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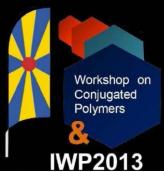
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Workshop on Science and Patents 2013

IWP2013

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

<u>2. Plenary Lecture</u>

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 Nakao¹, Saori Yamamoto¹, and 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

L3, 9:55-10:15

UCHIDA, Natsuko, University of Tsukuba, Japan

Molecular Design of Small ΔE_{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

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**

<u>Takeshi Mori¹</u>, 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 <u>A. Prasanna de Silva</u>, Bernadine O. F. McKinney, David C. Magri and Sheenagh M. Weir

<u>A. Prasanna de Silva</u>, Bernadine O. F. McKinney, David C. Magri and Sheenagn M. v 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

<u>Tomokazu Iseki</u>, 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 <u>Aimi Suzuki^{U1}</u>, Seiya Tsujimura²

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

IWP008

Preparation and Properties of Stretch-Oriented Poly(*p*-phenyleneviylene) Films Bearing Conjugated Side Chains

Hirotsugu Kawashima¹, Takeshi Yasuda², and Hiromasa Goto¹

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

<u>Yuhta Sorimachi¹</u>, Yuichi Hotota^a, 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

<u>Hiroki Hayashi^u</u>, 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 <u>Yuki Kaitsuka^u</u> and Hiromasa Goto College of Engineering Sciences, Univ*ersity of Tsukuba*

IWP015

Polythiophenes Bearing Borneol as a Side-chain Prepared by Electrochemical Polymerization and Chemical Polymerization

<u>Atsushi MATSUMURA</u>, 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

<u>Tomoaki Jo^{u1}</u>, Aohan Wang², Hiromasa Goto²

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, Tsukuba, Ibaraki 305-8573, Japan

IWP024

Fabrication of Organic Bilayer Solar Cells inserting Gold Nanodots

<u>Takayuki Sasaki¹</u>, Kenichi Tabata¹, Kazuhito Tsukagoshi³, Yohei Yamamoto^{1,2} 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

<u>Soh Kushida^{u1}</u>, Liang Tong¹, Junpei Kuwabara^{1,2}, Takaki Kanbara^{1,2}, Yohei Yamamoto^{1,2}

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

<u>Shota Koda¹</u>, 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 Polymerizationa

<u>Akira Kaneko¹</u>, Toru Nakayama¹, and Yohei Yamamoto^{1,2} 1) Facility of Pure and Appl. Sci., Univ. of Tsukuba, 2) TIMS, Univ. of Tsukuba

IWP028

Nanocrystallization And Macroscopic Deformation Of AmorphousAlloys By Electropulsing

<u>Keisuke Takeuchi</u>, Kento Inodaand 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)Colledge 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 Okada^{u1}, Hideki Kaneko¹, Katsuhiro Kato¹, Yohei Yamamoto^{1,2} 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 Superconducutor Bi2212 And Its Applications

<u>Yoshihiko Saiwai¹</u>, Takanari Kashiwagi², Takeo Kitamura², Kazuya Ishida², Shunsuke Sekimoto², Kurama Nakade², Kenataro Asanuma², Takaki Yasui², Yuki Shibano¹, Ryo Kaneda¹, Hidetoshi Minami², Kazuo Kadowaki²

Colledge of Engineering Science, University of Tsukuba
 Graduate School of Pure an Applied Sciences, University of Tsukuba

IWP034

Single Crystal Growth of Novel Insulators with Topologically Protected Surface States

<u>Fumiya Kimizuka¹</u>, Yusuke Suzuki², Masashi Komatsu², Takanari Kashiwagi², Kazuo Kadowaki²

Colledge of Engineering Science, University of Tsukuba,
 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 Kondoh¹, Koyomi Miyazaki¹, 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

<u>Y. Sakurai¹</u>, D. Matsumoto¹, T. Takenobu², Y. Iwasa³, K. Marumoto^{1,4} 1)Univ. of Tsukuba, 2)Waseda Univ., 3)Univ. of Tokyo, 4)JST PRESTO



