6th September (9月6日(金))

Tsukuba International Conference on Materials Science (TICMS) Joint conference
5-6 September, 2013
University Hall of University of Tsukuba, Japan

Workshop on Conjugated Polymers

International Workshop on Science and Patents 2013 IWP2013

Secretariat
Hiromasa Goto
gotoh@ims.tsukuba.ac.jp
Aohan Wang
s-awang@ims.tsukuba.ac.jp
1. Opening Ceremony 9:15-9:20 (University Hall)

Declaration of IWP2013 opening
Rafaël H. L. Kiebooms

2. Plenary Lecture

Chairman: de SILVA A. Prasanna

L1, 9:20-9:40
HIROKI, Kazuaki, Tsuyama National College of Technology, Japan
What Conductive polymers have taught us about the Meaning of Education: Education before Innovation

L2, 9:40-9:55
NAKAO, Reiko, AIST, Japan
Chronopharmacology: the Use of Endogenous Circadian Rhythm to Reduce the Side Effect of Glucocorticoid Administration
Reiko Nakao\textsuperscript{1}, Saori Yamamoto\textsuperscript{1}, and Katsutaka Oishi\textsuperscript{1,2,3}
1)Biological Clock Research Group, Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), 2)Department of Medical Genome Sciences, Graduate School of Frontier Sciences, The University of Tokyo, 3)Department of Applied Biological Science, Graduate School of Science and Technology, Tokyo University of Science

L3, 9:55-10:15
UCHIDA, Natsuko, University of Tsukuba, Japan
Molecular Design of Small $\Delta E_{\text{ST}}$ for Delayed Fluorescence Materials: Azacalix[n](2,6)pyridines and its Linear Analog
Natsuko Uchida, Junpei Kuwabara, and Takaki Kanbara
Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), Graduate School of Pure and Applied Sciences, University of Tsukuba
Chairman: KIEBOOMS, Rafaël H. L.

L4, 10:15-10:35

**YODA, Satoshi**, AIST, Japan

*Polymer foam-silica nanocomposites via high pressure phase control*

Satoshi Yoda¹, Toshiko Harimoto¹, Katsuto Otake²

1) Nanosystem Research Institute, National Institute of Advanced Industrial Science and Technology (AIST),
2) Department of Industrial Chemistry, Faculty of Engineering, Tokyo University of Science,

L5, 10:35-10:55

**BUNZ, Uwe H. F.**, Ruprecht-Karls-Universität Heidelberg, Germany

*Conjugated Polymer-Gold Nanoparticle Constructs for Sensing Applications*

Uwe H. F. Bunz¹, and Vincent M. Rotello²

1) Organisch-Chemisches Institut, Ruprecht-Karls Universität Heidelberg
2) Department of Chemistry, University of Massachusetts at Amherst

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Chairman: YODA, Satoshi

L6, 10:55-11:15

**MORI, Takeshi**, Industrial Tech. Center of Wakayama Prefecture, Japan

*Design of Pyrazoline Dyes for Dye-Sensitized Solar Cells*

Takeshi Mori¹, Hitoshi Saomoto¹, Koji Machitani¹, Kaname Inoue², Takeshi Koshitani², Yasunori Aoki²

1) Industrial Technology Center of Wakayama Prefecture, 2) Nippon Chemical Works Co., Ltd.

L7, 11:15-11:45

**KIHARA, Hideyuki**, AIST, Japan

*Reversible Phase Change of New Anthracene Compounds Triggered by the Action of Light and Heat*

Hideyuki Kihara and Masaru Yoshida

Nanosystem Research Institute, National Institute of Advanced Industrial Science and Technology (AIST)
Chairman: GOTO, Hiromasa

L8, 11:45-12:05
MOCHIDA, Madoka KEK, Japan
Materials and Life Science on Accelerator

PM------------

Chairman: KOIZUMI, Hiroyasu

L9, 13:00-14:00
de SILVA A. Prasanna, Queens Univ., UK
Molecular Logic-based Computation
A. Prasanna de Silva, Bernadine O. F. McKinney, David C. Magri and Sheenagh M. Weir
School of Chemistry and Chemical Engineering, Queen’s University

