

Scientific Programme Overview of 23rd IBA

10.08 Sunday	10.09 Monday	10.10 Tuesday	10.11 Wednesday	10.12 Thursday	10.13 Friday				
Registration 14:00-21:00	Opening 8:10-8:30								
	Memorial 8:30-8:45	PL-3, 4 <i>Kaoru Nakajima</i> <i>François Schiettekatte</i> S7 8:30-10:00	IV-13	IV-14	PL-5, 6 <i>Kai Nordlund</i> <i>Thomas Osipowicz</i> S17 8:30-10:00	New detector, Facility and instrumentation O 61-64 S25 8:30-9:50			
	PL-1, 2 <i>Leonard C. Feldman</i> <i>Vittone Ettore</i> S1 8:45-10:15		Micro and Nano Probes for imaging IV 13, O 24-26 S13 8:30-10:00	Energy Application IV 14, O 27-29 S14 8:30-10:00					
	Photo & Coffee		Coffee	Coffee			Coffee	Coffee	
	IV-1	IV-2	IV-7	IV-8	IV-15	IV-16	Complementary IBA and other techniques O 65-68 S26 10:20-11:40		
	MEIS & LEIS IV 1, O 1-2 S2 11:00-12:10	IV-3	Damage and effects on materials pertaining IBA IV 7, O 11-14 S8 10:30-12:20	IV-9	Computer simulations and analysis O 30-33 S15 10:30-11:50	Stopping forces O 34-37 S16 10:30-11:50		Materials Science-1 IV 15, O 38-40 S18 10:30-12:20	Environmental Science and Geophysics IV 16, O 41-44 S19 10:30-12:20
		Cross Sections IV 2-3, O 3 S3 11:00-12:00		Art,Archaeometry Forensic IV 8-10,O 15 S9 10:30-12:20					
	Lunch		Lunch		Lunch		Lunch		
	Welcome Reception 18:30-21:00	IV-4	IV-5	IV-11	IV-12	<i>Outing</i>	IV-17	IV-18	<i>Free Afternoon</i>
		Experimental development and novel IBA IV 4, O 4-7 S4 13:50-15:40	SIMS - keV to MeV IV-6	Damage and effects on materials pertaining IBA IV 11, O 16-19 S10 13:50-15:40	'Total-IBA' and Quantification of IBA IV 12,O 20-23 S11 13:50-15:40		Materials Science-2 IV 17, O 45-47 S20 13:50-15:20	Ion Channeling IV 18, O 48-50 S21 13:50-15:20	
IV 5-6, O 8-10 S5 13:50-15:50									
Coffee		Coffee		Coffee					
Poster 1 S6 16:10-18:10		Poster 2 S12 16:10-18:10			Materials Science-3 O 51-55 S23 15:50-17:30		Light element analysis O 56-60 S24 15:50-17:30		
		<i>IBA Committee Meeting</i>		<i>Banquet</i>					
						Closing 11:40-12:00			

23rd International Conference on Ion Beam Analysis (IBA 2017) program

Conference Hall: Room 102 (1st Floor) and 202 (2nd Floor), East Wing of Guanhua Tower

