O7B-4
15:00-15:15	<b>Late Glacial-Holocene environmental changes and its age in the Lower Amur River basin, Russian Far East: the Gursky peatbog case study</b> M. A. KLIMIN, Y. V. KUZMIN*, V. B. BAZAROVA, L. M. MOKHOVA and A. J. T. JULL	O7B-5

## Wednesday, 11 September 2002

09:00-17:30      **Conference Tour**  
17:30-19:30      **Conference Reception (Meiji-mura Museum)**

## Thursday, 12 September 2002

### **【Toyoda Auditorium】 (Plenary session)**

#### **SESSION 9: Special Lecture**

(chair: M. NAKAMURA)

09:00-09:50	<b>New features in nuclear structure far from the stability line</b> I. TANIHATA	O9-1
09:50-10:40	<b>Organic matter cycling within and between terrestrial and oceanic reservoirs: new insights from compound-specific radiocarbon analysis</b> T. I. EGLINTON*, N. OHKOUCHI, A. PEARSON, A. P. McNICHOL, D. MONTLUCON and J. M. HAYES	O9-2
10:40-11:00	Coffee break	

### **【Toyoda Auditorium】 (Parallel session)**

#### **SESSION 10A: Biomedical and Biochemical Sciences**

(chair: T. J. OGNIBENE and K. KOBAYASHI)

11:00-11:30	<b>Bringing AMS into the bioanalytical chemistry lab.</b> P. L. SKIPPER*, B. J. HUGHEY, R. G. LIBERMAN, M. H. CHOI, J. S. WISHNOK, R. E. KLICKOWSTEIN, R. E. SHEFER, C. PRAKASH, S. P. HARRIMAN and S. R. TANNENBAUM	O10A-1
11:30-11:45	<b>High binding of formic acid to biomacromolecules in mice</b> H. WANG*, L. XU, B. XUE, Y. LIU, SPENG, K. LIU, H. MA and Z. GUO	O10A-2
11:45-12:00	<b><math>^{26}\text{Al}</math> uptake into the tissues of suckling rats through maternal milk</b> S. YUMOTO*, H. NAGAI, K. KOBAYASHI, H. MATSUMURA, W. TADA, T. HORIKAWA, S. KAKIMI and H. MATSUZAKI	O10A-3

12:00-12:15	<b>Development of a precise, accurate, and rapid measure of bone turnover using accelerator mass spectrometry</b> G. S. JACKSON*, X. LU, D. ELMORE, B. R. MARTIN, C. TONG, G. McCABE, M. A. ROUNDS and C. M. WEAVER	O10A-4
12:15-12:30	<b>The measurement of <math>^{41}\text{Ca}</math> and its application for cell second messenger</b> S. JIANG*, M. HE, K. DONG, D. YUE, S. WU, Y. BAO, G. XU, X. ZHAO, S. LIU, X. RUAN and Q. LIANG	O10A-5

12:30-14:00      Lunch break

### **SESSION 11A: Glaciology, Cosmogeochemistry and Astrophysics**

(chair: M. CAFFEE and K. HORIUCHI)

14:00-14:15	<b>The last deglaciation in the Southern Hemisphere - Can cosmogenic exposure dating find the Younger Dryas?</b> D. FINK*, M. PRENTICE , P. AUGUSTINUS and J. SHULMEISTER	O11A-1
14:15-14:30	<b>Forcing mechanisms of paleoglaciations on the Tibetan Plateau</b> J.M.SCHAEFER*, P. OBERHOLZER, Z. ZHAO, S. IVY-OCHS, C.SCHLUECHTER, R. WIELER and P.W. KUBIK	O11A-2
14:30-14:45	<b><math>^{14}\text{C}</math> analysis of the Antarctic Dome-C core</b> R.S.W. VAN DE WAL, W.J.M VAN DER KEMP, K. VAN DER BORG *, A.F.M. DE JONG and C. VAN DER VEEN	O11A-3
14:45-15:00	<b>A high resolution record of chlorine-36 weapons-tests fallout from central Asia</b> J. R. GREEN*, L. D. CECIL, H.-A. SYNAL, K. J. KREUTZ, C. P. WAKE and V. B. AIZEN	O11A-4
15:00-15:15	<b>Radiocarbon contents in tree rings during the Spoerer minimum</b> K. MASUDA*, Y. MURAKI, H. MIYAHARA, T. UEMURA, M. KATO, H. TOYOIZUMI, T. NAKAMURA, H. KITAGAWA, E. MATSUMOTO and K. A. ARSLANOV	O11A-5
15:15-15:30	<b>Study of paleoenvironments in the international "Climate and Weather of the Sun-Earth System" program</b> R. FUJII*, T. YAMANOUCHI, K. MASUDA and Y. SHIBATA	O11A-6
15:30-15:45	<b>Recent advances in studies of extraterrestrial matter using cosmogenic radionuclides</b> R. C. REEDY*	O11A-7
15:45-16:00	<b><math>^{14}\text{C}</math> and <math>^{14}\text{C}</math>-<math>^{10}\text{Be}</math> terrestrial ages and weathering of meteorites from desert environments.</b> A. J. T. JULL*, L. R. MCHARGUE, S. E. KLANDRUD, A. SHAHAB, P.A. BLAND, D. A. KRING, D. H. HILL, A.W. R. BEVAN, J. KOBLITZ and L. SCHULTZ.	O11A-8

