### 1st Indiana-Taiwan Technology Transfer and Entrepreneurship Summit September 27-30, 2011 At Indiana University-Purdue University Fort Wayne

Fort Wayne, Indiana, U.S.A.

### **Preliminary Program Agenda/Information on ITTTES**

### Time and Date: September 27-30, 2011

- Discussions of a MOU for establishing Global Alliance for Technology Transfer and Entrepreneurship (GATTE) and signing ceremony; Taiwanese/IPFW Research & Engagement – September 27 and 28
- Evening reception September 28
- Technology Showcase presentations September 29
- Taiwanese guests visit regional companies September 30

### Tuesday, September 27, 2011

1:30 p.m. Panel Discussion: Taiwanese/IPFW Research and Engagement including Center of Excellence, Community outreach, University engagement partners, etc.

### Wednesday, September 28, 2011

9:00 a.m. Discussion of a Memorandum of Understanding (MOU) to establish the Global Alliance for Technology Transfer and Entrepreneurship (GATTE) and signing ceremony: IPFW, Northeast Indiana Innovation Center, Alliance, Northeast Indiana Development, Taiwanese Universities and their R&D Offices, and Taiwanese R&D/Innovation/Incubation Centers

1:00 p.m. IPFW Campus Tour

- 5:00 p.m. Reception for Taiwanese visitors, regional business leaders, Northeast Indiana Taiwan visit team, corporate plant tour hosts (by invitation only) Location: IPFW Alumni Center
- 7:30 p.m. Omnibus Lecture: Mitch Daniels, Governor, State of Indiana Location: Rhinehart Music Center, IPFW

### <u>Thursday, September 29, 2011</u>(Additional technology presentations and poster papers are expected)

| 8:00 a.m. | Registration, Continental Breakfast, Poster Presentation & Networking – Location: IPFW Walb Union Ballroom   |
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| 8:30 a.m. | <u>Welcome</u><br>Michael A. Wartell – Chancellor, Indiana University – Purdue University Fort Wayne   |
| 8:40 a.m. | Program Introduction   |
| 8:50 a.m. | Doing Business With Taiwan – Taiwanese – US Business Start-ups   |
| 9:00 a.m. | Elevate Ventures and QuiackStart: Supporting Entrepreneurs in Northeast Indiana –<br>Karen Goldner, President, Main Street Venture Fund and Robert Clark, Management<br>Director, Indiana Angel Network  |
| 9:30 a.m. | Taiwan- IU and Purdue Technology Presentations (2 tracks of 4 technologies each)<br>Track 1: Nano-Scale, Electronics and Thermoelectric Material Technologies(Walb<br>Ballroom)  |
|           | <ul> <li>FePt Nanoparticles for Dual Mode CT/MRI Molecular Imaging of Cancer Cells,<br/>National Cheng-Kung University &amp; NTNU Corporation, Professor Dar-Bin Shieh,<br/>NCKU, Taiwan</li> <li>Nano-Sized Alumina Particles, National Cheng-Kung University, Pei-Ching Yu<br/>and Fu-Su Yen, NCKU, Taiwan</li> <li>Flexible Polymer-Based Thermoelectric Materials on Fabrics for Use as</li> </ul> |

- Flexible Polymer-Based Thermoelectric Materials on Fabrics for Use as Personal Cooling/Heating and Portable Power Source, Purdue Research Foundation, Dr. Yue Wu, School of Chemical Engineering, Purdue University West Lafayette
- Energy Harvesting Power Supply for Sensor Network, National Taipei University of Technology, Taiwan, Professor Dahseng Lee, NTUT, Taiwan

## *Track 2: Renewable Energy, Environmental and Water Management Technology (Walb 222-226)*

- Small Scale Integrated Windmill System, WindTek Green Energy Technology Company, Ltd. Professor Frank Lin, National Formosa University, Taiwan
- A Novel Cruising Jet Aerator for Aquaculture and Water Pollution Applications, National Formosa University, Taiwan, Professor R.F. Tsai, NFU, Taiwan
- **Direct Ethanol Fuel Cell,** Indiana University Research and Technology Corporation, Professor Rongrong Chen, Indiana University-Purdue University Indianapolis
- High Rate Bio-Hydrogen Production Technology (HRBhPT), Green Energy Development Center, Dr. Huang-Chih Lu, Office of R&D, Feng Chia University, Taiwan,

| 11:00 a.m. | Break - Posters Presentation & Networking                                 |
|------------|---|
| 11:30 a.m. | Lunch   |
| 12:00 noon | Keynote Address<br>International Entrepreneurship and Technology Transfer |
| 12:30 p.m. | Taiwan- IU and Purdue Technology Presentations (2 tracks of 4 techno      |

# p.m. Taiwan- IU and Purdue Technology Presentations (2 tracks of 4 technologies each) Track 3: Wireless Sensors, Data Acquisition and Monitoring Technology (Walb Ballroom)

