

## Oral Session

November 10 (Tue.) Rokko Hall

## 9:10~ Plenary Lecture (Chair Hitoshi Ohta)

PL-01 Very high sensitivity, high bandwidth, orientation selective, DEER spectroscopy at 94GHz

O G. M. Smith, P. A. S. Cruickshank, O. Schiemann, D. R. Bolton, D. A. Robertson, R. I. Hunter, H. El Mkami

School of Physics and Astronomy, University of St Andrews, Scotland  
School of Biology, University of St Andrews, Scotland

## 9:10~ Plenary Lecture (Chair Toshikazu Nakamura)

PL-02 What can we learn about spin systems from pulsed EPR and ENDOR at very high frequencies

O Johan van Tol

National High Magnetic Field Laboratory, Florida State University, USA

Break (10 min.)

## 10:40~ Oral Session (Chair Eiji Ohmichi)

1A-01 Time-resolve ESR under adiabatic changes with sweeping fields

O Seiji Miyashita,<sup>1,2</sup> and Takashi Mori<sup>1,2</sup><sup>1</sup>The University of Tokyo; <sup>2</sup>CREST

1A-02 Evaluation of the Exchange Coupling in RE-3d Heterometallic Molecular Magnets

O H. Nojiri,<sup>1,2</sup> H. Misaki,<sup>1</sup> G. Tanaka,<sup>1</sup> S. Yoshii,<sup>2</sup> A. Gomella,<sup>3</sup> T. Ishida,<sup>4</sup> and A. Okazawa<sup>4</sup><sup>1</sup>IMR, Tohoku University; <sup>2</sup>CINTS, Tohoku University; <sup>3</sup>NanoJapan; <sup>4</sup>Dep. of Applied Physics and Chemistry, The University of Electro-Communications;

1A-03 Weakly exchange-coupled biradicals as a two-qubit operation - Determination of the spin-dipolar and exchange interactions by single-crystal ELDOR method

O Shigeaki Nakazawa,<sup>1,6</sup> Kazunobu Sato,<sup>1,6</sup> Tomohiro Yoshino,<sup>1</sup> Tomoaki Ise,<sup>1,6</sup> Shinsuke Nishida,<sup>1,6</sup> Nobuyuki Mori,<sup>1</sup> Robabeh Rahimi,<sup>2</sup> Yasushi Morita,<sup>3,6</sup> Kazuo Toyota,<sup>1</sup> Daisuke Shiomi,<sup>1</sup> Masahiro Kitagawa,<sup>4,6</sup> Kazuhiro Nakasuji,<sup>3</sup> Hideyuki Hara,<sup>5</sup> Patrick Carl,<sup>5</sup> Peter Hofer,<sup>5</sup> and Takeji Takui.<sup>1,6</sup><sup>1</sup>Graduate School of Science, Osaka City University; <sup>2</sup>Faculty of Science and Engineering, Kinki University; <sup>3</sup>Graduate School of Science, Osaka University; <sup>4</sup>Graduate School of Engineering Science, Osaka University; <sup>5</sup>Buraker Biospin; <sup>6</sup>JST-CREST1A-04 Spin Relaxation of Ensemble of [NV]<sup>-</sup> Centers in DiamondO J. Isoya,<sup>1</sup> H. Sumiya,<sup>2</sup> K. Nakamura,<sup>3</sup> H. Hanaya,<sup>4</sup> S. Saiki,<sup>4</sup> S. Onoda,<sup>4</sup> T. Ohshima,<sup>4</sup> N. Morishita,<sup>4</sup> A. Shimada,<sup>5</sup> and Y. Mizuta<sup>5</sup><sup>1</sup>University of Tsukuba, <sup>2</sup>SEI, <sup>3</sup>Tokyo Gas, <sup>4</sup>JAEA, <sup>5</sup>JEOL

Lunch (12:00~13:00)