Chairman: KIHARA, Hideyuki

L10, 14:00-15:00
KIEBOOMS Rafaël H. L., European Patent Office, The Netherlands
Protecting your intellectual property by means of patents

Chairman: de SILVA A. Prasanna

L11, 15:00-15:30
KOIZUMI, Hiroyasu, University of Tsukuba, Japan
Quantum computer using high Tc cuprate
3. Poster Session: 15:30-17:20

IWP005
Preparation of Chiroptical Polyisocyanides from Achiral Monomer in a Cholesteric Liquid Crystal Medium
Tomokazu Iseki, Kohsuke Kawabata and Hiromasa Goto
Graduate School of Pure and Applied Sciences, University of Tsukuba

IWP006
Synthesis and Properties of Polysaccharide/Polyaniline Composite
Kuniharu Nakajima, Hiromasa Goto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP007
Designing Efficient Glucose Anodes Based on MgO-Templated Carbon Electrode
Aimi Suzuki\(^{1}\), Seiya Tsujimura\(^{2}\)
1) College of Engineering Science, University of Tsukuba,
2) Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP008
Preparation and Properties of Stretch-Oriented Poly(p-phenylenevinylene) Films Bearing Conjugated Side Chains
Hirotugu Kawashima\(^{1}\), Takeshi Yasuda\(^{2}\), and Hiromasa Goto\(^{1}\)
1) Institute of Materials Science, Graduate School of Pure and Applied Sciences, University of Tsukuba
2) Organic Thin-Film Solar Cells Group, Photovoltaic Materials Unit, National Institute for Materials Science (NIMS)
IWP009
Preparation of Conjugated Polymer Film with Catalytic Polymerization and Electrochemical Polymerization
Fan Yang, Hiromasa Goto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP010
Synthesis of Conjugated Polymers Bearing a-Tocopheryl Moiety
Yoshifumi Maruyama, Kohsuke Kawabata, Hiromasa Goto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP011
Photosterilizing Properties of Pheophorbide a
Yuhta Sorimachi¹, Yuichi Hotota², Toru Yamamoto², Katsuaki Taira², Takanori Iriuchishima², Junpei Saito³, Yu Nagai², Masataka Nakazato⁴, Hiroshi Sentsui⁵, Akiyoshi Saito², Masami Kobayashi¹
¹ Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba, Tsukuba, JAPAN
² School of Medicine, Nihon University, Kanda, JAPAN
³ Department of Matsudo Dentistry, Nihon University, Matsudo, JAPAN
⁴ Chlorophyll Research Institute, Fuefuki, JAPAN
⁵ Department of Veterinary Medicine, Nihon University, Fujisawa, JAPAN

IWP012
Synthesis of cholesteric liquid crystals having menthol
Hiroki Hayashi⁶, Tomokazu Iseki, and Hiromasa Goto
College of Engineering Sciences, University of Tsukuba

IWP013
Conjugated polymers deposited on metal surface
Yuki Kudo, Hiromasa Goto
Graduate School of Pure and Applied Sciences, University of Tsukuba,
IWP014
Synthesis of Chiral Polyaniline Derivatives
Yuki Kaitsuka and Hiromasa Goto
College of Engineering Sciences, University of Tsukuba

IWP015
Polythiophenes Bearing Borneol as a Side-chain Prepared by Electrochemical Polymerization and Chemical Polymerization
Atsushi MATSUMURA, Kohsuke KAWABATA, and Hiromasa GOTO
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba,

IWP016
Synthesis and Properties of Pyrimidine-type Chiral Inducer Containing Fluorine Atom
Tomoaki Jo, Aohan Wang, Hiromasa Goto
1) College of Engineering Sciences, University of Tsukuba
2) Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP017
Synthesis and Characterisation of Thieno[3,2-b]thiophene-based Linear Shaped Liquid Crystals
Jiuchao Dong, Kohsuke Kawabata, Takahiro Seino, Fan Yang, Hiromasa Goto
Graduate School of Pure and Applied Sciences, Institute of Material Science, University of Tsukuba