- "Sky Falcon" Unmanned Aerial Vehicle Tracking and Ground Control System with Novel Applications, RayFalcon Technology Corporation & National Formosa University, Taiwan, Professor Huan-Jung Lin, NFU, Taiwan
- Human Vision for Robotic Machines, Purdue Research Foundation, Professor Zygmunt Pizlo, Department of Psychology, Purdue University West Lafayette
- Universal Wireless Internet Data Acquisition System (WIDAS), Max Yen, et. al., Indiana University-Purdue University Fort Wayne
- Extension of Fixed Controller Area Networks to Wireless Personal Area Networks, Indiana University Research and Technology Corporation, Paul A. Kuban, Engineering Department, University of Southern Indiana, Evansville, IN

### Track 4: Novel Instrumentation and Detection (Walb 222-226)

- Indoor Personal Locator via Wireless Sensor Network, Chung Yuan Christian University, Professor Yhu-Show Tsai, CYCU, Taiwan
- Oxazine-Based Opto-Chemical Sensor for Detecting Contaminants in Water, Purdue Research Foundation, Professor Agbai "George" A. Nnanna, Purdue University Calumet
- An Automated Microfluidic Enzyme-Linked ImmunoSobent Assay Disc Detection System (CD-ELISA)Dr. Li-Ling Ye and Dr. Samuel I-En Lin, National Formosa University, Taiwan
- **Biodegradation Suppression Solution for Forensic Samples,** Indiana University Research and Technology Corporation, Dr. John Goodpaster, Indiana University-Purdue University Indianapolis

2:00 p.m. Poster Presentations & Networking

### **Poster Presentations**

### **NSWC Crane**

- 1. Non-invasive Measurement System
- 2. Method and System for Detecting Leakage of Energy Structure Storage Liquid
- 3. Backplane Tester and Method of Use
- 4. Igniter for Exothermic Torch Rod
- 5. Battery Charger and Power Reduction System and Method
- 6. Miniature Cryogenic Shutter Assembly

- 7. Strip Charge Storage Arrangement
- 8. Locator System and Method Including Node and Target Acquisition
- 9. Integrated Radar, Optical and Sighting System
- 10. Electromagnetic Interference Protective Backshells for Cables
- 11. Modular Safe Room
- 12. Mounting System
- 13. Tilt Lock Mechanism and Method for Movable Optical or Display Device
- 14. Two-Band Imaging System
- 15. Quick-Release Gun Sight Adapter
- 16. Dual Channel Downconverter
- 17. Fast Response Fluid Flow Valve Control Nozzle

#### **Purdue Research Foundation**

- 1. Silica Entrapment of Biofilms in Membrane Bioreactors for Water Regeneration (#65213)
- 2. Increased Performance Lithium Ion Battery Cathodes (#65730)
- 3. Chitosan Derivative for Endotoxin Inactivation (#65984)
- 4. Continuous Flow Solar Ultraviolet Disinfection System for Drinking Water (#65920)
- 5. Portable Device for Detection of Environmental Pathogens in Food and Water Supplies (#64984)
- 6. Enzymatic Treatment of Alginate to Reduce Membrane Fouling for Municipal Wastewater Reuse (#65931)

### **Taiwan Research Partners**

- 1. Online Sampling of Metal Nanoparticle Fluid, National Taipei University of Technology, Professor Liang-Chia Chen, National Taiwan University, Taiwan
- 2. Rapid and Precise Scanning of 3D Occlusal Profile of a Dental Cast, National Taipei University of Technology, Professor Liang-Chia Chen, National Taiwan University, Taiwan
- 3. Preparation of 3D Aerogel Array Biochips, Chung Yuan Christian University, Yen Kuang Li, Yun-Chu Chen, Jui-Chuang Wu, Walter Hong-Shong Chang, Yui Whei Chen-Yang, CYCU
- 4. Application of Membrane Bioreactor on Wastewater, Chung Yuan Christian University, Professor Sheng-Jie You, CYCU
- 5. 3D Printer and Direct High Temperature Resistance Molding for Metal Castings, National Cheng Kong University, Professor Wei-Hsang Lai, NCKU
- 3:0 p.m. Close of formal program
- 6:00 p.m. Dinner for Taiwanese Guests, Taiwan visit team, IPFW leadership and community guests (by Invitation only) Location: Chancellor Wartell's Home

### Friday, September 30, 2011

| 8:00 a.m.  | Breakfast for Taiwanese Visitors & Community Hosts at Holiday Inn   |
|------------|---|
| 9:00 a.m.  | Company Tours (hosted by committee members – various option to be made available and schedule in advance): Fort Wayne Metals, Water Furnace, or PHD |
| 12:00 p.m. | Lunch and tour of Northeast Indiana Innovation Center   |
| 1:40 p.m.  | Company tour: DePuy Orthopaedics  |