

## POLYMAT 08 – PRELIMINARY PROGRAM

### SUNDAY, AUGUST 10, 2008

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4:00 PM      **REGISTRATION BEGINS**

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**WELCOME**

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6:30 PM      **OPENING RECEPTION EVENT SPONSORED BY UNIVERSAL DISPLAY CORPORATION**

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### MONDAY, AUGUST 11, 2008

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7:30 AM      **CONTINENTAL BREAKFAST**

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8:30 AM      Greetings  
Rigoberto C. Advincula (University of Houston, USA)

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8:35 AM      Opening Remarks  
Hiroyuki Nishide (Waseda University, JAPAN)

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**SESSION 1: Photovoltaic and Energy-Harvesting Polymers**  
**Discussion Leader: Prof. Nishide**

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8:45 AM      **Alan J. Heeger** (University of California, Santa Barbara, USA)      **1**  
*“Low Cost ‘Plastic’ Solar Cells”*

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9:30 AM      **Kazuo Akagi** (Kyoto University, JAPAN)      **2**  
*“From Helical Polyacetylene to Helical Graphite: Synthesis in Helical Sense-Controllable Liquid Crystal Field and Morphology-Retaining Carbonization”*

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10:15 AM      **COFFEE BREAK**

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10:40 AM      **Tsutomu Miyasaka** (Peccell Technologies, JAPAN)      **3**  
*“Printable Plastic Photovoltaic Cells and Modules by the Dye-Sensitized TiO<sub>2</sub> Technology”*

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11:10 AM      **Quyen Nguyen** (University of California, Santa Barbara, USA)      **4**  
*“Probing Surface and Internal Structure of Bulk Heterojunction Conjugated Polymer Solar Cells”*

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11:35 AM      **Yang Yang** (University of California, Los Angeles, USA)      **5**  
*“Efficient Polymer Solar Cell and its Invert Structure”*

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12:05 PM      **LUNCH ON YOUR OWN 3 hours**

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## MONDAY, AUGUST 11, 2008, CONT'D

### SESSION 2: Printed Electronics, Transistors, and Sensors Discussion Leader: Prof. Advincula

3:00 PM	<b>Samson A. Jenekhe</b> (University of Washington, USA) <i>"Polymer Semiconductor Nanowires: Sizing and Shaping Materials for Better Properties and High Performance Devices"</i>	<b>6</b>
3:30 PM	<b>Shinji Aramaki</b> (Mitsubishi Chemicals, JAPAN) <i>"Solution-Processible Organic Semiconductors for Electronic Applications"</i>	<b>7</b>
4:00 PM	<b>Guillermo C. Bazan</b> (University of California, Santa Barbara, USA) <i>"New Conjugated Polyelectrolyte Materials for Biosensor Design and Device Fabrication"</i>	<b>8</b>
4:30 PM	<b>COFFEE BREAK</b>	
4:45 PM	<b>Richard McCullough</b> (Carnegie Mellon University, USA) <i>"Printable Electronics: From Living Synthesis of Conducting Polymers to High Mobility Transistors"</i>	<b>9</b>
5:15 PM	<b>Xiong Gong</b> , Gang Yu, Chan-Long Shieh, Boo Nilsson, Hsing-Chung Lee, Alan J. Heeger (Cbrite, Inc., USA) <i>"Ultrasensitive Solution Processed Polymer Photodetectors"</i>	<b>10</b>
5:35 PM	<b>Kenichi Oyaizu</b> (Waseda University, JAPAN) <i>"Radical Polymers for Organic Memory Devices"</i>	<b>11</b>
6:00 PM	<b>ORAL Poster Summaries</b>	
7:00 PM	<b>POSTER SESSION AND DINNER EVENT</b>	

## TUESDAY, AUGUST 12, 2008

7:30 AM	<b>CONTINENTAL BREAKFAST</b>	
<b>SESSION 3: LED, Display and Emissive Device</b> Discussion Leader: Prof. Oyaizu		
8:30 AM	<b>Toshihiro Ohnishi</b> (Sumitomo Chemicals, JAPAN) <i>"Light-Emitting Polymers for Full Color OLED"</i>	<b>12</b>
9:00 AM	<b>Jason Brooks</b> (Universal Display Corporation, USA) <i>"High efficiency phosphorescent OLEDs"</i>	<b>13</b>
9:30 AM	<b>Junji Kido</b> (Yamagata University, JAPAN) <i>"Development of White OLEDs for Lighting Applications"</i>	<b>14</b>
10:00 AM	<b>COFFEE BREAK</b>	
10:30 AM	<b>Ben Schwartz</b> (University of California, Los Angeles, USA) <i>"Controlling NM-Scale Phase Segregation in Bulk Heterojunction Conjugated Polymer Solar Cells Through The Use Of Stackable "Shuttlecock" Fullerene Derivatives"</i>	<b>15</b>
11:00 AM	<b>H. Usui</b> (Tokyo University of Agriculture & Technology, JAPAN) <i>"Improved Hole-Transport Properties in OLED Devices From Vapor-Deposited Polymer Coatings"</i>	<b>16</b>