## 13:00~ Presentation Award Candidate (Chair Hiroshi Hirata)

1C-01 The measurement of redox status in sepsis model mice by *in vivo* ESR using acyl-protected hydroxylamine probe

O Shoko Okazaki, Yoko Tachibana, and Keizo Takeshita

Faculty of Pharmaceutical Sciences, Sojo University

1C-02 Application of flow-ESR technique for evaluation of second-order rate constants ( $k_s$ ) of the reaction occurring between hydroxyl, superoxide radical and selected biomolecules

O Yasuhiro Sakurai, Rushiru Komatsu, Kenji Kanaori, and Kunihiko Tajima

Department of Biomolecular Engineering, Kyoto Institute of Technology

1C-03 ESR measurements of random kagome system  $Zn_xCu_{4-x}(OH)_6Cl_2$ O Mizuki Tomoo<sup>1</sup>, Susumu Okubo<sup>2</sup>, Takahiro Sakurai<sup>3</sup>, Masashi Fujisawa<sup>1</sup>, Hitoshi Ohta<sup>1, 2, 3</sup> and Hikomitsu Kikuchi<sup>4</sup><sup>1</sup>Graduate School of Science, Kobe University; <sup>2</sup>Molecular Photoscience Research Center, Kobe University; <sup>3</sup>Center for Supports to Research and Education Activities, Kobe University; <sup>4</sup>Department of Applied Physics, University of Fukui1C-04 Topological phase transition proved by highfield and multifrequency ESR in the triangular lattice antiferromagnet  $NiGa_2S_4$ O H. Yamaguchi,<sup>1</sup> S. Kimura,<sup>1</sup> M. Hagiwara,<sup>1</sup> Y. Nambu,<sup>2</sup> S. Nakatsuji,<sup>3</sup> Y. Maeno,<sup>4</sup> A. Matsuo<sup>3</sup> and K. Kindo<sup>3</sup><sup>1</sup>KYOKUGEN, Osaka University; <sup>2</sup>Johns Hopkins University; <sup>3</sup>ISSP, University of Tokyo; <sup>4</sup>Department of Physics, Kyoto University

1C-05 Generation and Characterization of Quantum Entanglements for Molecular Spin-bus Quantum Computer Model Systems by Pulsed ENDOR Spin Technology

O Tomohiro Yoshino,<sup>1,5</sup> Shinsuke Nishida,<sup>1,5</sup> Shigeaki Nakazawa,<sup>1,5</sup> Kazunobu Sato,<sup>1,5</sup> Robabeh Rahimi,<sup>2</sup> Kazuo Toyota,<sup>1,5</sup> Daisuke Shiomi,<sup>1,5</sup> Yasushi Morita,<sup>3,5</sup> Masahiro Kitagawa,<sup>4,5</sup> and Takeji Takui,<sup>1,5</sup><sup>1</sup>Graduate School of Science, Osaka City University; <sup>2</sup>Faculty of Science and Engineering, Kinki University; <sup>3</sup>Graduate School of Science, Osaka University; <sup>4</sup>Graduate School of Engineering Science, Osaka University; <sup>5</sup>CREST, JST

Break (10 min.)

## 14:50~ Oral Session (Chair Yoshio Teki)

1A-05 Isotope effects on trapping of electrons,  $H_2^+$ , and H atoms in solid parahydrogenO Yuta Shimizu<sup>1</sup>, Takayuki Kumada<sup>2</sup>, Jun Kumagai<sup>1</sup><sup>1</sup>Nagoya University; <sup>2</sup>Japan Atomic Energy Agency

1A-06 Photoexcited States of Organic UV-A Absorber, Butylmethoxydibenzoylmethane

Azusa KIKUCHI and Mikio YAGI

Yokohama National University

1A-07 Effect of the quantum coherence in triplet precursor spin-state on the triplet-triplet electron spin polarization transfer

O Yasuhiro Kobori, Masaaki Fuki, Shusuke Katagiri and Hisao Murai

Faculty of Science, Shizuoka University

1A-08 A High Frequency CW/pulse ESR Study of Photosystem I

Hideto Matsuoka, Kei Nishiyama,<sup>1</sup> Yasunori Ohba, Seigo Yamauchi, Oleg Poluektov, Lisa Utschig, Ernst Ohmes, Marion C. Thurnauer, and Gerd Kothe

IMRAM, Tohoku Univ.; Argonne National Laboratory; University of Freiburg

Break (10 min.)