IWP019
Silver Hexagonal Nanoplate Formation In SilverCitrate Solution By Visible Light Irradiation
Kazuhiro Hashiguchi and Hisanori Tanimoto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba
IWP020
Characteristic Mechanical Behavior and Grain Boundary State of Nanocrystalline Gold
Takatoshi Kimura, Kosuke Suzuki and Hisanori Tanimoto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP022
Elastic Anomaly and Order-Disorder Nature of Multiferroic Barium Sodium Niobate Studied by Broadband Brillouin Scattering
Shiori Ohta, Kazuya Matsumoto, Kohei Suzuki, and Seiji Kojima,
Division of Materials Science, University of Tsukuba, Ibaraki 305-8573, Japan

IWP024
Fabrication of Organic Bilayer Solar Cells inserting Gold Nanodots
Takayuki Sasaki¹, Kenichi Tabata¹, Kazuhito Tsukagoshi³, Yohei Yamamoto¹,²
1)Division of Materials Science, 2)Tsukuba Research Center for Interdisciplinary Materials Science (TIMS),
University of Tsukuba, 3) National Institute for Materials Science

IWP025
Spherical Assemblies from Low-Bandgap Donor–Acceptor Copolymers
Soh Kushida¹⁰, Liang Tong¹, Junpei Kuwabara¹,², Takaki Kanbara¹,², Yohei Yamamoto¹,²
1) Division of Materials Science and 2) Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), Faculty of Pure and Applied Sciences, University of Tsukuba.
IWP026
Thermo-optical and Temperature Modulated DSC Measurements of Organic Glass Forming Liquids
Shota Koda¹, Haruki Takayama², Tomohiko Shibata², Yuto Kuroda¹, and Seiji Kojima²
1)College of Engineering Science, University of Tsukuba,
2)Graduate School of Pure and Applied Sciences, University of Tsukuba

IWP027
Control of Secondary Structures of Norbornene-Appended Charged Oigopeptides by Ring-Opening Metathesis Polymerization
Akira Kaneko¹, Toru Nakayama¹, and Yohei Yamamoto¹,²
1) Facility of Pure and Appl. Sci., Univ. of Tsukuba, 2) TIMS, Univ. of Tsukuba

IWP028
Nanocrystallization And Macroscopic Deformation Of Amorphous Alloys By Electropulsing
Keisuke Takeuchi, Kento Inoda and Hisanori Tanimoto
Division of Material Science, Faculty of Pure and Applied Science, University of Tsukuba,

IWP030
Single Crystal Growth of High-Temperature Superconductor Ca
Takuma Enomoto¹, Yusuke Suzuki², and Kazuo Kadowaki²
1) College of Engineering Science, University of Tsukuba, 2) Graduate School of Pure and applied Sciences, University of Tsukuba

IWP031
β-Phase Transformation of Poly(Vinylidene Fluoride) Nanospheres and their colloidal crystallization
Daichi Okada¹, Hideki Kaneko¹, Katsuhiro Kato¹, Yohei Yamamoto¹,²
1) Division of Materials Science and 2) Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), Faculty of Pure and Applied Sciences, University of Tsukuba.
IWP032
Development of High Power THz Oscillators Using High-Temperature Superconducting Bi2212 And Its Applications

*Yoshihiko Saiwai*, Takanari Kashiwagi 2, Takeo Kitamura 2, Kazuya Ishida 2, Shunsuke Sekimoto 2, Kurama Nakade 2, Kenataro Asanuma 2, Takaki Yasui 2, Yuki Shibano 1, Ryo Kaneda 1, Hidetoshi Minami 2, Kazuo Kadowaki 2

1) College of Engineering Science, University of Tsukuba
2) Graduate School of Pure and Applied Sciences, University of Tsukuba

IWP034
Single Crystal Growth of Novel Insulators with Topologically Protected Surface States

*Fumiya Kimizuka*, Yusuke Suzuki 2, Masashi Komatsu 2, Takanari Kashiwagi 2, Kazuo Kadowaki 2

1) College of Engineering Science, University of Tsukuba
2) Graduate School of Pure and Applied Sciences, University of Tsukuba

