

	Sept. 25	Sept. 26	Sept. 27	Sept. 28	Sept. 29
		Session	Session	Session	
9:00					
10:00		Opening remark 26-H-01 T. Nanba [History] 26-H-02 G.P. Williams [History]	27-I-01 L. Degiorgi 27-I-02 H. Okamura	28-I-01 J.M. Byrd 28-I-02 G.P. Williams	
11:00		26-I-03 J.-M.Ortega 26-I-04 S.C. Schneider	27-O-03 A. Irizawa Coffee break	28-O-03 T. Idehara Coffee break	
12:00		Coffee break 26-O-05 P. Dumas 26-O-06 B. Gasharova 26-O-07 A. Bitzer	27-I-04 Z. Liu 27-O-05 T. Nanba 27-O-06 A. Perucchi 27-O-07 J. Lee	28-I-04 U. Schade 28-O-05 T. Takahashi 28-O-06 A. Mochihashi 28-O-07 Y. Shoji	
13:00		Lunch	Lunch	Lunch	
14:00		26-I-08 P. Calvani 26-I-09 S. Kimura	27-I-08 C. Hirschmugl 27-O-09 T. May	28-I-08 M. Martin 28-O-09 P. Yu	
15:00	Registration	26-O-10 A. Thoman 26-O-11 K. Tsuzuku	27-O-10 M. Gensch 27-O-11 G. Isoyama	28-O-10 F. Hahn-Melendres 28-O-11 E. Yonemochi	
16:00		Coffee break 26-I-12 G.L. Carr	27-O-12 H. Yamada 27-O-13 S. Takahashi	28-O-12 Z. El-bayyari 28-O-13 N. Miyoshi	
17:00		26-O-13 T. Sasaki 26-O-14 Z-J. Xin 26-O-15 Y-C. Lee		28-O-14 M.J. Nasse 28-O-15 A.C. Marcelli	P. Dumas [Closing remark] Announcement of next WIRMS
18:00		[Vender presentation]	Go to Kobe harbour via Akashi Kaikyo Bridge by bus		
19:00	Welcome Party	Poster session [Light meals and drinks are available.]	Banquet [Kobe bay cruise]		
20:00			Back to hotel by bus		
21:00					
22:00					

SPring-8 site tour

[This tour visits at SPring-8 and Himeji Castle. The final destination is Himeji station.]

# WIRMS 2007 Program (Ver. 070807)

## Sept. 25

18:00-20:00      **Get together party**

## Sept. 26

### Opening session

9:00-9:15      Opening + Announcement

9:15-9:35 26-H-01 IRSR history I      T. Nanba

9:35-9:50 26-H-02 IRSR history II      G.P. Williams

### Microspectroscopy and imaging 1

9:50-10:20 26-I-03 Nano-chemical mapping performed by an AFM-based ("AFMIR") acoustooptic technique and applications

A.Dazzi, R. Prazeres, F. Glotin, J.-M. Ortega

10:20-10:50 26-I-04 Phonon-enhanced scattering near-field optical microscopy and spectroscopy of anisotropic ferroelectrics using the FELBE free electron laser

S. Schneider, S. Grafström, S. Winnerl, D. Stehr, M. Helm, L.M. Eng

10:50-11:10      Coffee break

### Microspectroscopy and imaging 2

11:10-11:30 26-O-05 Subcellular infrared analysis using synchrotron: detecting drug interaction with cancer cells

S. Srichan, M. Refregiers, F. Jamme, V. Rouam and P. Dumas

11:30-11:50 26-O-06 Single crystal IR microscopy and X-ray powder diffraction study of the  $\alpha$ -Ca<sub>2</sub>[SiO<sub>3</sub>(OH)](OH) - Ca<sub>6</sub>[Si<sub>2</sub>O<sub>7</sub>][SiO<sub>4</sub>](OH)<sub>2</sub> phase transformation upon thermal decomposition of  $\alpha$ -C<sub>2</sub>SH in Air

Biliana Gasharova, Krassimir Garbev, Peter Stemmermann

11:50-12:10 26-O-07 High-resolution THz Field Imaging in the Frequency- and Time -Domain