## 16:20~ Oral Session (Akio Kawai)

1A-09 The Origin of Two Kinds of Excited Triplet States in Rh Corrole Complexes

	○Mana Tanabe, Hideto Matsuoka, Yasunori Ohba, and Seigo Yamauchi	Institute of Multidisciplinary Research for Advance Materials, Tohoku University
1A-10	Pulsed W-band EPR Study on Dynamics in the Excited Triplet State of Fullerene	
	○Takuya Kotaki, Hideto Matsuoka, Yasunori Ohba, and Seigo Yamauchi	IMRAM, Tohoku University
1A-11	Determination and Interpretation of g Values in the Excited Triplet states by Means of Time-resolved High Frequency W-band EPR	
	○ Seigo Yamauchi, Mana Tanabe, Hideto Matsuoka, Islam Saiful, Yasunori Ohba	Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University
1A-12	Photo-Excited Quartet State of Stable $\pi$ -Radical Covalently Linked to Weak Electron Acceptor	
	○Takemoto Yohei, Teki Yoshio	Osaka City University
1A-13	Quantum Chemical Calculations on the Spin-Orbit Contribution to Zero-Field Splitting Tensors: Applications to Organic High-Spin Systems	
	○Kenji Sugisaki, Kazuo Toyota, Kazunobu Sato, Daisuke Shiomi, and Takeji Takui	Graduate School of Science, Osaka City University

## November 10 (tue.) Takikawa Memorial Hall

### 10:40~ Oral Session (Yasuhiro Kobori)

1B-01	Anisotropic rotation of paramagnetic solutes in room temperature ionic liquids	
	○Yusuke Miyake, Ryuta Aramaki, Masaki Iwama, Nobuyuki Akai, Akio Kawai, Kazuhiko Shibuya, Shinichi Koguchi and Tomoya Kitazume	Graduate School of Science and Engineering* Graduate School of Bioscience and Bioengineering, Tokyo Institute of Technology
1B-02	Time resolved EPR spectra of protonated porphyrin in room temperature ionic liquids	
	○Akio Kawai, Yusuke Miyake, Takehiro Shiozaki, Nobuyuki Akai, Kazuhiko Shibuya, Thomas Berthold, Stefan Weber, and Gerd Kothe	Tokyo Tech.; Freiburg Univ.
1B-03	Mechanism of Magnetic Field Effects on Photochemical Reactions in Ionic Liquids	
	○Tomoaki Yago, Masanobu Wakasa	Department of Chemistry, Saitama University
1B-04	Electron spin resonance of a model chemical compass for bird migration	
	○K.Maeda, K.B.Henbest, C.Wedge, P.A.Liddel, D.Gust, C.R.Timmel, P.J.Hore	Centre for Advanced ESR (CAESR), Inorganic Chemistry Laboratory, University of Oxford., Department of Chemistry, University of Oxford, Physical and Theoretical Chemistry Laboratory, Department of Chemistry and Biochemistry, Arizona State University