IWP035
An *ex vivo* Model for the Study of Central Circadian Clock as a Reflection of *in vivo* Circadian Rhythm

*Daisuke Kondoh*, Koyomi Miyazaki 1, Katsutaka Oishi 1,2,3

1) Biological Clock Research Group, Biomedical Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), 2) Department of Medical Genome Sciences, Graduate School of Frontier Sciences, The University of Tokyo, 3) Department of Applied Biological Science, Graduate School of Science and Technology, Tokyo University of Science

IWP036
Electron spin resonance study on accumulated charge states in ion gel-gated RR-P3HT thin film transistors

*Y. Sakurai*, D. Matsumoto 1, T. Takenobu 2, Y. Iwasa 3, K. Marumoto 1,4

1) Univ. of Tsukuba, 2) Waseda Univ., 3) Univ. of Tokyo, 4) JST PRESTO
IWP037
Mn Doping into Si
Takashi Kanazawa¹, Koichi Murata², Satoshi Tsubomatsu¹, and Kazushi Miki¹,²
¹University of Tsukuba, ²National Institute for Material Science (NIMS),

IWP038
Transient Fano Resonance for Coherent Phonon Generation in an Ultrashort-Pulse Irradiated Semiconductor
Yohei Watanabe¹, Yuya Nemoto¹, Ken-ichi Hino²,³ and Nobuya Maeshima²,³
¹Graduate School of Pure and Applied Sciences, University of Tsukuba,
²Division of Materials Science, Faculty of Pure and Applied Science, University of Tsukuba
³Center for Computational Science, University of Tsukuba

IWP039
Collapse of Fractal Structure in Dynamic Fractional Stark Ladder Driven by a THz Laser
Fumitaka Ohno¹, Yuya Nemoto¹, Nobuya Maeshima²,³, and Ken-ichi Hino²,³
¹Graduate School of Pure and Applied Sciences, University of Tsukuba
²Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba
³Center for Computational Science, University of Tsukuba

IWP040
Magnetic fields effects on the radiation characteristics of high Tc superconductor Bi2212 single crystal THz emitter
Yuuki Shibano¹, Takeo Kitamura², Yoshihiko Saiwai¹, Kazuya Ishida², Shunsuke Sekimoto²,
Chiharu Watanabe², Kentaro Asanuma², Kurama Nakade², Takaki Yasui², Ryo Kaneda¹,
Hidetoshi Minami², Takanari Kashiwagi², Kazuo Kadowaki²
¹College of Engineering Science University of Tsukuba
²Graduate School of Pure and Applied Sciences University of Tsukuba
IWP042
The Mechanism of Nano Membrane Vesicles Formation in Bacteria
Masaharu Kurosawa, Masanori Toyofuku, Nobuhiko Nomura
College of Agrobiological Resource Sciences, University of Tsukuba

IWP043
Introduction to the Slow Positron Facility at KEK
Ken Wada¹, Izumi Mochizuki¹, Toshio Hyodo¹, Tetsuo Shidara¹, Satoshi Ohsawa¹,
Mitsuo Ikeda¹, Kouji Michishio², Hiroki Terabe², Shinpei Iida², Yasuyuki Nagashima²,
Yuki Fukaya³, Masaki Maekawa³, Atsuo Kawasuso³, Takayuki Tachibana⁴
1) High Energy Accelerator Research Organization (KEK), 2) Department of Physics, Tokyo University of Science, 3) Advanced Science Research Center, Japan Atomic Energy Agency, 4) Department of Physics, Rikkyo University

IWP044
Reflection High-Energy Positron Diffraction (RHEPD) and its Applications
I. Mochizuki¹, H. Ariga², Y. Fukaya³, K. Wada¹, T. Hyodo¹, K. Asakura², M. Maekawa³, A. Kawasuso³
1) Institute of Materials Structure Science, High Energy Accelerator Research Organization. 2) Catalysis Research Center, Hokkaido University. 3) Advanced Science Research Center, Japan Atomic Energy Agency