A. Bitzer, M. Walther, A. Kern, H. Helm

12:10-14:00      Lunch

### Spectroscopy

14:00-14:30 26-I-08 Study of the superconducting gap in B-doped diamond by coherent THz radiation

S. Lupi, M. Ortolani, L. Baldassarre, P. Calvani, U. Schade, Y. Takano, M. Nagao, T. Takenouchi, H. Kawarada

14:30-15:00 26-I-09 Infrared Magneto-Optical Imaging on Correlated Materials

Shin-ichi Kimura

15:00-15:20 26-O-10 Nanostructured gold films as broadband THz antireflection coatings

A. Thoman, A. Kern, H. Helm, M. Walther

15:20-15:40	26-O-11	Evaluation of the local homogeneity fluctuation of sinter of the small chip size MLCCs by means of mid-infrared spectroscopy	Koichiro Tsuzuku, Tomoya Hagiwara, Shunsuke Takeoka, Yuka Ikemoto
15:40-16:00		Coffee break	
<b>Microspectroscopy and imaging 3</b>			
16:00-16:30	26-I-12	Infrared Microspectroscopic Imaging Combining Focal Plane Array Detection and Dipole Synchrotron Radiation Source	G.L. Carr, R.J. Smith, A. Acerbo, L.M. Miller, T.J. Tague Jr., R.S. Jackson
16:30-16:50	26-O-13	Infrared Imaging in the Strongly Correlated Molecular Conductors	T. Sasaki, N. Yoneyama, N. Kobayashi, Y. Ikemoto, H. Kimura
16:50-17:10	26-O-14	Fast FTIR Microspectroscopic Imaging by Focal Plane Array Spatially Resolved Synchrotron	Z.-J. Xin, P. Codd, L. McNicholl, J. Headspith, R. Farrow, M. Tobin, M. Chesters
17:10-17:30	26-O-15	Radiation based Infrared Microspectroscopy of Malignant Human Colorectal Tissues	Yao-Chang Lee, Ching-lue Chen, Pei-Yu Huang
17:30-18:00		<b>Vender presentation</b>	
18:30-21:30		<b>Poster session</b>	

## Sept. 27

<b>Extreme conditions 1</b>			
9:00-9:30	27-I-01	Infrared study of the pressure dependence of the charge-density-wave gap in rare-earth tri-tellurides	A. Sacchetti, M. Lavagnini, A. Perucchi, E. Arcangeletti, L. Baldassarre, P. Postorino, S. Lupi, N. Ru, I.R. Fisher, L. Degiorgi
9:30-10:00	27-I-02	Infrared Study of Pressure-Induced Valence Crossover in Yb	H. Okamura, K. Senoo, S. Ishida, M. Matsunami, Y. Ikemoto, T. Moriwaki, T. Nanba
10:00-10:20	27-O-03	Observation of the electronic states for strongly correlated electron systems under high-pressure and low-temperature probed by infrared microscope	A. Irizawa, K. Sato, K. Shimai, K. Kobayashi, T. Murakami, K. Iizuka, M. Nishiyama, H. Okamura, T. Nanba, M. Matsunami, H. Sugawara, H. Sato, S. Niitaka, H. Takagi
<b>Extreme conditions 2</b>			
10:40-11:10	27-I-04	Synchrotron Infrared Spectroscopy under Extreme Conditions	Zhenxian Liu, Russell J. Hemley
11:10-11:30	27-O-05	Pressure induced heavy electron states in TmTe	Y. Taniguchi, A. Irizawa, K. Shimai, K. Iizuka, T. Nanba, T. Matsumura
11:30-11:50	27-O-06	Infrared study of pressure-induced Insulator to Metal Transitions in Vanadium Oxide compounds at the SISSI@Elettra beamline	A. Perucchi, L. Baldassarre, E. Arcangeletti, D. Di Castro, P. Postorino, S. Lupi

