The 2nd Japan–China Joint Workshop on Positron Science (JWPS2013)

Time	December 20th	21st	22nd	23rd
7:30		Walk to the site from SAKURAKAN		
8:30		(Chair: K. Ito) Opening remarks		
9:00		Plenary-1 Japan M. Fujinami (Chiba)	(Chair: C. He) Plenary-3 Japan T. Hirade (JAEA)	(Chair: N. Oshima) Invited-III1 China S. Jin
9:30		Plenary-2 China C. He (Wuhan)	Invited-II1 Japan Ki. Sato	Invited-III2 Japan H. Tsuchida
10:00		Invited-I1 China B. Ye	Invited-II2 China Z. Chen	Invited-III3 China S. Fan
10:30		Break (Chair: T. Oka) Invited-I2 Japan A. Kinomura	Break (Chair: Ki. Sato) Invited-II3 Japan T. Oka	Invited-III4 Japan A. Yabuuchi
11:00		Invited-I3 China W. Zhang	Invited-II4 China J. Yang	Break (Chair: W. Zhou) Oral-III0 H. Li
11:30				Invited-III5 Japan K. Shibuya
12:00		Invited-I4 Japan M. Yamawaki	Oral-II1 W. Zhou Oral-II2 H. Hagihara	Oral-III1 Y. Sano
12:30				Summary talk Closing
13:00		Lunch		
13:30		(Chair: B. O'Rourke) Invited-I5 Japan K. Wada	photo	Lab tour (AIST)
14:00		Invited-I6 Japan I. Mochizuki		
14:30		Invited-I7 Japan M. Maekawa		
15:00		Invited-I8 Japan K. Michishio		
15:30		Break (Chair: Z. Chen)	Lab tour (KEK)	
16:00		Invited-I9 Japan B. O'Rourke		
16:30		Invited-I10 Japan Ko. Sato		
17:00	Registration and Welcome (SAKURA KAN)	Invited-I11 Japan H. Kato		
17:30				
18:00	Welcome	Poster session (with Food & Drink)	BUS TO RESTURANT Dinner at Sansuitei	
20:00				
21:00			BUS TO Tsukuba st. & AIST	

Session 1

(8:40–10:30, Dec. 21st)

Chair: K. Ito AIST, Japan

8:40 **Opening**

9:00 P-1: **Masanori Fujinami** Chiba Univ., Japan
Positron probe microanalyzer for the deformed iron and stainless steel

9:30 P-2: **Chunqing He** Wuhan University, China
Issues on positron annihilation studies of mesoporous silica films

10:00 I-I1: **Bangjiao Ye** University of Science and Technology of China, China
Positron annihilation detecting arts and its development

Break

Session 2

(10:50–12:20, Dec. 21st)

Chair: T. Oka Tohoku Univ., Japan

10:50 I-I2: **Atsushi Kinomura** AIST, Japan
Dual beam analysis system for in-situ positron annihilation spectroscopy of ion-irradiation induced defects

11:20 I-I3: **Wenshuai Zhang** University of Science and Technology of China, China
Assessment of calculation methods of positron lifetime

11:50 I-I4: **Masato Yamawaki** AIST, Japan
Data processing method on positron annihilation lifetime measurement

Lunch

Session 3

(13:30–15:30, Dec. 21st)

Chair: B. O'Rourke AIST, Japan

13:30 I-I5: **Ken Wada** KEK, Japan
Installation of a reflection high-energy positron diffraction (RHEPD) experiment station to the Slow Positron Facility at KEK

14:00 I-I6: **Izumi Mochizuki** KEK, Japan
Total reflection high-energy positron diffraction rocking-curve analysis for the topmost surface structure determination

14:30 I-I7: **Masaki Maekawa** JAEA, Japan
Development of spin-polarized slow positron beam for evaluation of spintronics materials

15:00 I-I8: **Koji Michishio** TUS, Japan
Development of an energy-tunable positronium beam employing the photodetachment of positronium negative ions

Break

Session 4

(15:50–17:20, Dec. 21st)
Chair: Z. Chen WIT, China

15:50 I-I9: **Brian O'Rourke** AIST, Japan
Development of the next generation, accelerator based, slow positron facility at AIST

16:20 I-I10: **Koichi Sato** Kyoto Univ., Japan
Positron beam facility at Kyoto University Reactor

16:50 I-I11: **Hidetoshi Kato** AIST, Japan
X-ray source using coniferous carbon nano-structure

Poster Session

(17:30–19:45, Dec. 21st)

Session 5

(9:00–10:30, Dec. 22nd)

Chair: C. He Wuhan Univ., China

9:00 P-3: **Tetsuya Hirade** JAEA, Japan
Positronium bubble oscillation in room temperature ionic liquids

9:30 I-II1: **Kiminori Sato** Tokyo Gakugei Univ., Japan
Application of layered nanoparticles to environmental materials

10:00 I-II2: **Zhe Chen** Wuhan Institute of Technology, China
Study of the hydrophobicity recovery on polymer surface after plasma modification

Break

Session 6

(10:50–12:30, Dec. 22nd)

Chair: K. Sato Tokyo Gakugei Univ., Japan

10:50 I-II3: **Toshitaka Oka** Tohoku Univ., Japan
Free volume study of the functionalized fluorinated polymer

11:20 I-II4: **Jing Yang** Institute of High Energy Physics, Chinese Academy of Sciences, China
Gamma irradiation effect on positron annihilation mechanism in polymers

11:50 O-II1: **Wei Zhou** China University of Geosciences, China
Effect of heat treatment on the crystallization for polyvinyl alcohol nano-films by positron annihilation lifetime spectroscope

12:10 O-II2: **Hideaki Hagihara** AIST, Japan
Nanoscopic structural study for cellulose triacetate hollow fiber membranes by slow positron annihilation techniques