IWP046
Functional Analysis of a Retinitis Pigmentosa Causative Gene Product, KLHL7
Tomoyuki Endo¹, Yu Kigoshi², Tomomi Fukuda², Fuminori Tsuruta², and Tomoki Chiba²
1) College of Biological Sciences, School of Life Science and Environmental Sciences, University of Tsukuba,
2) The Graduate School of Life and Environmental Sciences, University of Tsukuba,
IWP047
Synthesis and Characterization of 3,4-Phenylenedioxythiopene Copolymers

Kosuke Shibasaki\textsuperscript{1,2}, Masashi Kijima\textsuperscript{2,3}


IWP050
Coulometric Detection for Organophosphate Pesticides in Liquid Plugs by Microfabricated Flow Channel Based on Bienzyme Biosensor

Jin Wang\textsuperscript{1}, Zhi Cai\textsuperscript{2}, Hiroaki Suzuki\textsuperscript{2} and Takaaki Satake\textsuperscript{1}

1) Graduate School of Life and Environmental Sciences, University of Tsukuba; 2) Graduate School of Pure and Applied Sciences, University of Tsukuba.

IWP051
Bioelectrocatalytic oxidation of glucose on quinone-modified porous carbon electrode

Takuya Sadakane\textsuperscript{1}, Seiya Tsujimura\textsuperscript{2}

1) College of Engineering Science, University of Tsukuba
2) Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP052
Induction of Associative Olfactory Memory by Targeted Activation of the Memory Circuits in Drosophila Larvae

Takato Honda\textsuperscript{1,2}, Maki Yoshida-Kasikawa\textsuperscript{2} and Katsuo Furukubo-Tokunaga\textsuperscript{2}

1) MEXT/JSPS Program for Leading Graduate Schools: Ph.D. Program in Human Biology, School of Integrative and Global Majors, University of Tsukuba, 2) Graduate School of Life and Environmental Sciences, University of Tsukuba
IWP053
Synthesis of Poly (3,6-difluoro-2,7-carbazole)s and Their Electroluminescence Characteristics
Takehiro OHASHI1,2, Masashi KIJIMA2,3,

IWP054
Light-induced electron spin resonance study on charge formation and accumulation states at interfaces in polymer-based organic solar cells
M. Yabusaki1, D. Liu1, T. Yamanari2, Y. Yoshida2, K. Marumoto1,3
1) Univ. of Tsukuba, 2) RCPVT-AIST, 3) JST PRESTO

IWP055
Crystal structure and magnetism of the ternary compound CrFeTe grown on GaAs(001) and (111) substrates by MBE
Kazuma Yamawaki, Ken Kanazawa and Shinji Kuroda
Materials Science, University of Tsukuba.

IWP056
Systematic Studies on the Formation of β-Sheet from Fmoc-Substituted Charged Oligopeptides
Toru Nakayama1, Akira Kaneko1, Taro Sakuraba1, Kentaro Tashiro2, and Yohei Yamamoto1
1) Faculty of Pure and Applied Sciences, University of Tsukuba, Tennodai 1-1-1, Tsukuba, Ibaraki 305-8573, Japan, 2) National Institute for Materials Science, Tsukuba, Japan
IWP057
Surface Characterizations and Electrochemical Properties of Nitrogen Enriched Carbons
Satoshi Kato\textsuperscript{1,2}, Masashi Kijima\textsuperscript{2,3}
1) Grad. School of Pure & Appl. Sci., U. Tsukuba, 2) TIMS, 3) Faculty of Pure & Appl. Sci., U. Tsukuba

IWP058
Effect of n-type doping on electron-transporting material Alq3 as investigated by electron spin resonance
Donghyun Son\textsuperscript{1}, Yukihiro Shimo\textsuperscript{2} and Kazuhiro Marumoto\textsuperscript{1,3}
1) University of Tsukuba, 1-1-1, Tennodai, Tsukuba, Ibaraki, Japan
2) Nanosystem Research Institute (NRI), National Institute of Advanced Industrial Science and Technology (AIST), 1-1-1, Umezono, Tsukuba, Ibaraki, Japan
3) Japan Science and Technology Agency (JST), PRESTO, Kawaguchi, Saitama, Japan

