

**[TuP] Poster Session II****Date / Time** July 3 (Tue.), 2018 / 19:00-21:00**Place** 2F, Lobby**Topic 1: Organic Conductors and Superconductors**

(TuP-001~TuP-019)

**TuP-001****Single Crystals of Sandwich-Type Polyoxometalates  $[(PW_9O_{34})_2(H_2OTb)_3CO_3]^{11-}$  with  $(CH_3)_nH_{4-n}N+(n=1-4)$  Counter Cations**Jiao Chen<sup>1</sup>, Masaru Fujibayashi<sup>2</sup>, Kiyonori Takahashi<sup>1</sup>, Kazuya Kubo<sup>3</sup>, Shin-ichiro Noro<sup>1</sup>, and Takayoshi Nakamura<sup>1</sup><sup>1</sup>Hokkaido Univ., Japan, <sup>2</sup>Yamaguchi Univ., Japan, <sup>3</sup>Univ. of Hyogo, Japan**TuP-002****Study of The Molecular Crystals by Synchrotron X-ray Diffraction**Shunsuke Kitou<sup>1</sup>, Kunihisa Sugimoto<sup>2</sup>, Toshikazu Nakamura<sup>3</sup>, and Hiroshi Sawa<sup>1</sup><sup>1</sup>Nagoya Univ., Japan, <sup>2</sup>JASRI, Japan, <sup>3</sup>IMS, Japan**TuP-003****Josephson Vortex Dynamics in FFLO Phase of Layered Organic Superconductor** **$\beta''-(BEDT-TTF)_2SF_5CH_2CF_2SO_3$** Shiori Sugiura<sup>1</sup>, Shinya Uji<sup>1</sup>, Hishiro Hirose<sup>1</sup>, Taichi Terashima<sup>1</sup>, Syuma Yasuzuka<sup>2</sup>, and John A. Schlueter<sup>3</sup><sup>1</sup>NIMS, Japan, <sup>2</sup>Hiroshima Inst. of Tech., Japan, <sup>3</sup>Argonne Nat'l Lab., USA**TuP-004****Syntheses, Structures, and Properties of Novel Metal-Dithiolene Complexes with Hydrogen-Bonds**So Yokomori<sup>1</sup>, Akira Ueda<sup>1</sup>, Reiji Kumai<sup>2</sup>, Youichi Murakami<sup>2</sup>, and Hatsumi Mori<sup>1</sup><sup>1</sup>The Univ. of Tokyo, Japan, <sup>2</sup>KEK PF CMRC, Japan**TuP-005****Fabrication of Semi-Transparent and Flexible Organic Solar Cells**Kwanghee Lee<sup>1</sup>, Yeongjin Lee<sup>1</sup>, Hongkyu Kang<sup>1</sup>, Nara Kim<sup>2</sup>, and Seok Kim<sup>1</sup><sup>1</sup>GIST, Korea, <sup>2</sup>Linkoping Univ., Sweden**TuP-006****Characterization of Crystal Structure and Physical Properties of The Novel Organic Salt,** **$\alpha-(ET)_2NH_4Hg(SeCN)_4$** Akihiro Ohnuma<sup>1</sup>, Shuhei Fukuoka<sup>1</sup>, Yoshihiko Ihara<sup>1</sup>, Hiromi Taniguchi<sup>2</sup>, and Atsushi Kawamoto<sup>1</sup><sup>1</sup>Hokkaido Univ., Japan, <sup>2</sup>Saitama Univ., Japan

**TuP-007**

**Electronic and Magnetic Properties of  $\lambda'$ -(BEDT-STF)<sub>2</sub>GaBr<sub>4</sub>**

Kawaguchi Satoshi, Wada Takuma, Minamide Takaaki, Matsunaga Noriaki, Kawamoto Atsushi and Nomura Kazushige  
*Hokkaidou Univ., Japan*

**TuP-008**

**Crystal Structures and Intrinsic Proton Conductivity of Anhydrous Organic Salts, Imidazolium Dicarboxylates**

Yoshiya Sunairi, Akira Ueda, Junya Yoshida, Keisuke Suzuki, and Hatsumi Mori  
*The Univ. of Tokyo, Japan*

**TuP-009**

**Synthesis and Characterization of Electron AcceptingConjugated Polymers Achieved by Benzotriazoly Bis(trifluoroborate)**

Youngtae Kim, Hyun-Taek Oh, Seok-Heon Jung, and Jin-Kyun Lee  
*Inha Univ., Korea*

**TuP-010**

**Change of Electrical Properties of PEDOT:PSS Thin Films by Post-Treatment with Various Solvents**

Hong Jang, Hyeokjo Jeong, and Felix Sunjoo Kim  
*Chung-Ang Univ., Korea*

**TuP-011**

**Manufacture of High-Intensity and Conductive Alginate Fiber Mixed with Carbon Nano Tube and Using Ion-Exchange Reactions.**