Sunday, 08 October 2017	
14:00-21:00	Registration – Fuxuan Hotel
18:30-21:00	IBA 2017 Welcome Reception – location: The third floor of Danyuan Cafeteria
Monday, 09 October 2017	
08:00-16:00	Registration – Conference Hall
08:10-08:30 [Room202]	Opening remarks and welcome address <i>Li Jin – Vice President of Fudan University</i> <i>Fujia Yang – Chair of IBA 2017</i> <i>Ian Vickridge – Chair of the IBA International Advisory Committee</i> <i>Chair: Liqun Shi</i>
08:30-08:45	Commemoration for three IBA pioneers — <i>Ian Vickridge</i>
08:45-10:15 [Room 202]	Session 1: Plenary Presentation <i>Chair: Yongqiang Wang</i>
08:45-09:30	PL-1: Ion Beam Analysis History, Impact & Future <i>Leonard C. Feldman, Rutgers University, USA</i>
09:30-10:15	PL-2: Ion Beams for Diamond Research <i>Vittone Ettore, Physics Department, University of Torino, Italy</i>
10:15-11:00	Group Photo (Main entrance of Guanhua Tower) & Coffee Break
11:00-12:10	Session 2: MEIS & LEIS [Room 202] <i>Chair: Lyudmila Goncharova</i>
	Session 3: Cross Sections [Room 102] <i>Chair: François Schiettekatte</i>
11:00-12:10	[11:00-11:30] IV-1: As plasma doping and processing studied by quantitative medium energy ion scattering (MEIS) depth profiling <i>Jaap Van den Berg, University of Huddersfield, UK</i>
	[11:00-11:20] IV-2: Development of the PiGreCo simulation code for material analysis using the PIGE technique <i>Konstantinos Preketes-Sigalas, National Technical University of Athens, Greece</i>
	[11:30-11:50] O-1: The role of large-angle dual scattering in the MEIS analysis of gold nanostructures <i>Zsolt Zolnai, Institute of Technical Physics and Materials Science, Hungary</i>
	[11:20-11:40] IV-3: ERYA-Profiling code <i>João Duarte Neves Cruz, Universidade Nova de Lisboa, Portugal</i>
	[11:50-12:10] O-2: Ar cluster cleaning and other new applications of the ultra-high surface sensitivity of LEIS <i>Thomas Grehl, ION-TOF GmbH, Germany</i>
	[11:40-12:00] O-3: Projectile X-ray yields induced by heavy ion impact on solids <i>Johnny Dias, Federal University of Rio Grande do Sul, Brazil</i>
12:10-13:50	Lunch Break (Danyuan Cafeteria)

13:50-15:50	Session 4: Experimental development and novel IBA [Room 202] Chair: Chris Jeynes	Session 5: Secondary ion mass spectrometry - from keV to MeV [Room 102] Chair: Isao Yamada
13:50-14:20	IV-4: Spin dependent He⁺ ion scattering on solid surfaces Taku Suzuki, National Institute for Materials Science, Japan	IV-5: Development of Molecular Concentration Mapping Techniques Using MeV Focused Ion Beams Roger Webb, University of Surrey, UK
14:20-14:40	O-4: Hydrogen isotopes deposition and rentation in plasma facing material by in-situ NRA and ToF-SIMS Tieshan Wang, Lanzhou University, China	O-8: TOF-SIMS depth profiling of ultra-thin multilayer structures Alexander Tolstoguzov, Ryazan State Radio Engineering University, Russian Federation
14:40-15:00	O-5: Development of an in-air-ERDA system for hydrogen analysis Kohtaku Suzuki, The Wakasa Wan Energy Research Center, Japan	O-9: Ambient SIMS using MeV-Energy Heavy Ion Toshio Seki, Kyoto University, Japan
	[15:00-15:20] O-6: TOF-ERDA Spectrometry promoted by 5 keV Ar sputtering Zdravko Siketic, Ruder Boskovic Institute, Croatia	[15:00-15:30] IV-6: MeV-SIMS/SNMS, secondary ion and neutral mass spectrometry at very high energies Lars Breuer, University of Duisburg-Essen, Germany
	[15:20-15:40] O-7: Development of MeV-SIMS molecular imaging technique with continuous primary beam Primož Pelicon, Jozef Stefan Institute, Slovenia	[15:30-15:50] O-10: MeV SIMS as a tool for forensic examination of modern inks and toners Iva Bogdanovic Radovic (1) Ruđer Bošković Institute, Croatia; (2) University of Surrey, UK
15:50-16:10	Coffee Break	
16:10-18:10	Session 6: Poster Session 1 Zhihe Hall (2 nd floor), Guanghua Tower	