IWP037

Mn Doping into Si

<u>Takashi Kanazawa¹</u>, Koichi Murata², "Satoshi Tsubomatsu¹, and Kazushi Miki^{1,2} 1)University of Tsukuba, 2)National Institute for Material Science (NIMS),

IWP038

Transient Fano Resonance for Coherent Phonon Generation in an Ultrashort-PulseIrradiated Semiconductor

Yohei Watanabe¹, Yuya Nemoto¹, Ken-ichi Hino^{2.3}, and Nobuya Maeshima^{2.3}

1) Graduate School of Pure and Applied Sciences, University of Tsukuba,

2)Division of Materials Science, Faculty of Pure and Applied Science, University of Tsukuba

3)Center for Computational Science, University of Tsukuba

IWP039

Collapse of Fractal Structure in Dynamic Fractional Stark Ladder Driven by a THz Laser

<u>Fumitaka Ohno¹</u>, Yuya Nemoto¹, Nobuya Maeshima^{2, 3}, and Ken-ichi Hino^{2, 3} 1)Graduate School of Pure and Applied Sciences, University of Tsukuba 2)Division of Materials Science, Faculty of Pureand Applied Sciences, University of Tsukuba

3) Center for Computational Sciences, University of Tsukuba

IWP040

Magnetic fields effects on the radiation characteristics of high *Tc superconductor* Bi2212 single crystal THz emitter

<u>Yuuki Shibano¹</u>, Takeo Kitamura², Yoshihiko Saiwai¹, Kazuya Ishida², Shunsuke Sekimoto²,

Chiharu Watanabe², Kentaro Asanuma², Kurama Nakade², Takaki Yasui², Ryo Kaneda¹, Hidetoshi Minami², Takanari Kashiwagi², Kazuo Kadowaki²

1)Colledge of Engineering Science University of Tsukuba

2) Graduate School of Pure and Applied Sciences University of Tsukuba



IWP042

The Mechanism of Nano Membrane VesiclesFormation 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

<u>I. Mochizuki¹</u>, H. Ariga², Y. Fukaya³, K. Wada¹, T. Hyodo¹, K. Asakura², M. Maekawa³, A. Kawasuso³

1)Instituteof Materials Structure Science, High Energy Accelerator Research Organization.2)Catalysis Research Center, Hokkaido University3)Advanced Science ResearchCenter, Japan Atomic Energy Agency

IWP046

Functional Analysis of a Retinitis Pigmentosa Causative Gene Product, KLHL7

<u>Tomoyuki Endo¹</u>, 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

Synthesisand Characterization of 3,4-Phenylenedioxythiopene Copolymers Kosuke Shibasaki^{1,2}, Masashi Kijima^{2,3}

1)Inst. Mater. Sci. Grad. School Pure & Appl. Sci. Univ. Tsukuba, 2)Tsukuba Research Center for Interdisciplinary Mater. Sci. (TIMS), 3)Div. Mater. Sci. Facul. Pure & Appl. Sci. Univ. Tsukuba.

IWP050

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

Jin Wang¹, Zhi Cai², Hiroaki Suzuki² and Takaaki Satake¹

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

<u>Takuya Sadakane¹</u>, Seiya Tsujimura² 1)Colledge 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^{1.2}, Maki Yoshida-Kasikawa² and Katsuo Furukubo-Tokunaga²

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 OHASHI^{1,2}, Masashi KIJIMA^{2,3},

1) Inst. Mater. Sci. Grad. School Pure & Appl. Sci. Univ. Tsukuba, 2) Tsukuba Research Center for Interdisciplinary Mater. Sci. (TIMS), 3) Div. Mater. Sci. Facul. Pure & Appl. Sci. Univ. Tsukuba,

IWP054

Light-induced electron spin resonance study on charge formation and accumulation states at interfaces in polymer-based organic solar cells <u>M. Yabusaki¹</u>, D. Liu¹, T. Yamanari², Y. Yoshida², K. Marumoto^{1,3} *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

<u>Kazuma Yamawaki</u>, Ken Kanazawa and Shinji Kuroda Materials Science, University of Tsukuba.

