PROGRAM

THURSDAY OCTOBER 10 (MIRAI Hall, Frontier Center for Organic Materials (Building 11) in Yamagata University)

9:00-9:30
Open

9:30-9:40
Opening Remarks

Kohei Takahashi
Student Chair, Yamagata University, Japan

Moderator: Kohei Takahashi, Yamagata University, Japan

9:40-10:10

IL-1 3D Printing of Electrically Conductive Multi-Functional Materials for Structural Applications

Vipin Kumar and Vlastimil Kunc
Material Science and Technology Division, Manufacturing Demonstration Facility (MDF), Oak Ridge National Laboratory (ORNL), USA

10:10-10:20

CL-1 Physical Property Modification of Regenerated Cellulose Fiber by New Dyeing Technique

Kazuki Ohta, Go Matsuba and Hidemi Aita
Yamagata University, Japan

10:20-10:30

CL-2 The Effects of Crystal Morphology for Polyphenylene Sulfide and Polyamide Blends

Genta Mase, Go Matsuba and Akio Sakai
Yamagata University, Japan

10:30-10:40

CL-3 Comparative Study of Indica and Japonica Amorphous Rice Flour Made by Using the Shear and Heat Milling Machine

Yu Kanke, Hiroko Yano, Ken Miyata, Tomonori Koda, Taichi Nishio, Chukwan Techakanon, Somwang Lekjing and Akihiro Nishioka
Yamagata University, Japan
10:40-10:50  Coffee Break (10 min)

Moderator: Tatsuki Sasaki, Yamagata University, Japan

10:50-11:00

CL-4  Preparation of Biodegradable Material from Tapioca Starch and Cellulose Nanofibers

Apakorn Thongmeepech, Ken Miyata, Tomonori Koda, Taichi Nishino and Akihiro Nishioka
Yamagata University, Japan

11:00-11:10

CL-5  Effect of Crystallinity of Rice Flour on Rheological and Baking Properties

Marin Abiko, Hiroko Yano, Ken Miyata, Tomonori Koda, Taichi Nishio and Akihiro Nishioka
Yamagata University, Japan

11:10-11:20

CL-6  Relationship between Gelatin Solution Viscosity and the Size of Vesicles Formed by the Droplet-Shooting Method

Kanako Adachi, Kazunari Yoshida, Masato Makino, Masaru Kawakami and Hidemitsu Furukawa
Yamagata University, Japan

11:20-11:30

CL-7  Mechanical Properties of Food Materials Suitable for 3D Printing and Effect of Internal Structure on the Compression Fracture

Shunsuke Suzuki, Ryo Ishigaki, Masaru Kawakami, Jun Nango and Hidemitsu Furukawa
Yamagata University, Japan

11:40-11:50  Photo Opportunity

11:50-13:30  Lunch
Moderator: Chen Ying-Liu, Yamagata University, Japan

13:30-13:40

CL-8  3D Gel Printing with Low Cost Devices

Yosuke Sato, Azusa Saito, Masaru Kawakami and Hidemitsu Furukawa
Yamagata University, Japan

13:40-13:50

CL-9 Properties and Modeling of White Gel by 3D Gel Printer

Yuta Yamazaki, Azusa Saito, Masaru Kawakami, Jun Nango and Hidemitsu Furukawa
Yamagata University, Japan

13:50-14:00

CL-10 Development of Water Transpirable Mimetic Skin Using Hydrogels

Shuma Kanai, Masaru Kawakami and Hidemitsu Furukawa
Yamagata University, Japan

14:00-14:10

CL-11 Mimicking Human Emotions for Soft Matter Robotics

Takaaki Kameyama, Ikuma Sudo, Jun Ogawa, Kazunari Yoshida, Masaru Kawakami and Hidemitsu Furukawa
Yamagata University, Japan

14:10-14:20  Coffee Break (10 min)

Moderator: Keiichiro Sato, Yamagata University, Japan

14:20-14:50

IL-2 Synthesis and Self-Assembly of Oligosaccharide-Based Block Copolymers

Takuya Isono
Hokkaido University, Japan

14:50-15:00

CL-12 Synthesis of Tough Crosslinked Material by Photo-cyclopolymerization

Takumi Miyashita, Yoshimasa Matsumura and Bungo Ochiai
Yamagata University, Japan
15:00-15:10

CL-13  Ion Dynamics and Electrical Conductivity of M' (crown ether) TCNQ Complexes

Kohei Sambe, Norihisa Hoshino, Takashi Takeda, Takayoshi Nakamura and Tomoyuki Akutagawa

Tohoku University, Japan

15:10-15:20

CL-14  Copolymerization of Glycidyl Methacrylate with Acrylates Accompanied by Carbonation with Carbon Dioxide and Thermal Properties of Resulting Polymers

Kenta Kosugi, Yoshimasa Matsumura and Bungo Ochiai

Yamagata University, Japan

15:20-15:50

IL-3  How Does the "Techne" Use "us"

Ryosuke Kakinami

Yamagata University, Japan

15:50-16:00  Coffee Break (10 min)

16:00-17:30  Poster Session

18:00-20:00  Banquet
FRIDAY OCTOBER 11 (MIRAI Hall, Frontier Center for Organic Materials (Building 11) in Yamagata University)

9:00-9:30
Open

9:35-9:40
Announcements

Hiroki Arai
Yamagata University, Japan

Moderator: Yuki Tsuda, Yamagata University, Japan

9:40-10:10

IL-4 Roll-to-Roll High Uniformity Flexible OLED Lighting Panels Using Transparent IZO-Ag Alloy-Nb2O5 Multi-Layers as Anode Electrode

Hsin Chu Chen, Chao-Feng Sung, Chien-Hung Lin, Hung-Yi Chang, Gerry Yi-Shu Chen, Yu-Lin Hsu, Cheng-Yi Chen, Story Kuo-Hsin Huang, Hsin-Yun Hsu and Benjamin Chih-Ming Lai
Industrial Technology Research Institute, Taiwan

10:10-10:40

IL-5 Tumor-on-a-Chip for Studying Effects of Flow Through a Vascular Network

Yuji Nashimoto
Tohoku University, Japan

10:40-10:50

CL-15 Electrochemical CO₂ Reduction Catalytic Activity Comparison of Polydopamine on Various N-doped Carbon Substrates

Yuva Harada, Nobuyuki Nishiumi, Philipp Stadler, Hidenobu Shiroishi and Tsukasa Yoshida
Yamagata University, Japan

10:50-11:00

CL-16 Electrodeposition of Zn-Terephthalate MOF Thin Films for Redox Batteries

Tensho Nakamura, Shotaro Ueda, Satoshi Chubachi, Kyota Uda, Yuki Tsuda, Yuji Hirai and Tsukasa Yoshida
Yamagata University, Japan

11:00-11:10
CL-17 Synthesis Alkane Viologen Cation/Indanyl Anion and Property Evaluation

Erika Saito, Taichi Yasuhara, Shuji Okada, Ryohei Yamakado, Jun Matsui, Hiroshi Katagiri, Wataru Fujiwara, Akito Masuhara, Matthew White, Randall Headrick and Tsukasa Yoshida
Yamagata University, Japan

10:10-11:20 Coffee Break (10 min)

Moderator: Keiichiro Sato, Yamagata University, Japan

11:20-11:30

CL-18 Effect of Aromatic Ligands for Perovskite Nanocrystals and Their Optical Properties

Sasiphapa Rodbuntum, Kazuki Umemoto, Yuki Tezuka, Junya Enomoto, Takayuki Chiba, Satoshi Asakura and Akito Masuhara
Yamagata University, Japan

11:30-11:40

CL-19 Synthesis of Chain-End-Functionalized Poly(3-hexylthiophene)s Using a Zincate Complex

Shin Inagaki and Tomoya Higashihara
Yamagata University, Japan

11:40-11:50

CL-20 Development of Proton Conductive Materials for PEFC by Polymer Coated Cellulose Nanocrystals

Tomohiro Nohara, Keisuke Tabata, Kazuki Koseki, Toshihiko Arita and Akito Masuhara
Yamagata University, Japan

11:50-12:00

CL-21 Green Synthesis and Characterization of π-Conjugated Polymer Based on Aldol Polycondensation Reaction

Shingo Sato, Cheng-Liang Liu and Tomoya Higashihara
Yamagata University, Japan

12:00-13:30 Lunch
Moderator: Naoto Takagi, Yamagata University, Japan

13:30-14:00

IL-6  Machine Learning-based Augmentation of Creative Processes

Edgar Simo-Serra
Waseda University, Japan

14:00-14:10

CL-22  Automatic Detection System for Morphological- and Behavioral- Transition of Drosophila

Mayu Kudo, Ki-Hyeon Seong, Taishi Matsumura, Maki Otori, Hiroki Watanabe, Masaya Hata, Tetsuya Yuasa and Siu Kang
Yamagata University, Japan

14:10-14:20

CL-23  Interface Structure between TIPS-Pentacene and Polystyrene by Using Molecular Dynamics Simulation