### 14:50~ Oral Seission (Aiko Shimada)

1B-05	Study on the detection of irradiated dried fruits	
	○Tetsuo YOSHIDA, Tetsuya TAKEKAWA, Takayuki HIRONIWA, Toshiki MASUMIZU, Hideyuki HARA, Masahito OKANO, and Makoto MIYAHARA	Nuclear Fuel Industries, Ltd; KOGA ISOTOPE, Ltd; SOJO University; Bruker BioSpin K.K.; JEOL Ltd.; National Institute of Health Sciences
1B-06	Yields and mechanism of radical formation from alkyluracils by ionized irradiation	
	○Seiko Nakagawa and Nobuaki Ohta	Tokyo Metropolitan Industrial Technology Research Institute; Hiroshima University
1B-07	An Approach of ESR Method for Irradiated Unboned Meats	
	○Toshiki Masumizu, Keizo Takeshita, Shoko Okazaki, Tetsuo Yoshida, Tetsuya Takekawa, Kazuhiro Okano3, Hideyuki Hara, Takayuki Hironiwa, Makoto Miyahara	Sojo univ. , NFIS Ltd. , JEOL Ltd., Bruker Biospin K.K., Koga Isotope Ltd.,NIHS
1B-08	ESR Evaluation of Absorbed Dose on Irradiated Black Pepper (2)	
	○Masatoshi Ohta, Hisakazu Okamura, Rumi Yamaoki	Niigata University, Osaka University of Pharmaceutical Sciences

Break (10 min.)

### 16:20~ Oral Session (Hideyuki Hara)

1B-09	Invited Lecture Development of a new high-field ESR technique using a cantilever	
	○Eiji Ohmichi, Shuya Hirano ,Noriaki Mizuno, and Hitoshi Ohta	Graduate School of Science, Kobe Univ., Molecular Photoscience Research Center, Kobe Univ.
1B-10	ESR Point Sensor with Magnetic Circuits Incorporated	
	Kenji TAMUKAI, Katsuhisa KATO, Naoki YOSHIDA, Hirosuke SUZUKI, Chihiro YAMANAKA, Hiroaki OHYA	KEYCOM, Osaka University
1B-11	Lifetime seek of nanobubble with ESR device for radical measurement of nanobubble water	
	Satoru KOBAYASHI, Masayoshi TAKAHASHI , Naoki YOSHIDA, Hirosuke SUZUKI, Hiroaki OHYA	KEYCOM, SANSOUKEN
1B-12	Dynamic nuclear polarization using free radicals produced by radiolysis and photolysis	
	○Takayuki Kumada, Yohei Noda, Satoshi Koizumi, and Takeji Hashimoto	Adv. Sci. Res. Ctr., Japan Atomic Energy Agency
1B-13	ESR Observation of Molecular Orientations at the Interface and Surface of Rubrene Single-Crystal Transistors	
	K. Marumoto, N. Arai, H. Goto, K. Murakami, M. Kijima, Y. Tominari, J. Takeya, Y. Shimoi, H. Tanaka, S. Kuroda, T. Kaji, T. Nishikawa, T. Takenobu, and Y. Iwasa	University of Tsukuba; Osaka University; NRI-AIST; Nagoya University; Tohoku University

## November 11 (wed.) Rokko Hall

### 9:00~ Mini Symposium on "ESR Applied Metrology" (Chair Chihiro Yamanaka, Masatoshi Ohta)

1S-01	Contributions and Effects of ESR and Luminescence Studies to Archaeology	
	○Tsuneto Nagatomo	Nara University of Education
1S-02	Elucidation of Emitting Mechanism on Phosphor by ESR method	
	○Masatoshi Ohta	Niigata University
1S-03	The generation of the radicals in the liquid using the atmospheric pressure plasma jet with low gas temperature	
	○Katsuhisa Kitano, Atsushi Tani, Satoshi Ikawa, Naofumi Ohnishi, Ryuichi Arakawa, Seiya Yonemori, Satoshi Hamaguchi	Eng., Osaka Univ., Sci., Osaka Univ., TRI Osaka, Tohoku Univ., Kansai Univ.
1S-04	Atomic hydrogen transfer in gas hydrates	

- A. Tani, K. Nakatsuji, T. Minami, N. Kobayashi, T. Sugahara, and K. Ohgaki  
 Science, Osaka University; Engineering Science, Osaka University
- 1S-05 ESR apparatus using micro strip-line resonators  
 ○C. Yamanaka, Y. Otake, H. Ohya and Y. Suzuki  
 Osaka Univ., Keycom Corp.