## TUESDAY, AUGUST 12, 2008, CONT'D

11:30 AM	<b>LUNCH ON YOUR OWN, 3.5 hours</b>	
		<b>SESSION 4: New Materials and Initiatives</b> <b>Discussion Leader: Prof. Kido</b>
3:00 PM	<b>Kimihisa Yamamoto</b> (Keio University, JAPAN) <i>"Synthesis of Metallodendrimers"</i>	<b>17</b>
3:30 PM	<b>Alex K-Y Jen</b> (University of Washington, USA) <i>"Self-Assembly and Interface Engineering for High-Performance Organic Electronics"</i>	<b>18</b>
4:00 PM	<b>Tsuyoshi Kawai</b> (Nara Institute of Science and Technology, JAPAN) <i>"Design and Synthesis of Stimuli-Responsive <math>\pi</math>-Conjugated Molecular Units and Polymers"</i>	<b>19</b>
4:30 PM	<b>COFFEE BREAK</b>	
5:00 PM	<b>Fred Wudl</b> (University of California, Santa Barbara, USA) <i>"Design and Synthesis of New Materials for Organic Photovoltaics"</i>	<b>20</b>
5:30 PM	<b>Tsuyoshi Michinobu</b> (Tokyo Institute of Technology, JAPAN) <i>"A New Class of Conjugated Carbazole Polymers"</i>	<b>21</b>
5:50 PM	<b>Zhenan Bao</b> (Stanford University, USA) <i>"Conjugated Polymers Containing Fused Rings for Thin Film Electronics and Photovoltaic Cells"</i>	<b>22</b>
6:20 PM	<b>Tokuji Miyashita</b> (Tohoku University, JAPAN) <i>"Organic Nano-Electronics based on Polymer Nano-Sheet Assemblies"</i>	<b>23</b>
7:00 PM	<b>DINNER BANQUET</b>	

## WEDNESDAY, AUGUST 13, 2008

		<b>SESSION 5: Fabrication, Lithography, Roll-to-roll</b> <b>Discussion Leader: Prof. Usui</b>
7:30 AM	<b>CONTINENTAL BREAKFAST</b>	
8:30 AM	<b>A. Yee</b> (University of California, Irvine, USA) <i>"Fabrication and Orientation of Conjugated Polymer Lines"</i>	<b>24</b>
9:00 AM	<b>Futao Kaneko</b> (Niigata University, USA) <i>"Fabrication of Polymer Nano-Fibers using Electrospinning Method with a Wire Electrode in a Capillary Tube"</i>	<b>25</b>
9:30 AM	<b>Rigoberto Advincula</b> (University of Houston, USA) <i>"Electronanopatterning Methods and Precursor Polymer Approach"</i>	<b>26</b>
10:00 AM	<b>Akira Baba</b> (Niigata University, JAPAN) <i>"Surface Manipulation of Conjugated Precursor Polymer Thin Films by AFM Nanolithography"</i>	<b>27</b>

## WEDNESDAY, AUGUST 13, 2008, CONT'D

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10:30 AM	<b>COFFEE BREAK</b>	
10:50 AM	<b>Jeffrey Yamada</b> (Mitsubishi Chemical, USA) <i>"Photocurable Thiol-ene Polymers for Soft-Lithography"</i>	<b>28</b>
11:20 AM	<b>Dennis W. Smith, Jr.</b> (Clemson University, USA) <i>"Trifluorovinyl Aromatic Ether Derived Polymers for Photonics"</i>	<b>29</b>
11:50 AM	<b>Joe Mabry</b> (United States Air Force, USA) <i>"Functional Cyclo-Silicates and their Novel Polymer Nanocomposites"</i>	<b>30</b>
12:20 PM	<b>CLOSING REMARKS Nishide and Advincula</b>	

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Information will be provided for area tour options. More will be available in the very near future.