IWP060
Synthesis and Characterization of Poly(dibenzo[c,g]carbazole-5,9-diyl)
Tomohiro Okura\textsuperscript{1,2}, and Masashi KIJIMA\textsuperscript{2,3}

IWP061
Splitting Of Energy Level And Labi Oscillation Of Spin Vortex Induced Loop Current
Hikaru Wakaura\textsuperscript{1}, Akira Okazaki\textsuperscript{2}, Hiroyasu Koizumi\textsuperscript{2}
1) Affiliation, 2) Pure and Applied Sceince, Univ. of Tsukuba

IWP062
Structural and electronic properties of C60-ferrocene hybrid nanosheets
Kenji Wakui, Hideaki Aizawa, and Kiyoto Matsuishi
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba
IWP063
Optical properties of C60-porphyrin hybrid nanosheets fabricated by a liquid-liquid interfacial precipitation method
Takaki Mori, Motoki Sugaya, and Kiyoto Matsuishi
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP064
Oxigen reduction catalyzed by metagenome-derived laccase
Kazuki Murata and Seiya Tsujimura
Graduate School of Pure and Applied Sciences, University of Tsukuba

IWP065
Molecular Design of Small $\Delta E_{ST}$ for Delayed Fluorescence Materials: Azacalix[n](2,6)pyridines and its Linear Analog
Natsuko Uchida, Junpei Kuwabara, Takaki Kanbara
Graduate School of Pure and Applied Sciences, University of Tsukuba, TIMS

IWP066
Preliminary Examinations of Poly(2,7-phosphafluorene)s
Kaito Suzuki$^{1,2}$, Masashi Kijima$^{2,3}$
1)College of Engineering Sciences, University of Tsukuba 2)Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), 3)Faculty of Pure and Applied Sciences, University of Tsukuba

IWP067
Soliton electric generators based on conducting polymers
Hiromasa Goto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP068
The procedure to obtain the grant of a European patent
Rafaël H.L. Kiebooms
European Patent Office, The Netherlands
IWP069
The seven deadly sins of the inventor
Rafaël H.L. Kiebooms
European Patent Office, The Netherlands

IWP070
Cross-Linked Channel-Type $\gamma$-Cyclodextrin Buildups
Takafumi Watanabe$^{1,2}$, Masashi Kijima$^{2,3}$
1)College of Engineering Sciences, University of Tsukuba 2)Tsukuba Research Center for Interdisciplinary Materials Science(TICMS), 3)Faculty of Pure and Applied Sciences, University of Tsukuba

IWP071
Structure Preserving Carbonization of Polytetraphenylmethane Framework
Yasuyuki Kimura$^{1,2}$, Masashi Kijima$^{2,3}$

IWP072
Spherulitic Cellulose-Lignin Composites; Preparation, Carbonization and Characterization
Takeshi Shimada$^{1,2}$, Masashi Kijima$^{2,3}$, Toshimitsu Hata$^4$
1)Graduate School of Pure and Applied Sciences, University of Tsukuba, 2)Tsukuba Research Center for Interdisciplinary Materials Science, University of Tsukuba, 3)Faculty of Pure and Applied Sciences, University of Tsukuba, 4)Research Institute for Sustainable Humanosphere, Kyoto University
IWP073
Structural determination of a minor chlorophyll produced in a unicellular cyanobacterium KC1 incubated under near-infrared light:
Hirohisa Komatsu¹, Shinya Akutsu¹, Daiki Fujinuma¹, Tadashi Watanabe², Mayumi Ohnishi-Kameyama³, Hiroshi Ono³, Satoshi Ohkubo⁴, Hideaki Miyashita⁴, Masami Kobayashi¹
1)Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba, 2)Research Center for Math and Science Education, Organization for Advanced Education, Tokyo University of Science, Tokyo, 3)National Food Research Institute, Tsukuba, 4)Graduate School of Human and Environmental Studies, Kyoto University, Kyoto

IWP074
Synthesis and Characterization of Polycarbazoles Having Triazine Side Groups for OLEDs
Zhongmin Geng¹,², Masashi Kijima²,³
1)Graduate School of Pure and Applied Sciences, University of Tsukuba, 2) Tsukuba Research Center for Interdisciplinary Materials Science (TIMS), 3)Faculty of Pure and Applied Sciences, University of Tsukuba

