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.

Theme: "Indiana – Taiwan Technology Transfer & Entrepreneurship Connection"

Summit Overview

The Indiana-Taiwan Technology Transfer and Entrepreneurship Summit (ITTTES) is a global forum to showcase the innovative technologies and to initiate joint ventures facilitated by industry/government/university partnerships. The summit is designed to:

- Showcase innovative technologies developed both from Taiwan and Indiana universities, including their potential for commercialization, and
- Develop strategic partnerships for commercialization of these technologies through an open presentation and dialogue among university researchers, business and economic development professionals, entrepreneurs, industrial companies, and investors.

It is hoped that during the summit, some technologies will result in commercialization agreements between the Taiwanese universities and Indiana businesses, entrepreneurs and investors to allow for economic growth in the state through exposure to new intellectual property.

Indiana University-Purdue University Fort Wayne (IPFW) serves in the role of overseas representative of its international partners to facilitate the program in expediting the technology transfer and incorporation spin-off process. We anticipate attracting a target attendance of 150 people. In addition, this summit will include a poster session to showcase (a) other research projects and intellectual property available from various institutions (both from Indiana or Taiwan), (b) a design competition organized by students, and (c) industry, entrepreneurship support and economic development programs in northeast Indiana.

Preliminary Program Agenda/Information on ITTTES

Time and Date: September 27-30, 2011

- Taiwanese/IPFW Research & Engagement September 27
- Discussions of a MOU to establish the Global Alliance for Technology Transfer and Entrepreneurship (GATTE) and signing ceremony September 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

8:30 a.m. Welcome

Michael A. Wartell - Chancellor, Indiana University - Purdue University Fort Wayne

8:40 a.m. Program Introduction

Paul Lagemann, District Director, United States Senator Dan Coats

8:50 a.m. Doing Business With Taiwan – Taiwanese – US Business Start-ups

Minister of Economic Affairs, Taipei Economics and Cultural Office (TECO) in Chicago

9:00 a.m. Elevate Ventures and QuiackStart: Supporting Entrepreneurs in Northeast Indiana –

Karen Goldner, President, Main Street Venture Fund

Robert Clark, Management Director, Indiana Angel Network

9:30 a.m. Taiwan- IU and Purdue Technology Presentations (2 tracks of 4 each)

Track 1: Nano-Scale, Electronics and Thermoelectric Material Technologies(Walb

Ballroom)

- FePt Nanoparticles for Dual Mode CT/MRI Molecular Imaging of Cancer Cells, National Cheng-Kung University & NTNU Corporation, Professor Dar-Bin Shieh, NCKU, Taiwan
- Nano-Sized Alumina Particles, National Cheng-Kung University, Pei-Ching Yu and Fu-Su Yen, NCKU, Taiwan
- 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 Presentations & Networking

11:30 a.m. Lunch

12:00 noon Keynote Address

International Entrepreneurship and Technology Transfer

12:30 p.m. Taiwan- IU and Purdue Technology Presentations (2 tracks of 4 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

1:40 p.m.

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): Northeast Indiana Innovation Center, Fort Wayne Metals, Water Furnace, or PHD
12:00 p.m.	Lunch and tour of innovation center

Company Tour: DePuy Orthopaedics

ITTTES Official Lodging (Rooms reserved for ITTTES from Sept. 26 to Oct. 1, mention IPFW-Invention Seminar or ITTTES to receive a special room rate of \$90 USD plus taxes)

 Holiday Inn at Fort Wayne and the Coliseum, 4111 Paul Shaffer Drive, Fort Wayne, IN 46825, U.S.A.