Tuesday, 10 October 2017		
08:30-16:00	Registration – Conference Hall	
08:30-10:00 [Room 202]	Session 7: Plenary Presentation Chair: Barney Doyle	
08:30-09:15	PL-3: Molecular analysis and imaging by transmission SIMS using MeV primary ions Kaoru Nakajima, Kyoto University, Japan	
09:15-10:00	PL-4: IBA software: getting as close to reality as possible François Schiettekatte, University of Montreal, Canada	
10:00-10:30	Coffee Break	
10:30-12:20	Session 8: Damage and effects on materials pertaining IBA [Room 202] Chair: Gyorgy Vizkelethy	Session 9: Art, Archaeometry and Forensic Science [Room 102] Chair: Melanie Bailey/ Simon Aliz
10:30-11:00	IV-7: Ion beam analysis of heritage materials - considerations regarding safety Zita Szikszai, ATOMKI–MTA, Hungary	IV-8: New AGLAE: upgrade and automation of the unique beamline dedicated to Cultural Heritage Claire PACHECO, C2RMF, Paris, France
11:00-12:20	[11:00-11:20] O-11: Comprehensive investigation of chemical changes in organic materials upon ion beam irradiation Róbert Huszánk, Institute for Nuclear Research, MTA Atomki, Hungary	[11:00-11:30] IV-9: IAEA-driven ion beam research and development Simon Aliz, IAEA, Austria
	[11:20-11:40] O-12: Negative thermal quenching behavior of electron irradiated GaInP top cell for triple-junction solar cells Junling Wang, Beijing Normal University, China	[11:30-11:50] O-15: Investigation of pigments used in Persian antique carpets (15th - 17th century) by IBA methods Omidreza Kakuee, Physics & accelerators research school, NSTRI, Iran
	[11:40-12:00] O-13: Influences of Ion-irradiations on Microstructure in Tritium Breeder Material Li₂TiO₃ Qiang Qi, Institute of Plasma Physics, CAS, China	[11:50-12:20] IV-10: DAPNe-IBA: A new tool for the IBA community? Melanie Bailey, University of Surrey, UK
	[12:00-12:20] O-14: Ion beam analysis of dielectric samples Edit Szilágyi, Wigner Research Centre for Physics, Hungarian Academy of Sciences, Hungary	
12:20-13:50	Lunch Break (Danyuan Cafeteria)	

13:50-15:40	Session 10: Damage and effects on materials pertaining IBA [Room 202] Chair: Zhu An	Session 11: 'Total-IBA' and Quantification of IBA [Room102] Chair: Tieshan Wang
13:50-14:20	IV-11: In-situ chemical analysis of technologically important interfaces using low energy ion beam based, newly developed liquid SIMS Zihua Zhu, PNNL, USA	IV-12: Bias and synergy in the self-consistent analysis of IBA data Tiago Fiorini da Silva, University of São Paulo, Brazil
14:20-14:40	O-16: Single ion displacement effects in heterojunction bipolar transistors studied by high energy focused heavy ion beams Gyorgy Vizkelethy, Sandia National Laboratories, USA	O-20: The value of RBS as a Primary Direct Reference Method Chris Jeynes, University of Surrey, UK
14:40-15:00	O-17: Investigation of lead white and zinc white after ion beam irradiation Lucile BECK, CEA, France	O-21: Can RBS reach 0.1% accuracy? Elis M Stori, University of Surrey, UK
15:00-15:20	O-18: Corrections in Single Event Effects cross section Nemitala Added, University of Sao Paulo, Brazil	O-22: Nano-Scale Ion Beam Analysis Torgny Gustafsson, Rutgers University, USA
15:20-15:40	O-19: Effects of exposure temperature and pre-damage on deuterium retention in tungsten Xiu-Li Zhu, Beihang University, China	O-23: The Particle-In-Cell simulations of the RF heating of a Non-neutral plasma in an Electron TRAP Muhammad Ikram, (1) Hazara University, Pakistan; (2) Università degli Studi di Milano, Italy.
15:40-16:10	Coffee Break	
16:10-18:10	Session 12: Poster Session 2 Zhihe Hall (2 nd floor), Guanghua Tower	
	IBA International Advisory Committee Meeting (Chancellor Club , Crowne Plaza Hotel)	

Wednesday, 11 October 2017		
08:30-16:00	Registration – Conference Hall	
08:30-10:00	Session 13: Micro and Nano Probes for imaging [Room 202] <i>Chair: Thomas Osipowicz</i>	Session 14: Energy Application [Room 102] <i>Chair: Feng Ren</i>
08:30-09:00	IV-13: Nanoscale imaging and compositional analysis in the helium ion microscope <i>Nico Klingner, HZDR, Germany</i>	IV-14: Application of IBA in Nuclear Energy Materials <i>Hongliang Zhang, Fudan University, China</i>
09:00-09:20	O-24: Development and Applications of the Data Acquisition System at IMP GeV Nuclear Microprobe <i>Jinlong Guo, IMP, CAS, China</i>	O-27: Depth profiling of C and ³He implanted in nanostructured W film <i>Francisco-Javier Ferrer-Fernandez, National Center for Accelerators, Spain</i>
09:20-09:40	O-25: Using High Energy Electrons for Elastic Recoil Detection of Hydrogen* <i>Barney Doyle, Sandia National Laboratories, USA</i>	O-28: Impact of crystallinity on the luminescence of Si-implanted thin films <i>Lyudmila Goncharova, Western University, Canada</i>
09:40-10:00	O-26: MeV-PIXE mapping of plant leaves applying tapered glass capillary microbeam <i>L.D. Yu, Thailand Center of Excellence in Physics, Thailand</i>	O-29: Hydrogen storage in Ti-based metal hydrides investigated by elastic recoil detection analysis (ERDA) <i>Christopher Mtshali, iThemba LABS/NRF, South Africa</i>
10:00-10:30	Coffee Break	
10:30-11:50	Session 15: Computer simulations and analysis [Room 202] <i>Chair: Matej Mayer</i>	Session 16: Stopping forces [Room 102] <i>Chair: Edit Szilágyi</i>
10:30-10:50	O-30: Time of Flight Medium Energy Ion Scattering Measurements of As Profiles in Plasma Doped FinFETS <i>Jonathan England, University of Surrey, UK</i>	O-34: Coupling of ionization and atomic defects in single crystal SrTiO₃ irradiated with ions <i>Haizhou Xue, University of Tennessee, USA</i>
10:50-11:10	O-31: Elastic scattering tomography of two-dimensional objects using MeV ions <i>Matej Mayer, Max-Planck-Institut für Plasmaphysik, Germany</i>	O-35: Electronic energy dissipation mechanisms for H, He and Ne in TiN <i>Daniel Primetzhofer, Uppsala University, Sweden</i>
11:10-11:30	O-32: Simulation of Fine Focus Time-of-Flight RBS using TRIM Backscattering Data <i>Albert Seidl, Hochschule Magdeburg, Germany</i>	O-36: Energy loss and stopping force of heavy ions Cu, Si, Al and F crossing thin Nickel (Ni) foil at low energy <i>Carlos A. Pineda-Vargas, iThemba LABS, South Africa</i>
11:30-11:50	O-33: Artificial neural networks in ion beam analysis: advances and new applications <i>André Vantomme, Instituut voor Kern-en Stalingsfysica, Belgium</i>	O-37: Electronic stopping of protons in transition and rare earth metals and their oxides <i>Peter Bauer, Johannes Kepler University of Linz, Austria</i>
11:50-12:50	Lunch Break (Danyuan cafeteria)	
12:50	Conference outing	