Tomoka Suzuki, Giuseppe Milano, Hiroyuki Matsui and Antonio De Nicola
Yamagata University, Japan

14:20-14:30

CL-24  Molecular Dynamics Simulation on Phosphor Host Compounds Based on Lithium Aluminate

Joichiro Ichikawa, Chika Sato, Hiroko Kominami, Kazuhiko Hara, Massato Kakihana and Yuta Matsushima
Yamagata University, Japan

14:30-14:40

CL-25  Controlled Synthesis of Novel Amino Acid-Based Block Copolymers Using Polymerization Induced Self-Assembly

Kazunori Masuko and Hideharu Mori
Yamagata University, Japan
14:40-14:50

CL-26 Synthesis of High Refractive Index Benzothiazole-Based Block and Random Copolymers

Yugo Sato, Sadaki Samitsu, and Hideharu Mori
Yamagata University, Japan

14:50-15:00 Coffee Break (10 min)

Moderator: Hiroki Arai, Yamagata University, Japan

15:00-15:10

CL-27 One-Pot Synthesis of Luminescent Nanoparticles Using Aggregation-Induced Emission Block Copolymer

Masaki Furukawa, Kazuhiro Nakabayashi and Hideharu Mori
Yamagata University, Japan

15:10-15:20

CL-28 Adsorption Properties of CeO$_2$ Nanoparticles for Several Types of Gas Molecules

Keita Kanahara and Yuta Matsushima
Yamagata University, Japan

15:20-15:30

CL-29 Green Synthesis of Silver Nanoparticles using Pipar chaba Stem Extracts and Investigation on Their Catalytic Activity

MD Mahiuddin, Prianka Saha and Bungo Ochiai
Yamagata University, Japan

15:30-15:40

CL-30 Biomolecule Decorated Nanoparticles of CdS Photocatalyst for Highly Efficient Hydrogen Production via Water Splitting

Fumiya Tojo, Shieru Kubota, Fumihiko Hirose and Bashir Ahmmad
Yamagata University, Japan

15:40-15:50 Coffee Break (10 min)
Moderator: Hiroki Arai, Yamagata University, Japan

15:50-16:10

IL-7 Biocompatibility of Surface Modified Commercial Yttria Stabilized Zirconia

Gulsanarasathi Kazi
Yamagata University, Japan

16:10-16:20

Review Comments

Takuya Komoda and Hiroaki Kaneko
Yamagata University, Japan

16:20-16:30

Closing Remarks

Bungo Ochiai
Chair, Yamagata University, Japan
<table>
<thead>
<tr>
<th>Poster Session</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PO-1</strong></td>
</tr>
<tr>
<td>Kai Sasaki, Hiroyuki Furusawa, Kuniaki Nagamine and Shizuo Tokito</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-2</strong></td>
</tr>
<tr>
<td><strong>PO-3</strong></td>
</tr>
<tr>
<td>Masayuki Murakami and Takashi Mineta</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-4</strong></td>
</tr>
<tr>
<td>Taishu Kumagai, Maki Sakamoto and Yoshimune Nonomura</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-5</strong></td>
</tr>
<tr>
<td>Yuji Murakami, Hideyuki Mitui, Tubasa Sato and Takashi Mineta</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-6</strong></td>
</tr>
<tr>
<td>Koyo Tamaki and Toshinori Makuta</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-7</strong></td>
</tr>
<tr>
<td>Minako Okukawa, Takamasa Watanabe, Maki Miura, Hiroyuki Konno, Shigekazu Yano and Yoshimune Nonomura</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-8</strong></td>
</tr>
<tr>
<td>Hokuto Kataoka, Ryo Kameda and Toshinori Makuta</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-9</strong></td>
</tr>
<tr>
<td>Takaya Kajihara, Shunpei Tazaki, Tatsuya Makino and Toshinori Makuta</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
<tr>
<td><strong>PO-10</strong></td>
</tr>
<tr>
<td>Yuta Takeuchi, Daisuke Fukushima, Chiharu Onishi and Yuta Matsushima</td>
</tr>
<tr>
<td><em>Yamagata University, Japan</em></td>
</tr>
</tbody>
</table>
PO-11 Deep-Red Luminescence of Cr\(^{3+}\) in Fluorine-Doped Lithium Aluminate

Yuki Kamada, Hiroko Kominami, Kazuhiko Hara, Masato Kakiha and Yuta Matsushima
Yamagata University, Japan