Session 7

(9:00–11:00, Dec. 23rd)

Chair: N. Oshima AIST, Japan

9:00 I-III1: **Shuoxue Jin** Institute of High Energy Physics, Chinese Academy of Sciences, China
Positron annihilation spectroscopy on FeCu alloy after hydrogen ion irradiation at elevated temperature

9:30 I-III2: **Hidetsugu Tsuchida** Kyoto Univ., Japan
In-situ probing of radiation-induced defects under irradiation with positrons

10:00 I-III3: **Shaojuan Fan** University of Science and Technology of China, China
Electron correlation and magnetism ordering contribution to the band gap of hexagonal NiS

10:30 I-III4: **Atsushi Yabuuchi** AIST, Japan
Positron microscopy study of stress corrosion cracking in stainless steels for nuclear applications

Break

Session 8

(11:20–12:30, Dec. 23rd)

Chair: W. Zhou China University of Geosciences, China

11:20 O-III0: **Hui Li** JAEA, Japan
Spin polarization on ferromagnets surface observed by a spin-polarized positron beam

11:40 I-III5: **Kengo Shibuya** Univ. Tokyo, Japan
Ps spin conversion during Ps-Xe collisions

12:10 O-III1: **Yousuke Sano** Tohoku Univ., Japan
AMOC measurement of positron annihilation in Ar gas

12:30 **Summary talk**

12:40 **Closing**

Poster Session

(17:30–19:45, Dec. 21st)

Po-1: **Atsushi Yabuuchi** AIST, Japan
Direct electron bombardment annealing of lattice-like tungsten moderator

Po-2: **Kasumi Arai** Chiba Univ., Japan
Positron probe microanalyzer for hydrogen induced vacancy distribution in austenite stainless steel

Po-3: **Fuminori Hori** Osaka Pref. Univ., Japan
Application to defects study in bulk materials of high energetic positron created by using laser Compton scattering γ-ray

Po-3.5: **Shuoxue Jin** Institute of High Energy Physics, China
Positron annihilation spectroscopy on FeCu alloy after hydrogen ion irradiation

Po-4: **Syuntaro Minei** Ibaraki Univ., Japan
Effect of focused ion beam processing on stainless steel studied by positron annihilation lifetime measurements

Po-5: **Kagetora Ikeda** Chiba Univ., Japan
Positron annihilation spectroscopy in the hydrogen-induced superabundant vacancies in the electrodeposited Cu films

Po-6: **Hiroshi Ogawa** AIST, Japan
Development of a beam focusing device for positron re-emission microscopy

Po-6.5: **Wei Zhou** China University of Geosciences, China
In-situ characterization of free-volume holes in polymer thin films under humidity conditions with an atmospheric positron probe microanalyzer

Po-7: **Shuhei Aoyama** Chiba Univ., Japan
Void analysis of silica-based glasses by positron annihilation lifetime spectroscopy

Po-8: **Wenfeng Mao (C. He)** Wuhan University, China
Correlation between defects and conductivity of Sb-doped tin oxide thin films

Po-9: **Hiroyuki Hosomi** TRC, Japan
Pore size and physical properties in porous low-k thin films

Po-10: **Bangyun Xiong (C. He)** Wuhan University, China
Positron annihilation characteristics in mesostructural silica films with various porosities

Po-11: **Shigeru Yoshimoto** TRC, Japan
Determination of pore size in mesoporous thin films by low-energy positron lifetime spectroscopy and ellipsometric porosimetry

Po-12: **Naoya Uesugi** Chiba Univ., Japan
Positron annihilation spectroscopy in hydrogen-induced defects in pure aluminum

Po-12.5: **Jing Yang** Institute of High Energy Physics, China
The influence of accumulated charges in polymers on variable-energy Doppler broadening measurement

Po-13: **Takuma Yamashita** Tohoku Univ., Japan
Effective potential energy for a positronic sodium atom and relativistic corrections

Po-14: **Hiroaki Sakai** Ibaraki Univ., Japan
Electric field effect on positron annihilation lifetime in Kapton

Po-15: **Fuwei Liu (P.F. Fang)** Wuhan University, China
Study on degradation of epoxy coating under UV irradiation by slow positron annihilation spectroscopy

Po-16: **X.Y Peng (P.F. Fang)** Wuhan University, China
The surface structure of UV exposed poly-dimethylsiloxane (PDMS) insulator studied by a slow positron beam

Po-17: **Kazuomii Numata** Tokyo Gakugei Univ., Japan
Decomposition mechanism of inorganic-layered smectite nanoparticles

Po-18: **Y. Zhang (Z. Chen)** Wuhan Institute of Technology, China
Study of the microstructure of ethylene vinyl acetate copolymer in melt extrusion

Po-18.5: **Z. Chen** Wuhan Institute of Technology, China
Study of the hydrophobicity recovery on polymer surface after plasma modification

Po-19: **Masahito Tanaka** AIST, Japan
Magnetic domain observation of Sm-Fe-N sintered magnets by using circularly polarized light in the soft x-ray region

Po-20: **Nagayasu Oshima** AIST, Japan
Development of a combinatorial technique for defect analysis with a positron microprobe

Po-21: **Kenji Ito** AIST, Japan
NMIJ certified reference materials for positron hole-size measurements

Po-22: **Kenji Ito** AIST, Japan
Subnanoporosity development in hydrocarbon–siliconoxide hybrid PECVD films elucidated by variable-energy positrons

Po-23: **Yoshinori Kobayashi** AIST, Japan
Positronium in cardo-based polyimides and polysulfone

Po-24: **Z. Tang** East China Normal University, China
Positron annihilation study for enhanced NV-center formation in diamond by electron irradiation at 77K