Thursday, 12 October 2017		
08:30-10:00 [Room 202]	Session 17: Plenary Presentation Chair: David Jamieson	
08:30-09:15	PL-5: Improving atomic displacement calculations with physically realistic damage models: arc-dpa and rpa <i>Kai Nordlund, University of Helsinki, Finland</i>	
09:15-10:00	PL-6: The status of Ion Beam Analysis, Proton Beam Writing and Radiobiology at CIBA (Singapore) <i>Thomas Osipowicz, National University of Singapore, Singapore</i>	
10:00-10:30	Coffee Break	
10:30-12:20	Session 18: Materials Science-1 [Room 202] <i>Chair: Iva Bogdanović Radovi</i>	Session 19: Environmental Science and Geophysics [Room 102] <i>Chair: David Cohen</i>
10:30-11:00	IV-15: Kossel X-ray Diffraction observed with an Xray camera during PIXE of multilayers with nanometric period <i>Meiyi Wu, Sorbonne Universités, UPMC Univ Paris 06, France</i>	IV-16: The LIBAF LEAP-The Lund Ion Beam Analysis Facility Light Element Analysis Program <i>Linus Ros, Lund University, Sweden</i>
11:00-11:20	O-38: Development of an ion beam induced luminescence set-up with temperature controlled target stage and its application <i>Menglin Qiu, Beijing Normal University, China</i>	O-41: Characterization of fine particulate matter in an urban area in Amman by PIXE and gravimetric measurements <i>Hanan Sa'adeh, The University of Jordan, Jordan</i>
11:20-11:40	O-39: Effect of Swift Heavy Ag Ions on the Structural, Optical and Photocatalytic Properties of Vertically Aligned ZnO Nanorod Arrays <i>R.T. Rajendra Kumar, Bharathiar University, India</i>	O-42: On the optimal proton beam energy for IBA measurements of particulate matter samples collected on Teflon filters <i>Massimo Chiari, INFN-Florence, University of Florence, Italy</i>
11:40-12:00	O-40: Analysis of pulsed laser deposition of transition metal oxide thin films using medium energy ion scattering <i>Andrew Rossall, University of Huddersfield, UK</i>	O-43: Norm particles studies by Ion Beam Analysis (IBA) techniques at CNA <i>Carmen Jimenez-Ramos, Centro Nacional de Aceleradores (CNA), Spain</i>
12:00-12:20		O-44: Relevance of qualitative trace element distribution maps at answering geoscientific questions <i>Axel D. Renno, HZDR, Helmholtz Institute Freiberg for Resource Technology; Germany</i>
12:20-13:50	Lunch Break (Qingyun Hotel)	
13:50-15:20	Session 20: Materials Science-2 [Room 202] <i>Chair: Kaoru Nakajima</i>	Session 21: Ion channeling [Room102] <i>Chair: Vittone Ettore</i>

13:50-14:20	IV-17: Enhanced radiation tolerance of nanochannel W films <i>Feng Ren, Wuhan University, China</i>	IV-18: Systematic analysis of ion channeling over all crystal directions: dependences on energy, crystal structure, atom size, temperature and defect concentration <i>Flyura Djurabekova, University of Helsinki, Finland</i>
14:20-14:40	O-45: Helium release and swelling in nickel after multiple-energy helium implantation <i>Jie Gao, SINAP, CAS, China</i>	O-48: The implantation and activation of shallow Bi donors in silicon for quantum computer devices <i>David Jamieson, University of Melbourne, Australia</i>
14:40-15:00	O-46: Multilayer coating radiation tolerance revealed by IBA <i>Hicham Khodja, LEEL-NIMBE/CEA, France</i>	O-49: Formation mechanisms of a Highly Defective Structure in Urania – in situ experimental simulation by channeling and TEM <i>Yara Haddad, Univ Paris-Sud, CNRS, Université Paris-Saclay, France</i>
15:00-15:20	O-47: Nuclear Reaction Analysis for the D retention in the lithium-containing materials <i>Jipeng Zhu, Peking University, China</i>	O-50: Lattice location and electrical activation of tellurium hyperdoped silicon <i>Mao Wang, Helmholtz-Zentrum Dresden Rossendorf, Germany</i>
15:20-15:50	Coffee Break	
15:50-17:30	Session23: Materials Science-3 [Room 202] <i>Chair: Kai Nordlund</i>	Session 24: Light elements analysis [Room 102] <i>Chair: Patrick Reichart</i>
15:50-16:10	O-51: Application of 'Storing Matter' technique in SIMS depth profile analysis <i>Maciej Miśnik, Tele & Radio Research Institute, Gdańsk University of Technology, Poland</i>	O-56: Hydrogen and deuterium standards produced by ion implantation and characterized with the same accelerator <i>Guy Terwagne, University of Namur, Belgium</i>
16:10-16:30	O-52: Ion Beam Analysis of Interstitial Complexes in GaAs(Bi)N Alloys <i>Yongqiang Wang, Los Alamos National Laboratory, USA</i>	O-57: Characterization of ^{20,22}Ne implanted into Ta targets <i>Jozef Dobrovodsky, Slovak University of Technology in Bratislava, Slovak Republic</i>
16:30-16:50	O-53: Utilization of Si wafers as a supporting backing material for PIXE analysis of aqueous solutions <i>M. Salah Rihawy, Atomic Energy Commission of Syria, Syria</i>	O-58: Depth profiling of lithium in an all-solid-state lithium-ion battery using time-of-flight elastic recoil detection analysis <i>Takane Kobayashi, RIKEN, Japan</i>
16:50-17:10	O-54: Status report of Super-SIMS for resource technology <i>Georg Rugel, Helmholtz-Zentrum Dresden-Rossendorf, Germany</i>	O-59: Deuterium Retention in Tungsten Films Deposited on Different Substrates <i>Peng Wang, Lanzhou Institute of Chemical Physics, CAS, China</i>

17:10-17:30	O-55: Study of nitrogen content and location in diamond samples by Nuclear Reaction Analysis <i>Thierry Sauvage, CNRS/CEMHTI, France</i>	O-60: Measurement of Helium in ICF target with External RBS system in Fudan University <i>Hailei Zhang, Fudan University, China</i>
18:30	Banquet (Crowne Plaza Hotel)	

Friday, 13 October 2017		
08:30-09:50 [Room 202]	Session 25: New detector, Facility and instrumentation <i>Chair: Max Döbeli</i>	
08:30-08:50	O-61: Electron-mirror time pick-off detectors revisited <i>Harry James Whitlow, University of Louisiana at Lafayette, USA</i>	
08:50-09:10	O-62: Ion beam irradiation and analysis platform at SINAP <i>Jun Lin, SINAP, CAS, China</i>	
09:10-09:30	O-63: A high intensity, high stability 3.5 MV Singletron accelerator <i>Ayan Sen, High Voltage Engineering Europa BV, Netherlands</i>	
09:30-09:50	O-64: Design and experimental testing of a gas cluster ion accelerator <i>Vasily Pelenovich, Wuhan University, China</i>	
09:50-10:20	Coffee Break	
10:20-11:40 [Room 202]	Session 26: Complementary IBA and other techniques <i>Chair: Massimo Chiari</i>	
10:20-10:40	O-65: AFM, RBS and tribological properties of WC/WS₂ nanostructures after 1.5 MeV Nb⁺ implantation <i>Ion Burducea, IFIN-HH, Romania</i>	
10:40-11:00	O-66: Investigation of SEE distributions in processing system of Xilinx Zynq-7020 SoC <i>Weitao Yang, Xi'an Jiaotong University, China</i>	
11:00-11:20	O-67: Dynamic evolution of Ga⁺ induced damages on Si and heat spike analysis using Molecular Dynamics simulation <i>Zongwei XU, Tianjin University, China</i>	
11:20-11:40	O-68: Studies of NMR Properties of Fe-doped Magnetic Nanodiamonds Made by Ion Implantation <i>Bo-Rong Lin, Hsinchu Chiao Tung University</i>	
11:40-12:00	Closing remarks	
12:00-13:30	Lunch Break (Qingyun Hotel)	
	Free Afternoon	