Jae Ho Kim, Thu Nguyen, and Jun Young Lee  
*Sungkyunkwan Univ., Korea*

**TuP-012**

**Preparationand Characterization of Efficient Ionizing Materials of OLED Vacuum Deposition**

Seung-Kyu Park, Sung-Woo Jeon, Sung-Woo Jeon, Soohuan Lee, Ran Hee Kim, and Kwang-Sup Lee  
*Hannam Univ., Korea*

**TuP-013**

**A Self-Aligned High Resolution Patterning Process for Large Area Printed Electronics**

Won-Tae Park and Yong-Young Noh  
*Dongguk Univ., Korea*

**TuP-014****Experimental Search for Topological States in An Organic Dirac Fermion System,  $\alpha$ -(BEDT-TTF)<sub>2</sub>I<sub>3</sub>**

Mitsuyuki Sato, Kenta Yoshimura, and Toshihito Osada

*The Univ. of Tokyo, Japan*

**TuP-015****Thermodynamic Property of Magnetic-Field-Induced Superconductor kappa-(BETS)<sub>2</sub>FeBr<sub>4</sub>**

Takako Konoike<sup>1</sup>, Takahide Yamaguchi<sup>1</sup>, Taichi Terashima<sup>1</sup>, Shinya Uji<sup>1</sup>, Hideki Fujiwara<sup>2</sup>, Bin Zhan<sup>3</sup>, and Hayao Kobayashi<sup>4</sup>

<sup>1</sup>*Nat'l Inst. for Materials Science, Japan*, <sup>2</sup>*Osaka Prefecture Univ., Japan*, <sup>3</sup>*The Chinese Academy of Science, China*, <sup>4</sup>*Nihon Univ., Japan*

**TuP-016****New Triangular Lattice BEDT-TTF Salt with Disorder-Free Anions**

Tomeno Shinya, Yoshida Yukihiro, Mitsuhiro Maesato, and Hiroshi Kitagawa

*Kyoto Univ., Japan*

**TuP-017****A Polythiophene-Based Conductive Polymer with Both Ionic and Electronic Conductivity for Lithium-Ion Battery Applications**

Jong-Chan Lee, Na Kyung Kim, and Da Un Jung

*Seoul Nat'l Univ., Korea*

**TuP-018****Characterization of Conjugated Polymers composed of Thiazolo[5,4-b]pyridine and Benzodithiophene in the Position of Functional Group**

Hongsuk Suh, Juae Kim, Sangmin Chae, Ahra Yi, and Hyo Jung Kim

*Pusan Nat'l Univ., Korea*

**TuP-019****Charge Carrier Scattering in Polymers: A New Neutral Coupled Soliton Channel**

Geraldo Magela e Silva, Luiz Ribeiro, Fabio Monteiro, and Wiliam Cunha

*Univ. of Brasilia, Brazil*

**Topic 2:  $\pi$ -Conjugated Molecule**

(TuP-020~TuP-090)

**TuP-020**

**Green to Blue Light Upconversion in Polymer Matrixes**

Steponas Raisys, Povilas Adomenas, Karolis Kazlauskas, and Saulius Jursenas  
*Vilnius Univ., Lithuania*

**TuP-021**

**Bis-Tridentate Ir(III) Metal Phosphors for Efficient Deep-Blue Organic Light-Emitting Diodes**

Hsin-Hung Kuo<sup>1</sup>, Yi-Ting Chen<sup>2</sup>, Leon R. Devereux<sup>3</sup>, Chung-Chih Wu<sup>2</sup>, Mark A. Fox<sup>3</sup>, Chu-Yun Kuei<sup>1</sup>, Yun Chi<sup>1</sup>, and Gene-Hsiang Lee<sup>2</sup>

<sup>1</sup>Nat'l Tsing Hua Univ., Taiwan, <sup>2</sup>Nat'l Taiwan Univ., Taiwan, <sup>3</sup>Durham Univ., UK

**TuP-022**

**Room Temperature Phosphorescence towards Thermally Activated Delayed Fluorescence in Carbazole – Pyrimidine Cored Compounds**

Tomas Serevicius, Tadas Buciunas, Jonas Bucevicius, Jelena Dodonova, Sigitas Tumkevicius, and Saulius Jursenas  
*Vilnius Univ., Lithuania*

**TuP-023**

**A Comprehensive Photophysical Study of Pyrimidine Dyes Containing Carbazoles and Aniline: The Interplay between Singlets and Triplets**