16:00-16:30 Coffee break

**【Toyoda Auditorium】 (Plenary session)**

**SESSION 12: Cosmogeochemistry and Astrophysics**

(chair: R. C. REEDY and M. IMAMURA)

16:30-16:45	<b>Proton - induced production cross sections and production rates of <math>^{41}\text{Ca}</math> from Fe and Ni</b> C. SCHNABEL*, H.-A. SYNAL, P. GARTENMANN, F.J. SANTOS, M. SUTER, A. TARABISCHI, T. BASTIAN, F. SUDBROCK, U. HERPERS, I. LEYA, M. GLORIS and R. MICHEL	O12-1
16:45-17:00	<b>Production calculation of cosmogenic nuclides in the atmosphere</b> J. BEER*, M. GRAJCAR, J. MASARIK, R. MUSCHELER and M. VONMOOS	O12-2
17:00-17:15	<b>Neutron flux variations in the Southern Hemisphere: refinement of cosmogenic nuclide scaling factors</b> I. J. GRAHAM*, B. BARRY, R. DITCHBURN, N. WHITEHEAD and A. ZONDERVAN	O12-3
17:15-17:30	<b>Production of selected cosmogenic radionuclides by muons</b> B. HEISINGER, D. LAL, A. J. T. JULL, P. W. KUBIK, S. IVY-OCHS, S. NEUMAIER, K. KNIE, V. LAZAREV and E. NOLTE*	O12-4
17:30-17:45	<b>Supernova produced <math>^{60}\text{Fe}</math> on earth</b> K. KNIE*, A. ARAZI, T. FAESTERMANN, G. KORSCHINEK, G. RUGEL and A. WALLNER	O12-5

**【Symposion】 (Parallel session)**

**SESSION 10B: Oceanography**

(chair: T. I. EGLINTON and M. MURAYAMA)

11:00-11:15	<b>Radiocarbon age differences between molecular and foraminiferal fossils in a marine sediment drift</b> N. OHKOUCHI*, T. I. EGLINTON, L. D. KEIGWIN and J. M. HAYES	O10B-1
11:15-11:30	<b>Use of radioactive and stable carbon isotopes to assess the coastal upwelling contribution of Arraial Do Cabo (Cabo Frio) , Brazil</b> K.C. FERRAZ, A.N. MARQUES JR, E.G. RODRIGUEZ, G.M. SANTOS, S.G. TIMS, L.K. FIFIELD and P.R.S. GOMES*	O10B-2
11:30-11:45	<b><math>^{14}\text{C}</math> records of a coral reef at Leizhou Peninsula, South China Sea and the events of climatic changes</b> W. YI*, C. SHEN, Y. SUN, K. YU, T. LIU, J. BEER, I.	O10B-3

	HAJDAS and G. BONANI	
11:45-12:00	<b>Post-bomb surface water radiocarbon history in Indo-Pacific corals</b>	O10B-4
	T.P. GUILDERSON*, S. FALLON, M. KASHGARIAN and D.P. SCHRAG	
12:00-12:15	<b>A semiannual radiocarbon record of a modern coral from the Solomon Islands</b>	O10B-5
	G.S. BURR*, A. SCHMIDT, F.W. TAYLOR and J. O'MALLEY	
12:15-14:00	Lunch break	
	<b>SESSION 11B: Hydrology</b>	
	(chair: L. D. CECIL and H. KITAGAWA)	
14:00-14:15	<b>Tracing the oceans with <math>^{39}\text{Ar}</math></b>	O11B-1
	Ph. COLLON*, I. AHMAD, M. BICHLER, W.S. BROECKER, J. CAGGIANO, L. D. CECIL, Y. EL MASRI, R. GOLSER, C.L. JIANG, A. HEINZ, D. HENDERSON, W. KUTSCHERA, B.E. LEHMANN, P. LELEUX, H.H. LOOSLI, R.C. PARDO, M. PAUL, K.E. REHM, P. SCHLOSSER, R.H. SCOTT, W.M. SMETHIE JR. and R. VONDRASEK	
14:15-14:30	<b>Carbon pool analysis of methane hydrate regions in the sea floor by accelerator mass spectrometry</b>	O11B-2
	K. S. GRABOWSKI*, D. L. KNIES, S. J. TUMEY, J. W. POHLMAN, C. S. MITCHELL and R. B. COFFIN	
14:30-14:45	<b>Evidence and implications of enhanced, regional-scale contaminant transport by anion exclusion: comparison of chlorine-36, iodine-129, and tritium as hydrologic tracers, eastern Snake River Plain aquifer, Idaho, USA</b>	O11B-3
	L. D. CECIL*, J. R. GREEN, H.-A. SYNAL, L.F. HALL, J. A. WELHAN, S. K. FRAPE and E. R. SUDICKY	
14:45-15:00	<b>Tracing groundwater from uranium rich environments by <math>^{36}\text{Cl}</math> isotope methods: possibilities for natural analogue studies</b>	O11B-4
	W. BALDERER and H.-A. SYNAL*	
18:00-20:00	<b>SESSION 13: Poster-2 Open lab. of Nagoya AMS facility</b>	