IWP056

Systematic Studies on the Formation of β-Sheet from Fmoc-Substituted Charged Oligopeptides

<u>Toru Nakayama¹</u>, 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^{1,2}, Masashi Kijima^{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 Son¹, Yukihiro Shimoi² and Kazuhiro Marumoto^{1,3}

 University of Tsukuba, 1-1-1, Tennodai, Tsukuba, Ibaraki, Japan
 Nanosystem Research Institute (NRI), National Institute of Advanced Industrial Science and Technology (AIST), 1-1-1, Umezono, Tsukuba, Ibaraki, Japan
 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^{1,2}, and Masashi KIJIMA^{2,3}

1)Inst. Mater. Sci. Grad. School Pure & Appl. Sci., Univ. Tsukuba, 2)Tsukuba Research Center for Interdisciplinary Mater. Sci. (TIMS), 3)Div. Mater. Sci. Facul. Pure & Appl. Sci., Univ. Tsukuba

IWP061

Splitting Of Energy Level And Labi Oscillation Of Spin Vortex Induced Loop Current

<u>Hikaru Wakaura¹</u>, Akira Okazaki², Hiroyasu Koizumi² 1)Affiliation, 2) Pure and Applied Sceience, 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

<u>Takaki Mori</u>, 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 <u>Kazuki Murata</u> and Seiya Tsujimura Graduate School of Pure and Applied Sciences, University of Tsukuba

IWP065

Molecular Design of Small Δ*E*st for Delayed Fluorescence Materials: Azacalix[n](2,6)pyridines and its Linear Analog <u>Natsuko Uchida</u>, 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 <u>Rafaël H.L. Kiebooms</u> *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 γ-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}

1) Grad School Pure. & Appl. Sci. U. Tsukuba, 2) TIMS,3) Fac. Pure & Appl. Sci. Univ. Tsukuba

IWP072

Spherulitic Cellulose-Lignin Composites; Preparation, Carbonization and Characterization

<u>Takeshi Shimada^{1,2}</u>, Masashi Kijima^{2,3}, Toshimitsu Hata⁴

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 aminor chlorophyll produced in a unicellular cyanobacterium KC1 incubated under near-infrared light:

<u>Hirohisa Komatsu¹</u>, 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 Geng^{1,2}, Masashi Kijima^{2,3}

1)Gaduate 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

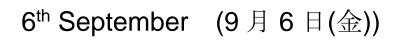
<u>Aohan Wang</u>, Kohsuke Kawabata and Hiromasa Goto Division of Materials Science, Faculty of Pure and Applied Sciences, University of Tsukuba

IWP077

Solubility Control of Regioregular 3-Substituted Polythiophenes Bearing 2-Phenylnaphthalene Side Chain by Copolymerization

Mari Watanabe^{1,2} and Masashi Kijima^{2,3}

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 Advaced Education, Tokyo University of Science

IWP079

Oral malodor reduction by chlorophylls

<u>Kanako Kimura</u>¹, 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 Depertment 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 Ng^{1,2}, Shangwu Chen^{1,2}, Naoki Kawazoe¹, Guoping Chen^{1,2},* 1Tissue Regeneration Materials Unit, International Center for Materials Nano architectonics, NationalInstitute 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

<u>Emi Honjo</u>¹, 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
<u>Mutsuko Nakano</u>¹, 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 <u>T. Ito</u>¹, D. Son¹, Y. Matsuo¹, Y. Sakurai¹, Y. Shimoi², K. Marumoto^{1,3} ¹Univ. of Tsukuba, ²NRI-AIST, ³JST PRESTO

IWP085

Preparation of porous polyimide-silica nanocomposite for a flexible thermal insulating material

<u>Yumeto Fukubayashi¹</u>, 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