PO-12 Friction Dynamics of Oil-in-Water Emulsion on Gel Surfaces

Kei Kikuchi, Hiroyuki Mayama and Yoshimune Nonomura
Yamagata University, Japan

PO-13 Nanochannel TiO\(_2\) Thin Film Transistors Fabricated by Room-Temperature Atomic Layer Deposition and Their Application for Sensors

Keito Sogai, Ko Kikuchi, Bashir Ahmad, Shigeru Kubota and Fumihiko Hirose
Yamagata University, Japan

PO-14 All Bio Composite Filler Composed of Cellulose Nanocrystal@Hydroxyapatite for New Inlays

Ryota Sato, Tomohiro Nohara, Keisuke Tabata, Toshihiko Arita and Akito Masuhara
Yamagata University, Japan

PO-15 Self-Organized Precipitation Patterns in Hydrogel with Density Gradient

Masaki Itatani, Qing Fang, Kei Unoura and Hideki Nabika
Yamagata University, Japan

PO-16 Mathematical Model for Self-Organized Pattern Formation with Polymerization Reaction

Daisuke Sato, Yushiro Shimizu, Qing Fang, Kei Unoura, Jun Matsui and Hideki Nabika
Yamagata University, Japan

PO-17 Single Molecule Observation of the Aggregation Behavior of Amyloid β Peptide under Non-Equilibrium Fluidic Condition

Akane Iida, Kei Unoura and Hideki Nabika
Yamagata University, Japan

PO-18 Multiferroic Properties of Gd and Pr Co-Doped BiFeO\(_3\) Ceramics

Naoto Kubota, M. K. Alam, F. A. Khan, Shigeru Kubota, Fumihiko Hirose and Bashir Ahmmad
Yamagata University, Japan

PO-19 Histidine Decorated CdS@TiO\(_2\) Core-Shell Nanocomposites Photocatalyst for Hydrogen Production via Water Splitting

Hiroto Mai, Fumiya Tojo, Shigeru Kubota, Fumihiko Hirose and Bashir Ahmmad
Yamagata University, Japan

PO-20 Influence of Core Size and Silanol Group on Proton Conductivity of Functionalized Filler for Polymer Electrolyte Membrane

Kazuki Koseki, Tomohiro Nohara, Keisuke Tabata, Toshihiko Arita and Akito Masuhara
Yamagata University, Japan
PO-21 Green Synthesis of Wholly-Aromatic Polyamides by Direct Bulk Polymerization
   Akihito Nojo and Tomoya Higashihara
   Yamagata University, Japan

PO-22 Fabricating the Shell Thickness Controlled Core-Shell Type Nanoparticles for Polymer Electrolyte Membrane
   Keisuke Tabata, Tomohiro Nohara, Kazuki Koseki, Ryota Sato, Toshihiko Arita
   and Akito Masuhara
   Yamagata University, Japan

PO-23 Low Friction Material Using Liquid-Crystallinity Ionic Liquid
   Ryusei Sato, Mari Aoyagi, Ryo Shomura, Gen Masuda and Takaya Sato
   National Institute of Technology, Tsuruoka College, Japan

PO-24 Synthesis of Novel Ionic Liquid and Its Physico Chemical Properties
   Naoya Maeta, T. Morinaga, R. Shomura, R. Satoh and T. Sato
   National Institute of Technology, Tsuruoka College, Japan

PO-25 Local Synthesis of DLC Thin Films by Atmospheric Pressure Microplasma
   Ryota Nishimura, Hiroyuki Yoshiki, Junki Sato and Kousuke Gando
   National Institute of Technology, Tsuruoka College, Japan

PO-26 Ion Conductivity Evaluation of Proton Conductive Oxide Thin Film
   Takashi Sato, Kenshin Narisawa and Kiyoshi Uchiyama
   National Institute of Technology, Tsuruoka College, Japan

PO-27 Preparation of CuCl$_x$X Thin Films by Spin Coating Method and Approach to Transparent Solar Cell Development
   Yuhei Sato, Kunihiko Tanaka, Nobuo Saito and Katsuhiko Moriya
   National Institute of Technology, Tsuruoka College, Japan

PO-28 A pH Dependence of Cu$_2$SnS$_3$ Thin Films Prepared by Chemical Bath Deposition
   Kazuhiro Sugai, Takuya Tomono, Kunihiko Tanaka and Katsuhiko Moriya
   National Institute of Technology, Tsuruoka College, Japan

PO-29 Preparation and Evaluation of Dextrin-Added Cu$_2$SnS$_3$ Thin Films by Wet Process
   Takuya Tomono, Kunihiko Tanaka and Katsuhiko Moriya
   National Institute of Technology, Tsuruoka College, Japan