Justina Jovaisaitė<sup>1</sup>, Gediminas Jonusauskas<sup>2</sup>, Jelena Dodonova<sup>1</sup>, Jonas Bucevicius<sup>1</sup>, Sigitas Tumkevicius<sup>1</sup>, and Saulius Jursenas<sup>1</sup>

<sup>1</sup>Vilnius Univ., Lithuania, <sup>2</sup>Bordeaux Univ., France

**TuP-024**

**Ferroelectricity of Alkylamide-Substituted Helicene Derivatives**

Hayato Anetai, Takashi Takeda, Norihisa Hoshino, Higashi Kobayashi, Nozomi Saito, Masanori Shigeno, Masahiko Yamaguchi, and Tomoyuki Akutagawa  
*Tohoku Univ., Japan*

**TuP-025**

**Synthesis and Light-Emitting Properties of Hyperbranched Conjugated Poly(Para-Phenylene Vinylene) Derivatives**

Gyeongmin Ki and Taek Ahn  
*Kyungsung Univ., Korea*

**TuP-026****The Polymers of Organic  $\pi$ -Conjugated Self-Assembly and Aggregation Conformation**

Yuanping Yi, Guangchao Han, and Lu Ning

Inst. of Chemistry Chinese Academy of Sciences, China

**TuP-027****Molecular Assembly Structure and Physical Properties of Porphyrin Derivatives with  $-\text{CONHC}_1\text{H}_{2g}$  Group**Jianyun Wu<sup>1</sup>, Takashi Takeda<sup>2</sup>, Norihisa Hoshino<sup>2</sup>, and Tomoyuki Akutagawa<sup>2</sup><sup>1</sup>Tohoku Univ., Japan, <sup>2</sup>IMRAM.Tohoku Univ., Japan**TuP-028****Graphene Oxide/Two-Dimensional Conjugated Polymer Composite as Effective Photocatalytic System for CO<sub>2</sub> Reduction**

Shih-Hao Wang and Leeyih Wang

Nat'l Taiwan Univ., Taiwan

**TuP-029****Development of Light-Emitting Semiconducting Coordination Polymers**Takashi Okubo, Toshiya Horii, Misaki Okita, Masahiko Maekawa, and Takayoshi Kuroda-Sowa  
Kindai Univ., Japan**TuP-030****Crystal Structures and Electrical Conducting Properties of Semiconducting Coordination Polymers with Copper(I)-Bromide and Tetrazine Derivatives**

Sanshiro Fukuda, Koki Tanishima, Kento Himoto, Takashi Okubo, Masahiko Maekawa, and Takayoshi Kuroda-Sowa

Kindai Univ., Japan

**TuP-031****Vibrational Spectroscopy of Regio-Regular P3HT and Its Deutero Derivatives**Luigi Brambilla<sup>1</sup>, Cristina Capel Ferròn<sup>2</sup>, Matteo Tommasini<sup>1</sup>, Kunlun Hong<sup>3</sup>, Juan Teodomiro López Navarrete<sup>2</sup>, Victor Hernández<sup>2</sup>, and Giuseppe Zerbi<sup>1</sup><sup>1</sup>Politecnico di Milano, Italy, <sup>2</sup>Univ. de Málaga, Spain, <sup>3</sup>Oak Ridge Nat'l Lab., USA**TuP-032****Ethanol-Soluble Donor and Acceptor for Eco-Friendly Organic Solar Cells**Ziang Wu<sup>1</sup>, Seungjin Lee<sup>2</sup>, Yuxiang Li<sup>1</sup>, Bumjoon Kim<sup>2</sup>, and Han Young Woo<sup>1</sup><sup>1</sup>Korea Univ., Korea, <sup>2</sup>KAIST, Korea

**TuP-033**

**Synergic Increase of Electrical Conductivity in Polypyrrole/Molybdenum Disulphide Composite**

Udit Acharya, Patrycja Bober, Jaroslav Stejskal, and Jiří Pfleger

*Inst. of Macromolecular Chemistry AS CR, Czech*

**TuP-034**

**Fused Perylene Diimide-Based Conjugated Polymers as The Acceptors for High-Performance All-Polymer Solar Cells**

Yuli Yin, Ming Liu, Yong Zhang, and Liancheng Zhao

*Harbin Inst. of Tech., China*

**TuP-035**

**Raman Spectroscopy in Organic Thin Film Technologies: Everything You Always Wanted to Know**

Xabier Rodríguez-Martínez<sup>1</sup>, Antonio Sánchez-Díaz<sup>1</sup>, Aleksandr Perevedentsev<sup>1</sup>, Michelle S. Vezie<sup>2</sup>, Xingyuan Shi<sup>2</sup>, Iain McCulloch<sup>3</sup>, Jenny Nelson<sup>2</sup>, Alejandro R. Goñi<sup>1</sup>, Sebastian Reparaz<sup>1</sup>, and Mariano Campoy-Quiles<sup>1</sup>