IWP076
Synthesis and Properties of Chiral Low Bandgap Polymers
Aohan Wang, Kohsuke Kawabata and Hiromasa Goto
Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP077
Solubility Control of Regioregular 3-Substituted Polythiophenes Bearing 2-Phenylnaphthalene Side Chain by Copolymerization
Mari Watanabe¹,² and Masashi Kijima²,³
1) Graduate School of Pure and Applied Sciences, University of Tsukuba, 2) TIMS, 3) Faculty of Pure and Applied Sciences, U. Tsukuba
IWP078
A Model for P740 special pair from the viewpoint of optical and electrochemical properties

Daisuke Fukayama¹, Tatsuya Iemura¹, Shunske Ohashi¹, Hayato Furukawa¹, Hideaki Miyashita², Koji Iwamoto³, Yoshihiro Shiraiwa³, Tadashi Watanabe⁴, Masami Kobayashi¹

1) Division of Materials Science, University of Tsukuba, 2) Graduate School of Human and Environmental Studies, Kyoto University, 3) Biological Sciences, University of Tsukuba, 4) Research Center for Math and Science Education, Organization for Advanced Education, Tokyo University of Science

IWP079
Oral malodor reduction by chlorophylls

Kanako Kimura¹, Yasuhiro Abe¹, Akiyoshi Saito², Junpei Saito³, Masataka Nakazato⁴, Masami Kobayashi¹

1) Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba, 2) School of Medicine, Nihon University, 3) Department of Matsudo Dentistry, Nihon University, 4) Chlorophyll Research Institute. Tennodai 1-1-1, Tsukuba, Ibaraki 305-8573, Japan

IWP080
Industrial Applications of Conductive Polymers for Ultra Low ESR Capacitors and the Panasonic Product Lineup

Yoshinori Takamuku

Engineering Department Capacitor Business Division, Automotive & Industrial Systems Company, Panasonic Corporation

IWP081
Preparation of PLGA-collagen hybrid scaffolds with controlled pore structures for cartilage tissue engineering

Jiahui Na¹,², Shangwu Chen¹,², Naoki Kawazoe¹, Guoping Chen¹,²,*

1) Tissue Regeneration Materials Unit, International Center for Materials Nanoarchitectonics, National Institute for Materials Science, Tsukuba, Japan
2) Department of Materials Science, Graduate School of Pure and Applied Sciences, University of Tsukuba, Tsukuba, Japan
IWP082
New Pleats Processing of Animal hair Fiber
Emi Honjo¹, Masako Shinotsuka¹, Shinobu Yoshinami², Gou Yoshinami²
1) Industrial Technology Institute of Ibaraki prefecture, Textile Technology Office,
2) Nankai Pleats CO., LTD.

IWP083
Development of water quality purification fiber appricated by Carbon nanotube
Mutsuko Nakano¹, Masako Shinotsuka¹
1) Industrial Technology Institute of Ibaraki prefecture, Textile Technology Office

IWP084
Field-induced ESR study of fluorene-based blue light-emitting polymer materials
T. Ito¹, D. Son¹, Y. Matsuo¹, Y. Sakurai¹, Y. Shimo², K. Marumoto¹,³
¹Univ. of Tsukuba, ²NRI-AIST, ³JST PRESTO

IWP085
Preparation of porous polyimide-silica nanocomposite for a flexible thermal insulating material
Yumeto Fukubayashi¹, Satoshi Yoda²
¹Unitika LTD Central Research Laboratory, ²NRI-AIST
4. Closing Ceremony and Awarding 17:30-18:00

(University Hall)

Remarks
de SILVA A. Prasanna
KIJIMA, Masashi

Awarding from
de SILVA A. Prasanna
KIEBOOMS, Rafaël H. L.

Remarks, Closing Declaration
KOJIMA, Seiji
Executive Chairman of TICMS, Joint Workshop on Conjugated Polymers and IWP2013,
Dean of Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba