台美合作再生能源 前瞻太陽電池國際研討會

GSAS Session on Advanced Solar Cell Research

本研討會是環球前瞻研究學院 (Global School for Advanced Studies;GSAS) 創立後首次舉辦的國際學術盛會，議題訂為「前瞻太陽電池研究」。太陽電池是我國最有發展潛力的再生能源產業，相關的教學與研究可以整合能源、材料與奈米科技。本研討會除提供年輕研究員有關太陽電池教學研習外，並提供國內外學者專家學術交流的平台。相信透過本研討會，將有助於太陽電池科技研究的創新，並提升年輕研究員的全球視野與領導能力。

專題演講主講人：

1. Prof. Allen Barnett, IEEE William R. Cherry Award and IEEE Fellow Award, Electrical and Computer Engineering, University of Delaware (USA)
   - Solar Electric Power for the 21st Century
   - Our Solar Power Future: The U.S. PV Industry Policy Recommendations and Roadmap for 2030 and Beyond
   - From Market Opportunity to Invention, Prototype Development and Transfer to Production: Necessary Steps to New Product Commercialization
2. Prof. R.P.H. Chang, Materials Research Institute, Northwestern University (USA)
3. Prof. Andreas Hinsch, Fraunhofer-Institut für Solare Energiesysteme ISE (Germany)
   - Dye-Sensitized Solar Cells: Principles and Issues Relating to Development and Manufacturing
   - Organic Solar Cells: Principles and Issues Relating to Development and Manufacturing
4. Prof. Huey-Liang Hwang, Department of Electrical Engineering, National Tsing Hua University, Taiwan (ROC)
   - Characterization of High efficiency Ternary Chalcopyrite Thin Film Solar Cell Devices - Overview of electrical and optical properties
   - Intelligent Design of Materials, Devices and Fabrication Processes for Tenary Chalcopyrite Thin Film Solar Cells
5. Prof. Lawrence Kazmerski, National Center for Photovoltaics, National Renewable Energy Laboratory (USA)
   - Advanced Thin Films for Solar Cells
   - Solar Cell Research at NREL
6. Prof. Antonio Luque, Member of the Spanish Royal Academy of Engineering and foreign member of the Russian Academy of Engineering, Instituto de Energia Solar Universidad Politechnica De Madrid (Spain)
   - Network Approach to Solar cell R&D- ex. FULLSPECTRUM (Optimizing Full Solar Spectrum Conversion)
   - Novel concepts of solar cells for ultra-high-efficiency: the Intermediate Band (IB) Solar cells and other approaches.
   - Concentrators: The path to commercialization of the novel sophisticated ultra high efficiency solar cells.
7. Prof. Bruce Parkinson, Department of Chemistry, Colorado State University (USA)
   - The Global Energy Perspective
   - Photoelectrochemical Energy Conversion and Storage
8. Prof. Wei-Fang Su Department of Material Science and Engineering, National Taiwan University, Taiwan (ROC)
   - Organic-inorganic bulk heterojunction solar cells: Principle and Development - Ordered inorganic-organic bulk heterojuctions and polymer-nanocrystals
   - Polymers and Small Organic Molecules for Advanced Solar Cell
9. Prof. Masafumi Yamaguchi, Toyota Technological Institute (Japan)
   - Multi-layer Solar Cells: Principles and Issues Relating to Development and Manufacturing
   - Perspective on Solar Cells Markets

專案競賽：

歡迎通過資格考之博士候選人或博士後研究員參加「年輕研究員」甄選專案競賽，優勝者可以至工研院或中研院研究一年，相關訊息請見網頁 http://www.gsasprogram.org/solarcells.html。

時　　間：95 年 9 月 19 日至 95 年 9 月 28 日　　地　　點：國立清華大學、台北國際會議中心

贊助單位：行政院國家科學委員會

主辦單位：國立清華大學原子科學院、能源與環境研究中心、美國西北大學 GSAS、中央研究院物理所、工業技術研究院奈米中心、奈米國家型計畫辦公室

協辦單位：台灣電力公司、工業技術研究院材料與化工研究所、工業技術研究院能源與環境研究所

費　　用：免費，請事先報名 (備茶點 午餐)，以免向隅。　　人　　數：200 人，額滿截止。

報名方式：即日起至 95 年 9 月 13 日前上網報名，報名網址 http://ceer.theweb.org.tw/。

聯 絡 人：清華大學原子科學院　蔡偉慈 小姐 TEL: (03) 5162033　　清華大學能源與環境研究中心　黃妍華 小姐 TEL: (03) 5162242