<sup>1</sup>*Inst. de Ciència de Materials de Barcelona (ICMAB-CSIC), Spain*, <sup>2</sup>*Imperial College London, UK*, <sup>3</sup>*KAUST, Saudi Arabia*

**TuP-036**

**Control in Molecular Assemblies and Physical Properties of Cation-Anion Pairs in Naphthalene Diimide Derivative**

Ayumi Kawasaki<sup>1</sup>, Takashi Takeda<sup>1</sup>, Norihisa Hoshino<sup>1</sup>, Takamitu Kikuchi<sup>1</sup>, Wakana Mastuda<sup>2</sup>, Shu Seki<sup>2</sup>, and Tomoyuki Akutagawa<sup>1</sup>

<sup>1</sup>*Tohoku Univ., Japan*, <sup>2</sup>*Kyoto Univ., Japan*

**TuP-037**

**Development of Hybrid Naphthalene-Based Nitrogen Containing Electron Deficient  $\pi$ -Systems for Organic Semiconductors**

Tsubasa Mikie and Itaru Osaka

*Hiroshima Univ., Japan*

**TuP-038**

**Water-Dispersible Hyperbranched Conjugated Polymer Nanoparticles for Amplifying Fluorescent Sensing of Trace TNT and Picric Acid**

Xiaofu Wu, Hua Li, Hui Tong, and Lixiang Wang

*Changchun Inst. of Applied Chemistry, Chinese Academy of Sciences, China*

**TuP-039****Molecular Assembly Structures and Dielectric Properties of Bis(alkylamide)-Substituted Benzene Derivatives**

Moeko Kawana, Takashi Takeda, Norihisa Hoshino, and Tomoyuki Akutagawa  
*Tohoku Univ., Japan*

**TuP-040****Synthesis of All-Small-Molecule Solar Cells Incorporating NDI-Based Acceptors**

YeonHee Ha<sup>1</sup>, Jisu Hong<sup>2</sup>, Hyojung Cha<sup>3</sup>, Ran Kim<sup>1</sup>, Yu Jin Kim<sup>4</sup>, Chan Eon Park<sup>2</sup>, James R. Durrant<sup>3</sup>, Soon-Ki Kwon<sup>1</sup>, Tae Kyu An<sup>5</sup>, and Yun-Hi Kim<sup>1</sup>

<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>POSTECH, Korea, <sup>3</sup>Imperial College London, UK, <sup>4</sup>Argonne Nat'l Lab, USA, <sup>5</sup>Korea Nat'l Univ.of Transportation, Korea

**TuP-041****Molecular Tuning of D-A Type Polymers for Efficient Charge Transport in Organic Field-Effect Transistors**

Kwang Hun Park<sup>1</sup>, Seong Hoon Yu<sup>2</sup>, Dae Sung Chung<sup>2</sup>, Cheol Ho Kang<sup>1</sup>, Yun-Hi Kim<sup>1</sup>, and Soon-Ki Kwon<sup>1</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>DGIST, Korea

**TuP-042****A Small Molecule based on Dithienophospholeoxide for Bulk Heterojunction Solar Cells**

Jiyoung Choi<sup>1</sup>, Jisu Hong<sup>2</sup>, Tae Kyu An<sup>3</sup>, Min Jae Sung<sup>1</sup>, Yebyeol Kim<sup>2</sup>, Yun-Hi Kim<sup>1</sup>, Chan Eon Park<sup>2</sup>, and Soon-Ki Kwon<sup>1</sup>

<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>POSTECH, Korea, <sup>3</sup>Korea Nat'l Univ. of Transportation, Korea

**TuP-043****Development of Azasiline-Based Thermally Activated Delayed Fluorescence Emitter for Blue OLED**

Yun-Hi Kim<sup>1</sup>, You Heon Kim<sup>1</sup>, Jang-Joo Kim<sup>2</sup>, Soon-Ki Kwon<sup>1</sup>, Jang-Yeol Baek<sup>1</sup>, and Jin-Won Sun<sup>2</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>Seoul Nat'l Univ., Korea

**TuP-044****Dithienobenzodithiophene-Based Small Molecule Organic Solar Cells via Additive- and Thermal-Annealing-Free Processing**

Na Yeong Kim<sup>1</sup>, Hyeng Gun Song<sup>1</sup>, Yu Jin Kim<sup>2</sup>, Ji Sang Lee<sup>1</sup>, Chan Eon Park<sup>2</sup>, Soon-Ki Kwon<sup>1</sup>, and Yun-Hi Kim<sup>1</sup>