## **Friday, 13 September 2002**

### **【Toyoda Auditorium】 (Parallel session)**

#### **SESSION 14A: Sedimentology and Soil Science**

(chair: T. JULL and M. OKUNO)

09:00-09:15	<b>Age heterogeneity of soil organic matter</b> J. RETHEMEYER, P. M. GROOTES*, F. BRUHN, M.-J. NADEAU and N. ANDERSEN	O14A-1
09:15-09:30	<b>Variations in atmospheric <math>^{14}\text{C}</math> content at 12,800-12,400 BP. Radiocarbon chronology of Late-Glacial record from Hauterive/Rouges-Terres, Lake Neuchatel (CH)</b> I. HAJDAS*, G. BONANI, P. HADORN, N. THEW, G. R. COOPE and G. LEMDHAL	O14A-2
09:30-09:45	<b>Comparison of radiocarbon ages, varve chronology, and historical earthquake record from Dead Sea sediments</b> C. MIGOWSKI*, J. F.W. NEGENDANK, A. AGNON and M. STEIN	O14A-3
09:45-10:00	<b>Radiocarbon as a paleolimnological tracer in the Dead Sea</b> R. KEN-TOR*, M. STEIN, Y. ENZEL, G.S. BURR and B. LAZAR	O14A-4
10:00-10:15	<b><math>^{14}\text{C}</math>-AMS as a tool for the investigation of mercury deposition at remote Amazon region</b> J. A BARBOSA, R.C. CORDEIRO, E.V. SILVA, B. TURCQ, G.M. SANTOS, P.R.S. GOMES*, A SIFEDINNE, A.L.S. ALBUQUERQUE, L. D. LACERDA, P.A HAUSLADEN, S.G. TIMS, L.K. FIFIELD and V. A LEVCHENCO	O14A-5
10:15-10:30	<b>Grain size distribution, <math>^{10}\text{Be}</math> content and magnetic susceptibility of micrometer-nanometer loess materials</b> C. SHEN*, T. LIU, J. BEER, P. W. KUBIK and M. SUTER	O14A-6
10:30-11:00	Coffee break	

#### **SESSION 15A: Sedimentology, Soil Science and Forensic Problems**

(chair: J. SOUTHON and K. YOSHIDA)

11:00-11:15	<b>Iodine-129 signatures from recent meteoric and biological sources: implications for global iodine cycling in the environment</b> G. SNYDER*, U. FEHN and Y. MURAMATSU	O15A-1
11:15-11:30	<b>On the source of gas hydrates in the Nankai Trough: a <math>^{129}\text{I}</math> study</b> U. FEHN*, G. SNYDER, R. MATSUMOTO and Y. MURAMATSU	O15A-2

11:30-11:45	<b>Measurements of Pu and Ra isotopes in soils and sediments by AMS</b> S.G. TIMS*, G.J. HANCOCK, L. WACKER and L.K. FIFIELD	O15A-3
11:45-12:00	<b>Forensic applications of <math>^{14}\text{C}</math> bomb-pulse dating</b> U. ZOPPI*, D. FINK, Q. HUA, G. JACOBSEN, G. JONES and A. WILLIAMS	O15A-4
12:00-12:15	<b>Determining the date of formation of senile plaques and neurofibrillary tangles in the Alzheimer's disease brain with bomb pulse carbon</b> B. A. BUCHHOLZ*, M. A. LOVELL, J. D. ROBERTSON, C. XIE and W. R. MARKESBERY	O15A-5
12:15-14:00	Lunch break	