11:50-12:10	27-O-07	Microspectroscopic investigation on the electric-pulse-induced insulator-metal transition of VO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> films	J. S. Lee, M. Ortolani, U. Schade, Y. J. Chang, T. W. Noh
12:10-14:00		Lunch	
<b>New facilities</b>			
14:00-14:30	27-I-08	Synchrotron Infrared Microspectroscopy Imaging Using a Multi-Element Detector (IRMSI-MED) for Diffraction-Limited Chemical Imaging	M. J. Nasse, R. Reininger, T. Kubala, S. Janowski, C. Hirschmugl
14:30-14:50	27-O-09	Mid infrared beamline commissioning at the CLS	T. May, L. Quaroni, C. Hyett, T. Ellis
14:50-15:10	27-O-10	New THz Undulator-Beamline at the VUV FEL FLASH	M. Gensch, L. Bittner, A. Chesnov, H. Delsim-Hashemi, M. Drescher, B. Faatz, J. Feldhaus, U. Fruehling, G.A. Geloni, O. Grimm, U. Hahn, M. Hesse, S. Kapitzki, V. Kocharyan, O. Kozlov, E. Matyushevsky, N. Morozov, D. Petrov, E. Ploenjes, M. Roehling, J. Rossbach, E.L. Saldin, B. Schmidt, P. Schmueser, E.A. Schneidmiller, E. Syresin, A. Willner, M.V. Yurkov
15:10-15:30	27-O-11	Development of FEL and SASE in the Far-Infrared Region at ISIR, Osaka University	G. Isoyama, R. Kato, S. Kashiwagi, T. Igo, Y. Morio
15:30-15:50		Coffee break	
<b>Light sources</b>			
15:50-16:10	27-O-12	Optimized MIRRORCLE as a high power FIR Source	Hironari Yamada Ahsa Moon, Nobuhiro Miura
16:10-16:30	27-O-13	EPR spectroscopy with injection-locked UCSB free-electron laser	Susumu Takahashi, Gerald Ramian, Mark S. Sherwin, Louis Claude Brunel, Johan van Tol
17:00-22:00		<b>Excursion + banquet</b>	
<b>Sept. 28</b>			
<b>CSR 1</b>			
9:00-9:30	28-I-01	Coherent Terahertz Radiation at ALS	J.M. Byrd
9:30-10:00	28-I-02	Applications of Intense CSR at Jefferson Lab	J. Michael Klopf, Gwyn P. Williams
10:00-10:20	28-O-03	Development of a THz Gyrotron FU CW Series for application to high power THz technologies	T. Idehara, T. Saito, I. Ogawa, S. Mitsudo, Y. Tatematsu, La Agusu, H. Mori, T. Kanemaki
10:20-10:40		Coffee break	
<b>CSR 2</b>			

10:40-11:10	28-I-04	Applying Coherent Synchrotron Radiation at the Storage Ring BESSY II: From Spectroscopy to THz SNOM	U. Schade, P. Calvani, M.C. Martin, P. Kuske, J.S. Lee, M. Ortolani, G. Staats, G. Wüstefeld
11:10-11:30	28-O-05	Observation of THz Coherent Transition Radiation from Single-Bunch Beam at KURRI-LINAC as an Intense Pulsed Light Source	T. Takahashi, K. Takami
11:30-11:50	28-O-06	Quasi-Monochromatic Coherent Synchrotron Radiation in Uniform Magnetic Field	A. Mochihashi, M. Katoh, S. Kimura, M. Shimada, M. Hosaka, Y. Takashima, T. Hara, T. Takahashi, S. Bielawski, C. Szwaj, C. Evain
11:50-12:10	28-O-07	Measurement of the time structure of CSR burst in NewSUBARU	Y. Shoji
12:10-14:00		Lunch	

#### **Microspectroscopy and imaging 4**

14:00-14:30	28-I-08	IR Spectroscopic Imaging of Charge Injection in Organic FETs	Z. Q. Li, G. M. Wang, V. Podzorov, N. Sai, D. Moses, Michael C. Martin, M.E. Gershenson, M. Di Ventra, A. J. Heeger, D. N. Basov
14:30-14:50	28-O-09	Synchrotron Infrared Microspectroscopic Studies on Feed Research at Cellular and Molecular Levels	Peiqiang Yu, J. McKinnon, D. A. Christensen
14:50-15:10	28-O-10	In Situ Synchrotron Far Infrared Microspectroelectrochemistry with a Grazing Angle Objective	F. Hahn, Y.-L. Mathis, A. Bonnefont, F. Maillard and C.A. Melendres
15:10-15:30		Coffee break	