<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>POSTECH, Korea

**TuP-045****Dimethylsilyl-Linked Anthracene-Pyrene Dimers and Their Efficient T-T Annihilation in Organic Light Emitting Diodes(OLED)**

Hwanil Je<sup>1</sup>, Min Jae Sung<sup>1</sup>, Hiroya Chubachi<sup>2</sup>, Ryo Satoh<sup>2</sup>, Yun-Hi Kim<sup>3</sup>, Yong-Jin Pu<sup>2</sup>, and Soon-Ki Kwon<sup>1</sup>

<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>Yamagata Univ., Japan

**TuP-046**

**New Linear Small Molecules: Naphthyl-Ethyanyl-Anthracene-Based Small Molecules Containing Different Alkyl End Group**

Hyun Woo Kim<sup>1</sup>, Yebyeo Kim<sup>2</sup>, So-Min Park<sup>1</sup>, Tae Kyu An<sup>3</sup>, Chan Eon Park<sup>2</sup>, Yun-Hi Kim<sup>1</sup>, and Soon-Ki Kwon<sup>1</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>POSTECH, Korea, <sup>3</sup>Korea Nat'l Univ. of Transportation, Korea

**TuP-047**

**Crystal Structures and Optical Properties of Benzothiazole Derivatives with Pyridyl Group**

Keigo Takahashi<sup>1</sup>, Takashi Takeda<sup>1</sup>, Norihisa Hoshino<sup>1</sup>, Ken-ichi Sakai<sup>2</sup>, and Tomoyuki Akutagawa<sup>1</sup>  
<sup>1</sup>Tohoku Univ., Japan, <sup>2</sup>Chitose Inst. of Science and Tech., Japan

**TuP-048**

**Synthesis and Characterization of A New Deep Green-Emitting Ir(III) Complex for OLED**

Myeong-Jong Kim<sup>1</sup>, Seung-Jun Yoo<sup>2</sup>, Jaeyoung Hwang<sup>1</sup>, Sung-Jin Park<sup>1</sup>, Jae-Wook Kang<sup>3</sup>, Yun-Hi Kim<sup>1</sup>, Jang-Joo Kim<sup>2</sup>, and Soon-Ki Kwon<sup>1</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>Seoul Nat'l Univ., Korea, <sup>3</sup>Chonbuk Nat'l Univ., Korea

**TuP-049**

**Synthesizing Orange Iridium (III) Complexes for Solution Processable Organic Light-Emitting Diodes**

Hyungjin Cheon<sup>1</sup>, Yun-Hi Kim<sup>1</sup>, Jaeyoung Hwang<sup>1</sup>, Seung-Bae Ji<sup>2</sup>, Kyoung Soo Yook<sup>2</sup>, and Soon-Ki Kwon<sup>1</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>Sungkyunkwan Univ., Korea

**TuP-050**

**Synthesis of Highly Soluble Carbazole-Based Copolymer Effects of Thermal Treatment on Chargecarrier Mobility**

Nam Yeong Jeong<sup>1</sup>, Min Su Jang<sup>1</sup>, So Min Park<sup>2</sup>, Dae Sung Chung<sup>2</sup>, Soon-Ki Kwon<sup>1</sup>, and Yun-Hi Kim<sup>1</sup>  
<sup>1</sup>Gyeongsang Univ., Korea, <sup>2</sup>DGIST, Korea

**TuP-051**

**Copolymer for Narrow Band Green-Selective Organic Photodiode**

Min Jae Sung<sup>1</sup>, Kyounghwan Kim<sup>2</sup>, Dae Sung Chung<sup>2</sup>, Yun-Hi Kim<sup>1</sup>, and Soon-Ki Kwon<sup>1</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>DGIST, Korea

**TuP-052**

**New n-Type Copolymer based on Thiazole Derivatives for OPVs**

Canjie Wang, Hyoung Nam Kim, Nayéong Kim, Yun-Hi Kim, and Soon ki Kwon  
Gyeongsang Nat'l Univ., Korea

**TuP-053**

**A Thinophene Based Copolymerfor An Organic Electronics**

Cheng Sun<sup>1</sup>, Kang in Lee<sup>1</sup>, Yun-Hi Kim<sup>1</sup>, and Soon-ki Kwon<sup>2</sup>  
<sup>1</sup>Gyeongsang Nat'l Univ., Korea, <sup>2</sup>Convergence Tech. and Inst. for Green Energy Convergen, Korea

**TuP-054****Synthesis and Photovoltaic Properties of Thieno[3,2-b]thiophene-Incorporated Benzothiadiazole-Based Conjugated Donor Polymers**