**【Symposion】 (Parallel session)**

**SESSION 14B: Nuclear Safeguards**

(chair: E. NOLTE and M. NAKAMURA)

09:00-09:15	<b>Environmental distribution of <math>^{236}\text{U}</math></b> D. CHILD*, M.A.C. HOTCHKIS, J. FERRIS, R. JEFFREE, S. MARKICH and C. TUNIZ	O14B-1
09:15-09:30	<b><math>^{36}\text{Cl}</math> measurements in Hiroshima: bomb induced and <i>in-situ</i> production</b> T. HUBER*, W. RUEHM, K. KATO, F. KUBO, V. LAZAREV and E. NOLTE	O14B-2
09:30-09:45	<b>AMS measurement of <math>^{63}\text{Ni}</math> at Munich in copper samples from Hiroshima: an update</b> G. RUGEL*, A. ARAZI, T. FAESTERMANN, K. KNIE, G. KORSCHINEK, A.A. MARCHETTI, J.E. MCANINCH, W. RUHM, T. STRAUME and A. WALLNER	O14B-3
09:45-10:00	<b>Chlorine-36 in granite samples from Hiroshima A-bomb site</b> Y. NAGASHIMA*, R. SEKI, T. MATSUHIRO, T. TAKAHASHI and K. SASA	O14B-4
10:00-10:15	<b><math>^{41}\text{Ca}</math> - an <i>in-vivo</i> dosimeter for thermal neutrons</b> A. WALLNER*, A. ARAZI, T. FAESTERMANN, A.M. KELLERER, K. KNIE, G. KORSCHINEK, H.J. MAIER, N. NAKAMURA, W. RUHM and G. RUGEL	O14B-5
10:15-10:30	<b>Actinide measurements by accelerator mass spectrometry at Lawrence Livermore National Laboratory</b> T.A. BROWN*, A. A. MARCHETTI, JP. KNEZOVICH and T.F. HAMILTON	O14B-6
10:30-11:00	Coffee break	

## **SESSION 15B: Nuclear Safeguards and Heavy Nuclides**

(chair: T. A. BROWN and Y. NAGASHIMA)

11:00-11:15	<b>Plutonium AMS at 300 kV ?</b>	O15B-1
11:15-11:30	L.K.FIFIELD*, H.-A.SYNAL and M.SUTER <b><math>^{244}\text{Pu}</math> in the environment</b>	O15B-2
	S. WINKLER*, I. AHMAD, R. GOLSER, W. KUTSCHERA, K. A. ORLANDINI, M. PAUL, A. PRILLER, P. STEIER, A. VALENTE and C. VOCKENHUBER	
11:30-11:45	<b>Re/Os measurements by microbeam AMS</b>	O15B-3
	S.H. SIE*, G.F. SUTER, G.C. CRIPPS and D.A. SIMS	
11:45-12:00	<b><math>^{182}\text{Hf}</math>, an extinct radionuclide of the early solar system and a possibly live supernova remnant on earth</b>	O15B-4
	C. VOCKENHUBER*, I. AHMAD, M. BICHLER, R. GOLSER, W. KUTSCHERA, A. PRILLER, P. STEIER and S. WINKLER	
12:00-14:00	Lunch break	

## **【Toyoda Auditorium】 (Plenary session)**

### **SESSION 16: AMS standards, Intercomparison, $^{14}\text{C}$ Calibration**

(chair: M. SCOTT and K. NISHIZUMI)

14:00-14:30	<b><math>^{10}\text{Be}</math>, <math>^{26}\text{Al}</math>, <math>^{36}\text{Cl}</math> and <math>^{41}\text{Ca}</math> AMS standards</b>	O16-1
	K. NISHIZUMI	
14:30-14:45	<b>First international <math>^{26}\text{Al}</math> interlaboratory comparison - part I</b>	O16-2
	S. MERCHEL* and W. BREMSER	
14:45-15:00	<b><math>^{230}\text{Th}</math> and <math>^{14}\text{C}</math> dating of speleothems from the Bahamas</b>	O16-3
	W. BECK* and D. RICHARDS	
15:00-15:15	<b>Future needs and requirements for AMS <math>^{14}\text{C}</math> standards and reference materials</b>	O16-4
	E. M. SCOTT*, D. D. HARKNESS, G. T. COOK and C. BRYANT	

15:15-15:45      Coffee break

## **SESSION 17: Summary and closing of AMS-9**

(chair: T. NAKAMURA)

15:45-16:45	<b>Conference Summary</b> W. KUTSCHERA
16:45-17:30	<b>Site for AMS-10 ?</b>
19:00-21:00	<b>Farewell party (Nagoya Beer Hall, KOYOEN)</b>