Lunch (11:40~12:40)

12:40~ General Meeting

13:40~ Award Lecture (Chair Hikomitsu Kikuchi)

- 2C-01 Comprehensive Study on Low Dimensional Magnets, with Emphasis on Magnetic Resonance  
 ○Yoshitami AJIRO  
 Institute of Physical Chemistry, Osaka University

14:20~ Award Lecture (Chair Tadaaki Ikoma)

- 2C-02 Spin Chemistry Studied by Time-resolved EPR Spectroscopy  
 ○Shozo Tero-Kubota  
 Tohoku University

Break (10 min.)

15:10~ Young Investigator Award Lecture (Chair Satoshi Fujii)

- 2C-03 Study of molecular motion and chemical reactions in cryocrystals by a technique of high-resolution ESR spectroscopy using parahydrogen matrices  
 ○Takayuki Kumada  
 Advanced Science Research Center, Japan Atomic Energy Agency
- 2C-04 Quantum information processing by single NV center in diamond  
 ○N. Mizuochi, P. Neumann, F. Rempp, K. Nakamura, H. Watanabe, S. Yamasaki, F. Jelezko, J. Wrachtrup  
 University of Tsukuba; JST-PRESTO; University of Stuttgart; Tokyo Gas co.; Diamond Res. Center, AIST; Energy Technology Research Institute, AIST
- 2C-05 Noninvasive analysis of Redox status in transient MCAO mice and rats  
 ○Mayumi Yamato  
 Innovation Center for Medical Redox Navigation, Kyushu University

## November 11 (wed.) Takikawa Memorial Hall

9:00~ Oral Session (Chair Masahiro Kohno)

- 2B-01 Effect of Glucose on ESR of Spin Labeled Blood  
 ○Asako Kawamori, Wataru Hattori, and Ken-ichi Yamada  
 AGAPE-Kabutoyama Institute of Medicine; Graduate School of Pharmaceutical Science, Kyushu University
- 2B-02 Development and Intracorporeal Dynamics of TEMPO-Containing Nano-particle  
 Toru Yoshitomi, ○Aki Hirayama, Takashi Mamiya, Hirofumi Matsui, Yukio Nagasaki  
 Grad. Sch. Pure and Applied Sciences; TARA; Grad. Sch. Comprehensive Human Sciences; TIMS; University of Tsukuba. Center for Integrative Medicine, Tsukuba University of Technology. Int. Center for Materials Nanoarchitectonics, Nat. Inst. for Materials Science
- 2B-03 Noninvasive imaging of fluctuating oxygen in transplanted tumor using pulsed electron paramagnetic resonance imaging (EPRI)  
 ○Hironobu Yasui, Shingo Matsumoto, Nallathamby Deavasahayam, Sankaran Subramanian, James B. Mitchell, Murali C. Krishna  
 Laboratory of Radiation Biology, Graduate School of Veterinary Medicine, Hokkaido University; Radiation Biology Branch, Center for Cancer Research, National Cancer Institute

Break (20 min.)

10:20~ Oral Session (Chair Ken-ichi Yamada)

- 2B-04 Mapping of Anti-oxidant capacity in mouse brain by rapid EPR imaging system  
 ○Hirotsada Fujii, Katsuya Kawanishi, Yoko Kuwahara, Hideo Sato-Akaba, and Hiroshi Hirata  
 Center for Medical Education, Sapporo Medical University; Graduate School of Engineering Science, Osaka University; Graduate School of Information Sciences and Technology, Hokkaido University
- 2B-05 Evaluation of SOD-like activity of water-soluble sulfonated salen manganese(III) complex  
 ○J. Sato, H. Katagiri, K. Unoura, T. Ogata, Y. Ohba  
 Graduate School of Science and Engineering, Yamagata Univ.; Faculty of Science, Yamagata Univ
- 2B-06 A quantitative analysis of reactive oxygen species generated by a mechanism of a tyrosine-tyrosinase reaction  
 ○Mika TADA, Masahiro KOHNO  
 New Industry creation hatchery center; NICHe, Tohoku University
- 2B-07 Temperature Depending Free Radical Reaction in Water  
 ○Ken-ichiro Matsumoto, Minako Nyui, Masato Kamibayashi, Toshihiko Ozawa, Ikuo Nakanishi and Kazunori Anzai  
 National Institute of Radiological Sciences; Yokohama College of Pharmacy