Jong-Woon Ha, Jong Baek Park, and Do-Hoon Hwang  
*Pusan Nat'l Univ., Korea*

**TuP-055****Observation and Characterization of Charge Transfer States in Bulk Heterojunction Blends by Subgap Optical Spectroscopies**

Sin Hang Cheung<sup>1</sup>, Carr Hoi Yi Ho<sup>1</sup>, Ho Wa Li<sup>2</sup>, Franky So<sup>3</sup>, Sai Wing Tsang<sup>2</sup>, and Shu Kong So<sup>1</sup>

<sup>1</sup>*Hong Kong Baptist Univ., Hong Kong, China*, <sup>2</sup>*City Univ. of Hong Kong, Hong Kong, China*, <sup>3</sup>*North Carolina State Univ., USA*

**TuP-056****A New Ambipolar Copolymer for Organic Electronics**

Xinwei Wu, Cheng Sun, Hyeng gun Song, and Yun-Hi Kim  
*Gyeongsang Nat'l Univ., Korea*

**TuP-057****Synthesis of Conjugated Polymer based on Phenanthrocarbazole Unit as A Donor and TPD Unit as An Acceptor**

Gyeong Seok Lee<sup>1</sup>, Yun-Hi Kim<sup>1</sup>, Dong Hwan Wang<sup>2</sup>, Soon-Ki Kwon<sup>1</sup>, Minji Yi<sup>2</sup>, Jae Sang Cho<sup>2</sup>, Soyun Park<sup>2</sup>, Hyungjin Cheon<sup>1</sup>, and Woongsik Jang<sup>2</sup>

<sup>1</sup>*Gyeongsang Nat'l Univ., Korea*, <sup>2</sup>*Chung-Ang Univ., Korea*

**TuP-058****Synthesis and Characterization of OLEDs, New Deep-Blue Dopants**

Oh-Sung Koo<sup>1</sup>, Yun-Hi Kim<sup>1</sup>, Sunyoung Sohn<sup>2</sup>, Bong Hyun Koh<sup>3</sup>, Jae Yeul Baek<sup>3</sup>, Hyun Chan Byun<sup>3</sup>, Jae Hyun Lee<sup>3</sup>, Dong-Seon Shin<sup>3</sup>, Hyungju Ahn<sup>2</sup>, and Han-Koo Lee<sup>2</sup>

<sup>1</sup>*Gyeongsang Univ., Korea*, <sup>2</sup>*Pohang Univ., Korea*, <sup>3</sup>*Kyeong-Nam Science High School, Korea*

**TuP-059****Improvement of Luminescence Efficiency of Organic Nanoarchitectures by Controlling Crystallinity**

Do Hyoung Kim, Jinho Choi, Seokho Kim, and Dong Hyuk Park  
*Inha Univ., Korea*

**TuP-060****Circularly Polarized Luminescence from Supramolecular Complexes Consisting of Cyanostilbene Derivatives and Sulfated Beta-Cyclodextrin in Water**

Hyeong-Ju Kim and Soo Young Park  
*Seoul Nat'l Univ., Korea*

**TuP-061**

**Novel Self-Doped Water-Soluble Highly Conducting Polymers**

Hirokazu Yano<sup>1,2</sup>, Kazuki Kudo<sup>2</sup>, and Hidenori Okuzaki<sup>2</sup>

<sup>1</sup>Tosoh Corp., Japan, <sup>2</sup>Univ. of Yamanashi, Japan

**TuP-062**

**Preparation of Graphene-Polypyrrole/Epoxy Composites with Excellent Electromagnetic Wave Absorption Properties**

Quyen Thi Vu<sup>1</sup>, Tung Trinh Ngo<sup>2</sup>, and Daewon Sohn<sup>1</sup>

<sup>1</sup>Hanyang Univ., Korea, <sup>2</sup>VAST, Vietnam

**TuP-063**

**High-Performance n-Channel Field-Effect Transistors from[1]Benzothieno[3,2-b]Benzothiophene Based Donor-Acceptor Copolymers**

Suman Kalyan Samanta, Inho Song, Jong Heun Yoo, and Joon Hak Oh

POSTECH, Korea

**TuP-064**

**Size Adjustment of Conjugatedpolymer Nanoparticles for White Light Emission**

Jongho Kim, Young-Jin Gwon, Jeong Jun Lee, and Taek Seung Lee

Chungnam Nat'l Univ., Korea

**TuP-065**

**Non-Conjugated Polymer Emitting Materials for High-Performing Solution-Processed TADF-Assisted Organic Light-Emitting Diodes**

Hyung Jong Kim, Chiho Lee, Mallesham Godumala, Suna Choi, Seo Yeon Park, Min Ju Cho, Sungnam Park, and Dong Hoon Choi