#### **Microspectroscopy and imaging 5**

15:30-15:50	28-O-11	Evaluation of Dispersion State of the Two Racemic Compounds of Troglitazone in Pharmaceutical Granules using IR-to-THz imaging	E. Yonemochi, M. Bunko, T. Moriwaki, Y. Ikemoto, K. Terada
15:50-16:10	28-O-12	Flow Cell Design for IR Microspectroscopy of Living Biological Cells	Z. El-bayyari, M. J. Nasse, S. Rath, S. Ratti, C. Hirschmugl
16:10-16:30	28-O-13	FT-IR image of TiO <sub>2</sub> /Pp-IX particles in tumor tissue	N. Miyoshi, Y. Fukunaga, T. Moriwaki
16:30-16:50	28-O-14	Rapid Assessment of Resource Partitioning in Algae with IR Spectromicroscopy	M. J. Nasse, A. Norici, S. Ratti, R. Julian, C. Hirschmugl, M. Giordano
16:50-17:10	28-O-15	In situ and time-resolved analysis of mesostructured films by simultaneous FTIR and SAXS experiments	P. Innocenzi, L. Malfatti, T. Kidchob, S. Costacurta, P. Falcaro, M. Piccinini, A. Marcelli, P. Morini, D. Sali, H. Amenitsch

#### **Closing session**

17:10-17:25      Closing remark      P. Dumas

17:25-17:35      Announcement of next WIRMS

## Sept. 29

9:00-15:00      **SPring-8 site tour**

## Poster session (Sept. 26, 18:30-21:30)

P-01	Simulation and optimization of Synchrotron infrared micro-spectroscopic beamlines using wave optics computation	O. Chubar, M. Cotte, J. Susini, F. Polack, K. Scheidt, P. Elleaume, P. Dumas
P-02	Near-Infrared Storage Ring Free Electron Laser Experiments at AIST	N. Sei, K. Yamada, H. Ogawa, M. Yasumoto
P-03	Beam diagnostics with uncooled fast IR detectors	A. Bocci, M. Cestelli Guidi, A. Drago, A. Marcelli, E. Pace, M. Piccinini, J. Piotrowski
P-04	Statistical Analysis of Intensity Fluctuations of SASE by use of the Autoregressive Model	R. Kato, S. Kashiwagi, T. Igo, Y. Morio, G. Isoyama, H. Sakaki
P-05	The Turkic Accelerator Complex IR FEL Project	O. Karsli, A. Aksoy, O. Yavas
P-06	Development of IR-FEL Facility for Energy Science in Kyoto University	H. Zen, T. Kii, K. Masuda, H. Ohgaki, T. Yamazaki
P-07	The Infrared MicroSpectroscopy beamline at Diamond: design study	G. Cinque, M. Frogley
P-08	The far-infrared beamline (port 02B1-1) at the Canadian Light Source Inc.	D. Appadoo, T. May, R. McKellar
P-09	A new beamline for infrared microscopy in the SR center of Ritsumeikan	T. Yaji, Y. Yamamoto, T. Ohta, S. Kimura
P-10	Present Status of IR-THz Beamline BL6B at UVSOR-II	S. Kimura, E. Nakamura, T. Mizuno, T. Iizuka
P-11	Beamline for VUV/IR pump probe experiments at FLASH	M. Gensch, U. Fruehling, E.A. Schneidmiller, M.V. Yurkov, E.L. Saldin, V. Kocharyan, J. Rossbach, M. Drescher, E. Ploenjes, J. Feldhaus
P-12	The upgrade of infrared beamline at NSRL	Zeming Qi, Chengxiang Li, Liusi Sheng
P-13	BL43IR at SPring-8 Redirected	T. Moriwaki, Y. Ikemoto
P-14	Development and status of the activities at the SISSI mid-IR beamline	D. Eichert, L. Vaccari, F. Morgera, L. Gardossi, A. Tossi, S. Pacor
P-15	High Resolution Far-Infrared Spectroscopy at NSLS Beamline U12IR	G.L. Carr, R.J. Smith, L. Mihaly, H. Zhang, D.H. Reitze, D.B. Tanner
P-16	Coherent THz Pulses and Electro-Optic Modulation Effects from Ultra-Short Relativistic Electron Bunches	Y. Shen, D. Arena, T. Watanabe, T. Tsang, C.-C. Kao, J.B. Murphy, X.-J. Wang, G.L. Carr
P-17	Time-resolved IR spectroscopy of quantum-optics in semiconductors	M.D. Frogley, G. Cinque, J. F. Dynes, M. Beck, J. Faist, C.C. Phillips
P-18	Generation of 0.1 THz Coherent Synchrotron Radiation with Compact S-band Linac at AIST	R. Kuroda, N. Sei, M. Yasumoto, H. Toyokawa, H. Ogawa, M. Koike, K. Yamada
P-19	Spectrum of Coherent Synchrotron Radiation from the JAEA Energy Recovery Linac	T. Takahashi, E. J. Minehara, R. Hajima, N. Nishimori, M. Sawamura, R. Nagai, N. Kikuzawa, H. Iijima, T. Nishitani, S. Okuda