Phone (260) 482-3800, Fax: (260) 482-3822, Email: sales@fortwayneholidayinn.com/
http://www.fortwayneholidayinn.com/

ITTTES - Taiwan Advisory Committee Members

- 鄭振裁副處長,經濟部中小企業處(Carlos C. T. Cheng, Deputy Director General, Small & Medium Enterprise Administration, Ministry of Economic Affairs, Republic of China)
- 何紀芳科長,經濟部中小企業處(Chi-Fang Ho, Section Chief, Small & Medium Enterprise Administration, Ministry of Economic Affairs, Republic of China)
- 林文通處長,教育部國際文教處 (Tony W. T. Lin, Director General, Bureau of International Cultural and Educational Relations, Ministry of Education, Republic of China)
- 李彦儀司長,教育部技職司 (Dr. Nicole Yen-Yi Lee, Director, Dept. of Technological & Vocational Education, Ministry of Education, Republic of China)
- 周錦惠教授,掌宇股份有限公司專案資深顧問,國立台北科大前教授、研發長、教務長, (Prof. John Chou, Senior Project Consultant of K&H MFG Co., Ltd; Former Dean of R&D, National Taipei University of Technology, Taipei, Taiwan)
- 吴文和總經理, 掌宇股份有限公司 (Winner Wu, General Manager, K & H MFG. Co., Ltd, Taipei, Taiwan)
- 蘇慶華教授, 台北醫學大學代理校長 (Prof. Ching-Hua Su, Acting President, Taipei Medical University, Taiwan)
- 陳大樑教授,台北醫學大學副校長 (Prof. Tai-Liang Chen, Vice President, Taipei Medical University, Taiwan)
- 李友專教授, 台北醫學大學醫學科技學院院長 (Prof. Yu-Chuan (Jack) Li, Dean, College of Medical Science & Technology, Taipei Medical University, Taiwan)
- 歐耿良博十, 台北醫學大學口腔醫學院院長 (Prof. Keng-Liang Ou, Dean, College of Oral Medicine, Taipei Medical University, Taiwan)
- 姚立德教授, 國立台北科技大學校長 (Prof. Leehter Yao, President, National Taipei University of Technology, Taiwan)
- 林啟瑞教授,國立台北科技大學副校長(Prof. Chii-Ruey Lin, Vice-President, National Taipei University of Technology, Taiwan)
- 孫卓動教授,國立台北科大電資學院院長 (Prof. Jwo-Shiun Sun, Dean, College of EECS, National Taipei University of Technology, Taiwan)
- 楊哲化教授, 國立台北科大機電學院院長 (Prof. Che-Hua Yang, Dean College of Mechanical and Electrical Engineering, National Taipei University of Technology, Taiwan)
- 曲立成博士,國立台北科技大學,教育部區域產學合作中心主任 (Dr. Li-Chuan Chu, Director, Center for Regional Industry-Education Partnership of MOE, National Taipei University of Technology, Taiwan)