Korea Univ., Korea

**TuP-066**

**High-Performing Silane Core-Based Bipolar Host Materials in Blue Thermally Activated Delayed Fluorescence OLEDs**

Suna Choi, Seo Yeon Park, Young Un Kim, Su Hong Park, Min Ju Cho, and Dong Hoon Choi  
Korea Univ., Korea

**TuP-067**

**Synthesis of Conjugated Polymer with Long Wavelength Absorption for ROS Generation**

Young Jin Gwon, Hyun Chul Kim, and Taek Seung Lee

Chungnam Nat'l Univ., Korea

**TuP-068****Control on Liquid Crystal Defects via Fabrication of Polymer-Based Microchannels with a Soft-Imprinting Technique Assisted Method**

Min Jeong Shin, Min-Jun Gim, and Dong Ki Yoon  
KAIST, Korea

**TuP-069****Blue-Emissive Fluorophore based on A Single Benzene with Intra- Andintermolecular Hydrogen Bonds**

Eunbee Cho, Taehyun Kim, Yena Lee, and Taek Seung Lee  
Chungnam Nat'l Univ., Korea

**TuP-070****Green-Processable and Dopant-Free Semiconducting Polymers with Asymmetric Structure and Application to Hole-Transporting Materials**

Junwoo Lee, Cheol Woong Park, Sang Ah Park, and Park Taiho  
POSTECH, Korea

**TuP-071****Synthesis of Fluorescent Azobenzene Derivatives upon Aggregation**

Yeoju Yoon, Seonyoung Jo, and Taek Seung Lee  
Chungnam Nat'l Univ., Korea

**TuP-072****Enhanced Electron Mobility of Low-Crystalline Conjugated Polymers with Localized Aggregates via Kinetically Fast and Robust Interactions.**

Minjun Kim, Hong Il Kim, Seung Un Ryu, and Taiho Park  
POSTECH, Korea

**TuP-073****Electric Field Induced Micropatterned Liquidcrystal**

Dongki Yoon and You Ra  
KAIST, Korea

**TuP-074****Self-Assembled Conjugated Poly Microdisk Array and Its Fluorescence Switching**

Yusuke Kitayama<sup>1</sup>, Yusuke Aikyo<sup>1</sup>, Takeo Minari<sup>2</sup>, Xuying Liu<sup>2</sup>, Masakazu Morimoto<sup>3</sup>, Masahiro Irie<sup>3</sup>, Junpei Kuwabara<sup>1</sup>, Takaki Kanbara<sup>1</sup>, and Yohei Yamamoto<sup>1</sup>

<sup>1</sup>Univ. of Tsukuba, Japan, <sup>2</sup>NIMS, Japan, <sup>3</sup>Rikkyo Univ., Japan

## International Conference on Science and Technology of Synthetic Metals 2018

### TuP-075

#### **Donor-Acceptor Dendrimer Crystals that Display Thermo-, Vapor-, and Mechanochromism**

Jooyoung Yoo<sup>1</sup>, Yohei Yamamoto<sup>1</sup>, Sae Nakajima<sup>1</sup>, Ken Albrecht<sup>2</sup>, Kimihisa Yamamoto<sup>2</sup>, Youhei Takeda<sup>3</sup>, and Minakata Satoshi<sup>3</sup>

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### TuP-076

#### **Luminescent Di-Iridium Complexes with Bridging Pyrazolates; Characterization and Fabrication of OLEDs Using Vacuum Thermal Deposition**

Jia-Ling Liao<sup>1</sup>, Palanisamy Rajakannu<sup>1</sup>, Premkumar Gnanasekaran<sup>1</sup>, Shang-Ru Tsai<sup>2</sup>, Chun-Han Lin<sup>2</sup>, Chih-Hao, Chang<sup>2</sup>, Shih-Hung Liu<sup>3</sup>, Pi-Tai Chou<sup>3</sup>, Gene-Hsiang Lee<sup>3</sup>, and Yun Chi<sup>1</sup>

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### TuP-077

#### **The Influence of Aromatic Diimide Side Groups on $\pi$ -Conjugated Polymer Properties**

Przemyslaw Ledwon, Karol Knop, Anna Drewniak, and Krzysztof Walczak  
Silesian Univ. of Tech., Poland

### TuP-078

#### **Dual Anthracene Derivatives Using Optimizing Side Group for Highly Efficient Blue OLED Emitters**

Seokwoo Kang, Hayoon Lee, Hyocheol Jung, and Jongwook Park  
Kyung Hee Univ., Korea

### TuP-079

#### **Ring-Fusion of Non-Fullerene Acceptors based on Perylene Diimide towards Efficient Organic Solar Cells with Small Voltage Losses**