P-20	Spectrum Measurement of THz CSR via Laser Bunch Slicing at UVSOR-II	M. Shimada, M. Katoh, M. Hosaka, A. Mochihashi, Y. Takashima, S. Kimura, T. Hara, T. Takahashi
P-21	An Intense Terahertz Radiation Source at the Planned Test ERL in Japan	K. Harada
P-22	Control of Impurity Diffusion in Silicon by IR Laser Excitation	K. Shirai, H. Yamaguchi, H. Katayama-Yoshida
P-23	Spatial Distribution of Hydrous Defects in Orthopyroxene	R. Stalder
P-24	Low Temperature Spectral Study of Nitric Oxide Reactions with Solid FeII(OEP)(NO <sub>3</sub> )	Gurgen M. Gulyan, Astghik A. Hovhannisyan, Tigran S. Kurtkyan
P-25	A New Approach to Concordance in Mid-infrared Spectromicroscopy Mapping of Malignant Tumors.	Kaiser Ali, Todd Reichert, Daniel Gomez, Yanjie Lu, Alexander Jan, Colleen Christensen
P-26	Fourier Transform Infrared Spectromicroscopy and Hierarchical Cluster Analysis of Human Meningiomas	K. Ali, Y.J. Lu, C. Christensen, T. May, C. Hyett, R. Griebel, D. Journey, K. Meguro, L. Resch, R. K. Sharma
P-27	Terahertz surface plasmon absorption spectrometer incorporating geodesic elements	G. Bogomolov, G. Zhizhin, A. Nikitin, B. Knyazev
P-28	Trans-cis isomerization of 1, 2-dichloroethylene induced by IR Free Electron Laser at Tokyo University of Science (FEL-TUS)	K. Kuramochi, Y. Kato, K. Tsukiyama
P-29	Infrared MCD in Magneto-Resistive Ti <sub>2</sub> Mn <sub>2</sub> O <sub>7</sub> Measured with Synchrotron Radiation	H. Okamura, T. Koretsune, T. Nanba, S. Kimura, H. Imai, Y. Kubo, Y. Shimakawa
P-30	Far-infrared and Millimeter Wave Spectroscopy of Superionic Conductors	T. Awano
P-31	Infrared Reflection-Absorption Spectroscopy Using Synchrotron Radiation at UVSOR-II	Y. Sakurai, S. Kimura, K. Seki
P-32	Photocurrent in Superconducting YBa <sub>2</sub> Cu <sub>3</sub> O <sub>7-x</sub> Films Induced by an Infrared Free Electron Laser	K. Nishi, Y. Hatsukade, S. Tanaka, K. Awazu, H. Horiike
P-33	Infrared spectroscopy of ammonia cluster ions, NH <sub>4+</sub> (NH <sub>3</sub> ) <sub>n</sub> (n = 3 and 4)	M. Tada, K. Tono, K. Fukazawa, N. Fukushima, T. Imai, K. Tsukiyama
P-34	Infrared spectroscopy of ammonia cluster ions II: Size evolution of infrared spectra and geometric structures of NH <sub>4+</sub> (NH <sub>3</sub> ) <sub>n</sub> (n = 4–8)	K. Tono, M. Tada, K. Bito, H. Kondoh, T. Ohta, T. Imai, K. Tsukiyama
P-35	The infrared microspectroscopy beamline at CAMD	E. Morikawa, O. Kizilkaya, R. S. Perkins
P-36	Absorption Spectroscopy Using a Coherent Transition Radiation mm Wave Light Source	S. Okuda, T. Takahashi
P-37	Absorption Spectroscopy with Coherent Radiation for Poly (Vinyl Alcohol) Aqueous Solution Irradiated with Gamma Rays	S. Okuda, M. Shibayama, T. Kojima, T. Takahashi

