



## Nanotechnology for Medical Devices & Sensing Systems

Mar. 23th, 2010 臺灣大學應力所國際會議廳 100

Time	Title	Speaker
9:00~9:10	Opening Plenary Session	Prof. Huan-Jang Keh/葛焕彰 Dean of College Engineering Dep, NTU, Taiwan  Ms. Margaret Tongue Deputy Director of British Trade & Cultural Office
Section I E	lectrical Nano-Medical Device and Sensor	Chairman:
9:10~9:40	The Impact of Nanotechnology in Medical Diagnostics: From the Benchtop to the Market	Prof. Jonathan Cooper  Dept. of Electronics & Electrical Engineering, Uni of Glasgow, UK
9:40~09:55	Micro/Nano Analytical Systems to Identify Bio Markers for Human Breath Analysis	Prof. Wei-Cheng Tian/ 田維誠 Assistant Professor, Department of Electrical Engineering, NTU, Taiwan
9:55~10:10	Microfluidic Devices for Cell-based Studies with Clinical Applications	Prof. Andrew M. Wo/ 胡文聰 Institute of Applied Mechanics, NTU, Taiwan
10:10~10:30	<b>Enabling the Next Generation of Medical Devices through Novel Materials</b>	Mr. Richard Snell Business Development Director, Altrika Ltd, UK
10:30~10:50 <b>Coffee break</b>		
Section II C	Chemical Nano-Medical Device and Sensor	Chairman:
10:50~11:20	Modulating and Controlling Cellular Function and Behavior using Microarrays	Prof. Mark Bradley HT Chemical Biology, School of Chemistry, Uni of Edinburgh, UK
11:20~11:35	Piezoelectric MEMS Generators for Scavenging Energy from Ambient Vibrations	Prof. Wen-Jong WU / 吳文中 Department of Engineering Science and Ocean Engineering, NTU
11:35~12:05	Directed self-assembly of thin peptide films and membranes – advanced materials for cell growth and proliferation.	Prof. Petra Cameron Development of Chemistry Bath University, UK
12:05~12:20	Wireless Communication Integrated Circuits for Biomedical Systems: RF and Mixed-Signal Circuits	<b>Prof. Shuenn-Yuh Lee/ 李順裕</b> Department of Electrical Engineering, National Chung Cheng University, Taiwan
12:20~12:35	Physical Regulation of Orthopaedic Soft Tissue	Prof. Pen-hsiu Grace Chao/ 趙 本秀 Institute of Biomedical Engineering, NTU, Taiwan
12:35~2:00	Lunch break	
Section III	Nano-Biomaterials	Chairman:
2:00~2:30	Novel Biodegradable Materials for Tissue Repair Micro/nanodevices that carry growth factors to promote nerve regeneration	Prof. Sandra Downes School of Biomaterials, Uni of Manchester, UK
2:30~2:45	Micro/nanodevices that carry growth factors to promote nerve regeneration	Prof. Shan-hui,Hsu/ 徐善慧 Institute of Polymer Science and Engineering, NTU, Taiwan
2:45~3:00	Studies on Optical Measurement of Membrane Potential Using Membrane-Targeted Nanoparticles and Planar Sensors	Prof. Chii-Wann Lin/ 林啟萬 Institute of Biomedical Engineering, NTU, Taiwan











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3:00~3:15	Detection of Allergen Gene Using Nano Bio-chip	Prof. Gou-Jen Wang/ 王國禎 Department of Mechanical Engineeirng, National Chung Hsing University, Taichung
3:15~3:35	Coffee break	
Section IV Bio & Electroanalysis with nanotechnology Chairman:		
3:35~4:05	Nanotechnology and it exploitation within biosensors for in vitro and in vivo diagnostics	Prof. Seamus Higson Bio & Electroanalysis, Uni of Cranfield, UK
4:05~4:20	A Release-on-Demand Wireless CMOS Drug Delivery SoC Based on Electrothermal Activation Technique	Prof. Yao-Joe Joseph Yang/ 楊燿州 Department of Mechanical Engineering, NTU, Taiwan
4:20~4:35	Development of Electrochemical Detection Technology Based Biosensors	Dr. Tai-Guang Wu/吳太光 General Life Biotechnology Co, Taiwan
4:35~4:50	Poly-silicon nanowire FET chemical sensor	Prof. Chih-Ting Lin/ 林致廷 Graduate Institute of Electronics Engineering, NTU, Taiwan
4:50~5:00	Closing Discussion	All participants
Banquet		











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## 報名表

姓 名	性別
英文姓名	職稱
通訊地址	
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## ★ 報名方式:

1. 電郵報名:填寫完畢請回傳至電郵信箱:hichou@ntu. edu. tw

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★ 注意事項:請於 3/18(四)前繳交報名表。報名額滿為止,基本資料請務必填寫完整。報名在限額者,我們將製做名牌、會議資料並備有午餐,名額有限, 請儘速登記。