## November 12 (thu.) Rokko Hall

9:00~ Mini Symposium on "Spin analysis" (Chair Kunihiko Tajima, Ken-ichi Yamada)

- 2S-01 Development of Spinanalysis techniques; A new HPLCESR System for Postcolumn Detection of Superoxide Radical Scavenging Ability of Column Eluates  
 ○Kunihiko Tajima  
 Department of Biomolecular Engineering, Kyoto Institute of Technology
- 2S-02 Mechanistic Study on Radical-Scavenging Reaction of Antioxidants by Spin Analysis

- 2S-03      OIkuo Nakanishi      National Institute of Radiological Sciences  
 ESR Study of Dynamics and Reactivity of Radical Center during Radical Reactions  
 Atsushi Kajiwara      Nara University of Education
- 2S-04      Development of New Nitroxyl Radicals for *in vivo* Imaging of Free Radical Reaction  
 OKen-ichi Yamada, Kiyoshi Sakai,  
 Hideo Utsumi      Faculty of Pharmaceutical Sciences, Kyushu University
- 2S-05      Progress in fast CW-EPR imaging  
 Hideo Sato-Akaba, Yoko Kuwahara, Hirokata Fujii, and OHiroshi Hirata      Graduate School of Engineering Science, Osaka University; Center for Medical Education, Sapporo Medical University; Graduate School of Information Science and Technology

Lunch (11:40~12:40)

12:40~ Oral Session (Chair Hisaaki Tanaka)

- 3A-08      Synthesis and Property of Brominated Diselenadithiafulvalene-based Spin-polarized Donors  
 ORyoji Mogi, Hideji Komatsu, Michio M. Matsushita, Kentaro Suzuki,  
 and Tadashi Sugawara      Department of Basic Science, The University of Tokyo; Department of Chemistry, Nagoya University
- 3A-09      Preparation and properties of ion-radical salt derived from TSF-based spin-polarized donor  
 OHideji Komatsu, Michio M. Matsushita, Kentaro Suzuki, and Tadashi Sugawara      Department of Basic Science, The University of Tokyo; Department of Chemistry, Nagoya University
- 3A-10      Microscopic Investigation of Competition Antiferromagnetic Phases in One-Dimensional Electronic Systems  
 K. Sugiura, F. Iwase, K. Furukawa and OT. Nakamura      The Graduate University for Advanced Studies; Institute for Molecular Science
- 3A-11      Crystal structures and magnetic properties of tri- and tetrafluorophenyl nitronyl nitroxides  
 OTsuneki Kanzawa, Sadafumi Nishihara, Yuko Hosokoshi      Department of Physical Science, Osaka Prefecture University; INR, Osaka Prefecture University
- 3A-12      The magnetic properties of an organic one-dimensional compound BIP-V2  
 OM. Tada, S. Nishihara, Y. Hosokoshi, H.Nojiri      Grad.Sch.Sci., Osaka.Pref.Univ., INR, Osaka.Pref.Univ., IMR Tohoku Univ
- 3A-13      Specific heat study of an organic tri-radical BIPNNBNO having S=1 and S=1/2  
 OTakashi Imazawa, Hiroyuki Tsujii, Tsuneki Kanzawa, Katsuya Inoue,  
 Yasumasa Takano, and Yuko Hosokoshi      Osaka Prefecture University, The University of Florida, Hiroshima University

Break (10 min.)