<b>P-38</b>	Transmission of mm Wave Light through Polyethylene Plates Irradiated with Gamma Rays	M. Shibayama, S. Okuda, T. Takahashi
<b>P-39</b>	Reflection spectra of orthoenstatite crystal	H. Suto, H. Sogawa, T. Naoi, C. Koike, H. Chihara, K. Murata, T. Moriwaki
<b>P-40</b>	Hydrated Protein THz Dynamics Studied by FTIR beam line of MIRRORCLE 20	N. Miura, H. Yamada, A. Moon, T. Kitagawa
<b>P-41</b>	Dynamical water structure investigated by far-infrared spectroscopy utilizing synchrotron radiation from MIRRORCLE 20	N. Miura, H. Yamada, A. Moon
<b>P-42</b>	Pressure induced phase transition in germanium proved by IR-THz spectromicroscopic reflectivity measurement	K. Iizuka, A. Irizawa, K. Shimai, M. Nishiyama, T. Nanba
<b>P-43</b>	Terahertz Spectroscopy of SmS under Pressure	T. Mizuno, T. Iizuka, K. Matsubayashi, K. Imura, H.S. Suzuki, N.K. Sato, S. Kimura
<b>P-44</b>	Study of optical response of spinel oxides by utilizing IR-THz spectromicroscopy	K. Shimai, A. Irizawa, K. Sato, K. Iizuka, M. Nishiyama, T. Nanba, S. Niitaka, H.Takagi
<b>P-45</b>	Simulating THz Plasmons in Metals Using the FD2TD Technique and Variable Step Sizes	A. Kern, A. Thoman, A. Bitzer, H. Helm, M. Walther
<b>P-46</b>	Spatial Resolution Limits for Synchrotron-based Spectromicroscopy in the Mid- and Near-Infrared	E. Levenson, P. Lerch, M. C. Martin
<b>P-47</b>	The New Vacuum FT-IR Spectrometer: Design Advances and Research Application	M.Jörger, G. Zachmann
<b>P-48</b>	Broad Band Infrared Near-Field Spectroscopy at Finger Print Region Using SPring-8	Y. Ikemoto, T. Moriwaki, H. Okamura, T. Sasaki, N. Yoneyama, A. Taguchi, Y. Inouye, S. Kawata, T. Kinoshita
<b>P-49</b>	A Study of Fourier-transform Infrared Microspectroscopy of material in tissue under Top-up Injection Operation at NSRRC	Y.-C. Lee, C.-I. Chen, C.-Y. Liu, P.-Y. Huang
<b>PD-01</b>	Terahertz applications at the ENEA FEL Facility	A.Doria, G.P. Gallerano, E.Giovenale, G. Messina, I. Spassovsky, L. d'Aquino, A. Ramundo, A. Coppa, F. Evangelisti, V. Foglietti, K. Fukunaga
<b>PD-02</b>	Active electric near field imaging of electronic devices	A. Coppa, F. Evangelisti, V. Foglietti, E. Giovine, A. Doria, G.P. Gallerano, E. Giovenale, M. Peroni, A. Cetronio, C. Lanzieri
<b>PD-03</b>	Using Synchrotron-Base FTIR Microspectroscopy to Rapid Characterize Molecular Chemistry and Nutrient Make-up and Microlocation of Internal Cereal Seed Tissue	P. Yu, K. Doiron, N. Liu, H. Block, Z. Niu, J.J. McKinnon
<b>PD-04</b>	Temperature dependence of infrared reflectance spectra of InN	K.Kurihara, T.Yanagawa, N.Nakagawa, K.Fukui, A.Yamamoto

**PD-05** Terahertz imaging of frozen sectioned tissues  
of the transplanted tumor on a nude mouse K.Kawakami, Y.Inoue, K.Fukui, N.Miyoshi