Jianquan Zhang, Yunke Li, and He Yan  
Hong Kong Univ. of Science and Tech., Hong Kong, China

### TuP-080

#### **Synthesis and Electroluminescent Properties of New Blue Dual-Core Derivatives Using Fluorene and Carbazole**

Beomjin Kim<sup>1</sup>, Suji Lee<sup>2</sup>, Hyocheol Jung<sup>1</sup>, Hayoon Lee<sup>1</sup>, Seokwoo Kang<sup>1</sup>, Yeonkyu Jeong<sup>1</sup>, and Jongwook Park<sup>1</sup>  
<sup>1</sup>Kyunghee Univ., Korea, <sup>2</sup>Catholic Univ., Korea

### TuP-081

#### **Synthesis of A Degenerated Neutral Radical State based on Metal Dithiolene Complex**

Yojiro Kimura, Mikihiro Hayashi, Mitsuhiro Maesato, and Hiroshi Kitagawa  
Kyoto Univ., Japan

**TuP-082****Synthesis and Electroluminescent Properties of New Blue Dual-Core Emitters Using Different Aromatic Amines and Substitution Positions**

Hwangyu Shin<sup>1</sup>, Beomjin Kim<sup>2</sup>, Hyocheol Jung<sup>2</sup>, Jaehyun Lee<sup>1</sup>, Hayoon Lee<sup>2</sup>, Seokwoo Kang<sup>2</sup>, Jiwon Moon<sup>1</sup>, JinWook Jeong<sup>2</sup>, Joonghan Kim<sup>1</sup>, and Jongwok Park<sup>2</sup>

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**TuP-083****Improving Photostability of Polymer Solar Cells by Introducing Stabilizing Moiety in Photoactive Layer**

Vu Van Doan, Rasool Shafket, Chang Eun Song, and Won Suk Shin  
KRICT, Korea

**TuP-084****Direct C-H Arylation Meets Perovskite Solar Cells: Sn-Free Synthesis Shortcut to High Performance Hole-Transporting Materials**

Yu-Chieh Chang<sup>1</sup>, Kun-Mu Lee<sup>2</sup>, Chia-Hsin Lai<sup>1</sup>, Ching-Yuan Liu<sup>1</sup>, and Jui-Heng Chen<sup>1</sup>

<sup>1</sup>Nat'l Central Univ., Taiwan, <sup>2</sup>Chang Gung Univ., Taiwan

**TuP-085****Greener Synthesis of D-π-A Organic Sensitizers via Cu-Catalyzed Direct Arylations: Development of Sn- & Pd-Free Process for Dye-Sensitized Solar Cells**

Chia-Hua Chiang<sup>1</sup>, Jiung-Huai Huang<sup>1</sup>, Po-Han Lin<sup>1</sup>, Wei-Ming Li<sup>1</sup>, Kun-Mu Lee<sup>2</sup>, and Ching-Yuan Liu<sup>1</sup>

<sup>1</sup>Nat'l Central Univ., Taiwan, <sup>2</sup>Chang Gung Univ., Taiwan

**TuP-086****Direct C-H Arylation as Chemoselective Single-Step Access to Organic-Electronics-Versatile π-Acceptor-π Type Building Blocks**

Kuan-Ming Lu, Wei-Ming Li, Po-Yu Lin, Kuan-Ting Liu, Yi-Kai Peng, and Ching-Yuan Liu  
Nat'l Central Univ., Taiwan

**TuP-087****Quinoidal Conjugated Polymers for High Performance Organic Field-Effect Transistors**

Yunseul Kim<sup>1</sup>, Hansu Hwang<sup>2</sup>, Nam-Koo Kim<sup>3</sup>, and Dong-Yu Kim<sup>1</sup>

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**TuP-088****Synthesizing Fluorinated Benzothiadiazole-Containing Regioregular Polymer: Comparing the Regioregular with Regiorandom Polymer on Nanogrooved Substrate**

Junghoon Lee  
Dongseo Univ., Korea

**TuP-089**

**Flexible NFC Tag for Food Packaging with Printed Antenna and Temperature Sensor with Si-Chip as RF Front End**

Bijendra Bishow Maskey, Kiran Shrestha, Yushin Kim, Hyejin Park, and Gyoujin Cho  
*Sunchon Nat'l Univ., Korea*

**TuP-090**

**Charge-Transfer Dynamics in Donor-Spacer-Acceptor Dyads**

Ahmed Hesham Balawi<sup>1</sup>, Julien Gorenflo<sup>1</sup>, Sebastian Stappert<sup>2</sup>, Denis Adrienko<sup>2</sup>, Chen Li <sup>2</sup>, Klaus Mullen<sup>2</sup>, and Frederic Laquai<sup>1</sup>

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