14:50~ Oral Session (Chair Yuko Hosokoshi)

- 3A-14      Hyperfine interaction of N-V center in Ib diamonds  
 OIkuko Akimoto, Youhei Matsuoka and Ken-ichi Kan'no      Wakayama University
- 3A-15      Magnetic Switching Phenomenon in Alkyloctamethylferrocenium-TFSI associated with Solid-Liquid Phase Transition  
 OYusuke Funasako, Takashi Inagaki, Tomoyuki Mochida,, Toshihiro Sakurai,  
 Hitoshi Ohta, Kou Furukawa, and Toshikazu Nakamura      Graduate School of Science, Kobe University; Center for Supports to Research and Education Activities, Kobe University; Molecular Photoscience Research Center, Kobe University; Institute for Molecular Science
- 3A-16      Field-induced electron spin resonance studies of ultrathin film transistors using orientationally controlled regioregular poly(3-hexylthiophene)  
 OShun-ichiro Watanabe, Hisaaki Tanaka, Shin-ichi Kuroda,  
 Akio Toda, Shusaku Nagano and Takahiro Seki      Department of applied physics, Nagoya University; Department of molecular design & engineering, Nagoya University
- 3A-17      ESR observations of charge carriers and molecular orientations in thin films of poly(p-phenylene vinylene) derivatives  
 OHisaaki Tanaka, Yoshihiko Bito, Shun-ichiro Watanabe, Hiroshi Ito, Kazuhiro Marumoto, and Shin-ichi Kuroda      Nagoya university; University of Tsukuba
- 3A-18      Observation of a Spin-Gap in Triangular Lattice Antiferromagnet InMnO<sub>3</sub> by High-Field ESR  
 OHitoshi Ohta, Naruaki Matsumi, Susumu Okubo, Masashi Fujisawa,  
 Takahiro Sakurai, Hikomitsu Kikuchi, Kou Furukawa, and Toshikazu Nakamura      Molecular Photoscience Research Center, Kobe University; Faculty of Science, Kobe University; Center for Support to Research and Education Activities, Kobe University; Faculty Engineering, Fukui University; 5Institute of Molecular Science

November 12 (thu.) Takikawa Memorial Hall

9:00~ Oral Session (Daisuke Shiomi)

- 3B-01      Spin Relaxation Effect on Magnetoresistance due to Electron-hole Pair Mechanism  
 Yuka Takahashi and OTadaaki Ikoma      Graduate School of Science and Technology, Niigata University; PRESO, JST
- 3B-02      Spin Dynamics of Photo-Induced Conductive Materials TTF Derivatives  
 OK. Furukawa, Y. Sugishima, H. Fujiwara, and T. Nakamura      Institute for Molecular Science; The Graduate University for Advanced Studies; Osaka Prefecture University
- 3B-03      Magnetic Hysteresis of Molecular Magneto-Optical Effects in the Visible Region at Room Temperature: Phthalocyanine Thin Films on Ferromagnetic Inorganic Substrates  
 OKazuyuki Ishii and Kazutaka Ozawa      Institute of Industrial Science, The University of Tokyo

Break (20 min.)

10:20~ Oral Session (Chair Yasunori Ohba)

- 3B-04      Weakly coupled exchange interactions of phthalocyanine-based tetranitroxide as a prototypical model for matter spin-qubits in 2D arrays