- 侯祟文教授, 國立台北大學校長 (Prof. Charles Hou, President, National Taipei University, Taiwan)
- 許春金教授, 國立台北大學研發長 (Prof. Chuen-Jim Sheu, Dean, Research and Development Affairs, National Taipei University, Taiwan)
- 沈榮麟教授, 國立台北大學電機資訊學院院長 (Prof. Victor R. L. Shen, Dean, College of EECS, National Taipei University, Taiwan)
- 張保隆教授, 逢甲大學校長(Chair Prof. Pao-Long Chang, President of Feng Chia University, Taiwan)
- 黃錦煌教授, 逢甲大學工學院院長 (Prof. Jin H. Huang, Dean of College of Engineering, Feng Chia University, Taiwan)
- 江美英執行長, 逢甲大學產學合作與技術營運辦公室, Mei Ying Chiang, CEO Industry Liaison Office, Feng Chia University, Taiwan
- 黄煌煇教授,國立成功大學校長(Prof. Hung-Hweng Hwung, President, National Cheng Kung University, Taiwan)
- 游保杉教授,國立成功大學工學院院長 (Prof. Pao-Shan Yu, Dean, College of Engineering, National Cheng Kung University, Taiwan)
- 蔡明祺教授,國立成功大學 研究總中心中心主任 (Prof. Min-Ching Tsai, Director General, Research & Service Headquarters, National Cheng Kung University, Taiwan)
- 陳顯禎教授,國立成功大學 研究總中心副中心主任;技轉育成中心主任(Prof. Shean-Jen Chen, Deputy Director General, Research & Service Headquarters, Technology Transfer & Business Incubation Center, National Cheng Kung University, Taiwan)
- 林振德教授,國立虎尾科技大學校長(Dr. Jenn-Der Lin, President, National Formosa University, Taiwan)
- 莊賦祥教授, 國立虎尾科技大學 研究發展處研發長 (Prof. Fuh-Shyang Juang, Dean, Office of Research and Development, National Formosa University, Taiwan)
- 林盛勇教授,國立虎尾科技大學 創新育成中心主任 (Prof. S. Y. Lin, Director, Innovation Incubation Center, National Formosa University, Taiwan)
- 程萬里校長, 中原大學 (President Wan-Lee Cheng, Chung Yuan Christian University Taiwan)
- 陳夏宗教授,中原大學產學營運總中心執行長,工學院院長 (Professor Shia-Chung Chen, CEO, Executive Operation Center for Industry-Academia Cooperation, Dean of College of Engineering, Chung Yuan Christian University)
- 王世明教授, 中原大學產學營運總中心副執行長 (Prof. Shih-Ming Wang, Deputy Executive Officer, Executive Operation Center for Industry-Academia Cooperation, Chung Yuan Christian University)

ITTTES - Northeast Indiana Advisory Committee Members

- Michael Wartell, Chancellor, Indiana University-Purdue University Fort Wayne, U.S.A.
- Walter Branson, Vice Chancellor, Indiana University-Purdue University Fort Wayne, U.S.A.
- Max Yen, Dean, College of Engineering, Technology, and Computer Science; Indiana University-Purdue University Fort Wayne, U.S.A.
- Paul I-Hai Lin, Professor, College of ETCS, Indiana University-Purdue University Fort Wayne, U.S.A.
- Sean Ryan, Director of University Engagement, Indiana University-Purdue University Fort Wayne, U.S.A.
- Joe Ruffolo, President & CEO, Ruffolo and Benson LLC, U.S.A.
- Jim Cook, President of Chase Bank North Indiana Region, U.S.A.
- Karl LaPan, CEO, North East Indiana Innovation Center (NICC), U.S.A.
- Scott Naltner, Executive Vice President, North East Indiana Economic Development Alliance, U.S.A.
- John Sampson, North East Indiana Economic Development, U.S.A.

ITTTES – Local Organization Committee

- John Sampson, President & CEO, Northeast Indiana Regional Partnership
- Sean Ryan, <u>ryans@ipfw.edu</u>, 260-399-1662, Director, IPFW Office of University Engagement, IPFW - Purdue – IU
- Max Yen, <u>yens@ipfw.edu</u>, 260-481-6839, Dean, College of Engineering, Technology and Computer Science, IPFW
- Mark Becker, <u>mark@northeastindiana.org</u>, 260-469-3479, Executive Director, Northeast Indiana Fund
- Brook Steed, <u>bsteed@iedc.in.gov</u>, 260-436-3000 (x4551), Director, Northeast Region, Indiana Economic Development Corporation (IEDC)
- Jane Rich, <u>richj@ipfw.edu</u>, 260-481-0495, Director, Northeast Indiana Small Business Development Center (SBDC)
- Karl LaPan, <u>klapan@niic.net</u>, 260-438-2328, President and CEO, Northeast Indiana Innovation Center (NIIC)
- Steve Franks, <u>sfranks@niic.net</u>, 260-407-1754, Program Manager, Northeast Indiana Innovation Center (NIIC)
- Tina Torres, torresk@ipfw.edu, 260-481-6888, Event Planner, IPFW
- Paul I-Hai Lin, <u>lin@ipfw.edu</u>, 260-481-6339, Professor, College of Engineering, Technology, and Computer Science, IPFW.