- Mikito Nozaki, Shigeaki Nakazawa, Kenji Sugisaki,  
Kazunobu Sato, Daisuke Shiomi, Kazuo Toyota, Aaron S. Micallef,  
Graeme R. Hanson,  
Masahiro Kitagawa, Takeji Takui
- Graduate School of Science, Osaka City University; The University of  
Queensland AIBN;  
The University of Queensland CMR; Graduate School of Engineering  
Science, Osaka  
University; JST-CREST
- 3B-05 A Study of the Electronic Structure of a Weakly Exchange-Coupled Biradical System by Two-Dimensional Electron Spin Transient Nutation Spectroscopy
- Kazuki Ayabe, Kazunobu Sato, Tomoaki Ise, Kenji Sugisaki,  
Shigeaki Nakazawa, Yasushi Morita, Kazuo Toyota,  
Daisuke Shiomi, Masahiro Kitagawa, and Takeji Takui
- Graduated School of Science, Osaka City University; Graduated School  
of Science, Osaka  
University; Graduated School of Engineering Science, Osaka University;  
CREST-JST
- 3B-06 Supramolecular Conformation of Spin-Labeled Crown-Ethers as Studied by Pulsed Electron-Electron Double Resonance
- Yuki Kanzaki, Daisuke Shiomi,  
Takatoshi Sawai, Shigeaki Nakazawa, Kazunobu Sato, Keiji Okada and  
Takeji Takui
- Graduate School of Science, Osaka City University
- 3B-07 Polyether-bridged Nitroxide Biradicals and Their Host-guest Compounds
- OSADA, Sayaka; ISHIDA, Takayuki
- The University of Electro-Communications

Lunch (11:40~12:40)

12:40~ Oral Session (Chair Hiroyuki Mino)

- 3B-08 Structural advantage for anti-oxidation of nucleotides\_EPR and DFT calculations on nucleotide radicals
- Catharina T. Migita and Kouto Migita
- Faculty of Agriculture, Yamaguchi University; Graduate School of  
Science and Engineering,  
Yamaguchi University
- 3B-09 Slow releasing long-lived radicals caused by medium mediated radiation bystander effect: Effect of ascorbate addition
- Jun Kumagai,1 Kousi  
Mioki, Kazuto Miura, Genro Kashino, and Masami Watanabe
- Nagoya University; Kyoto University Research Reactor Institute
- 3B-10 Spin-trapping Analysis for Thermal Degradation in Polymer Solid
- Masayo SONO,Wataru SAKAI,and Naoto TSUTSUMI
- Kyoto Institute of Technology, Department of Macromolecular Science  
and Technology
- 3B-11 Interpretations of ESR spectra observed during radical polymerizations of fumarates
- Atsushi Kajiwara, Satoe Arata, Takafumi Miki, and Naoyuki Amaya
- Nara University of Education; JCII
- 3B-12 Analysis of Stratum Corneum Lipid Ordering by A Slow-Tumbling Simulation for Electron Paramagnetic Resonance
- Kouichi Nakagawa, Kazunori Anzai, and Howard. Maibach
- RI Research Center, Fukushima Med. University, NIRS, and UCSF

Break (10 min.)

14:30~ Oral Session (Chair Catharina Taiko Migita)

- 3B-13 Distance Determination between Tropomyosin and Actin in Muscle Thin Filament Using Isotopical Spin-labels
- K. Ueda, C. Kimura, M. Miki, S. Ueki, T. Arata
- Grad. Sch. Sci., and Inst. Protein Res., Osaka Univ., 3Tokushima-Bunri  
Univ., Grad. Sch.  
Eng. Sci., Univ. Fukui, and Grad. Sch. Sci., Nagoya Univ
- 3B-14 The Protein Interaction of Clock Proteins in Cyanobacteria Studied by SDSL-ESR
- Risa MUTOH, Hiroyuki MINO, Reiko MURAKAMI, Tatsuya UZUMAKI,  
Kentaro ISHII, Masahiro ISHIURA
- Center for Gene research, Nagoya Univ., Graduate School of Schience,  
Nagoya Univ
- 3B-15 PELDOR analysis of the protein-protein interaction in the blue light sensor BLUF protein SyPixD
- Toru Kondo, Kazuhiko Tsutsui, Shinji Masuda, and Hiroyuki Mino
- Nagoya University; Tokyo Institute of Technology
- 3B-16 ESR analysis of the light reaction process of SyPixD
- Kazuhiko Tsutsui, Toru Kondo, Shinji Masuda,, and Hiroyuki Mino
- Nagoya University ; Tokyo Institute of Technology