

## International Workshop on Functional Materials 2016 國際功能材料研討會 2016 8-11/12/2016

## **Programs**

Thursday, 8 December 2016 Venue: Postgraduate House (PGH), S1-G015

7:00pm-10:00pm	Welcome Gathering	
	(Light food & drinks will be provided)	Free Attendance

Friday, 9 December 2016 Venue: E4-G051, Anthony Lau Building-Tai Fung Lecture Hall, Ground Floor

9:30 a m - 10:00 a m	Opening Remarks  Vice Rector (Academic Affairs), Prof. Lionel NI  Presentation of Souvenirs  Group Photo	Moderator: Prof. Haydn, H.D. CHEN
10:00 a m - 10:35 a m	Keynote Speech 1 Prof. Robert CHANG (Northwestern University) "Fundamentals of Indium-based Complex Amorphous Semiconducting Oxides"	Chair: Prof. Haydn, H.D. CHEN
10:35am-11:10am	Keynote Speech 2 Prof. Kozo OSAMURA (Kyoto University) "Stress / Strain Dependence of Critical Current in Practical Superconducting Wires"	Same as above
11:10 a m - 11:30 a m	Coffee Break (set up posters)	E4 Lobby
	Oral Presentation: Session 1	Co-Chairs: Prof. Pu-Wei WU Prof. Haifeng LI
11:30 a m - 11:50 a m	Prof. Chi Tat KWOK (University of Macau) "Surface Modification of Engineering Alloys by Friction Stir Processing"	
11:50am-12:10pm	Prof. Hong-Cheu LIN (National Chiao Tung University)  "Enhancements of Thermal Conductivities in Polymeric Composites by Aggregation-Induced Additives and their Preparation Methods"	

12:10 p m - 12:30 p m	Prof. Jiwei ZHAI (Tongji University) "Study on improving the piezoelectric properties of BNT-BKT-based thin films"	
12:30 p m - 12:50 p m	Prof. Igor RAEVSKI (Southern Federal University) "Structural, Dielectric and Mossbauer Studies of Multiferroic (1-x) Pb( $Fe_{1/2}Nb_{1/2}$ )O <sub>3</sub> - xPb( $Cr_{1/2}Nb_{1/2}$ )O <sub>3</sub> Solid Solution Ceramics Obtained by Usual Sintering and by High-Pressure Synthesis"	
1 2 : 5 0 p m - 2 : 3 0 p m	Lunch	E5-1081, 1 <sup>st</sup> floor of Food Paradise
	Oral Presentation: Session 2	Co-Chairs: Prof. Yung-Jung HSU Prof. Huaiyu SHAO
2:30pm-2:50pm	Prof. Jia-Hong HUANG (National Tsing Hua University) "The Oxidation Behavior and Corrosion Resistance of Vacuum Annealed ZrN-Coated Stainless Steel"	
2:50pm-3:10pm	Prof. Chih CHEN (National Chiao Tung University) "Grain growth in highly (111)-oriented nanotwinned Cu films"	
3:10pm-3:30pm	Prof. lat Neng CHAN (University of Macau) "The past and present of superconductor research"	
3:30pm-3:50pm	Prof. Cheng-chia CHOU (National Taiwan University of Science and Technology)  Phase Transformation of Pb-free Ferroeletrics	
3:50pm-4:40pm	Coffee Break + poster session (26)	E4 Lobby
	Oral presentation: Session 3	Co-Chairs: Prof. Chih CHEN Prof. lat Neng CHAN
4:40pm-5:00pm	Prof. Huaiyu SHAO (University of Macau) "Onboard and Stationary Hydrogen Energy Storage in Nanostructured Mg- based Materials"	
5:00pm-5:20pm	Prof. Yung-Jung HSU (National Chiao Tung University) "Semiconductor Nanoheterostructures for Photoconversion Applications"	
5 : 2 0 p m – 5 : 4 0 p m	Prof. Guichuan XING (University of Macau) "Metal-halide perovskites for light harvesting and light emission"	
5:40pm-6:00pm	Prof. Pu-Wei WU (National Chiao Tung University) "Synthesis and Characterisation of IrOx Film for Biostimulating Electrodes in Implantable Devices"	
6:00pm-6:30pm	IAPME and AMSV, Laboratory tour	N21 & N23
6:30pm-8:30pm	Banquet	Fortune Inn, Guest House (N1) UM

## Saturday, 10 December 2016 Venue: E4-G051, Anthony Lau Building-Tai Fung Lecture Hall, Ground Floor

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9:30am-10:05am	Keynote Speech 3 Prof. Zikang TANG (University of Macau) "Measurement of atomic radius using monochromic visible light"	Chair: Prof. Kung-Hwa WEI
10:05 a m - 10:40 a m	Keynote Speech 4 Prof. Edward Yi CHANG (National Chiao Tung University) "Realization of GaN-Based Technology for High Power Applications"	Same as above
10:40 a m - 11:00 a m	Coffee Break	E4 Lobby
	Oral Presentation: Session 4	Chair: Prof. Fu-Hsiang KO
11:00 a m - 11:20 a m	Prof. Yuntao LIU (China Institute of Atomic Energy) "Current status of neutron facilities at CARR, China"	
11:20am-11:40am	Prof. Li CHANG (National Chiao Tung University) "Plasma Nitridation of Sapphire and Oxides on Si"	
11:40 a m - 12:00 p m	Prof. Haifeng LI (University of Macau)  "Itinerant and local-moment antiferromagnetism in intermetallic ErPd₂Si₂"	
12:00pm-2:00pm	Lunch	E5-1081, 1 <sup>st</sup> floor of Food Paradise
2:00pm-2:35pm	Keynote Speech 5 Prof. Haydn, H.D. CHEN (University of Macau) "Enhanced Energy Density of Well-Aligned Barium Titanate-based Nanorod/ Polyvinylidene Fluoride Composites"	Chair: Prof. Hong-Cheu LIN
2:35pm-3:10pm	Keynote Speech 6 Prof. Kung-Hwa WEI (National Chiao Tung University) "Two-dimensional Transition Metal Dichalcogenides for various applications—Hydrogen plasma treated Molybdenum Disulfide monolayer in Hydrogen evolution reaction and Tungsten Diselenide/Molybdenum Disulfide monolayer heterostructure with atomically sharp interface for photovoltaics.	Same as above
3:10pm-3:40pm	Coffee Break + poster session (26)	E4 lobby
	Oral Presentation: Session 5	Chair: Prof. Li CHANG Prof. Jiwei ZHAI
3:40pm-4:00pm	Prof. Hui PAN (University of Macau) "MXene - Novel Two-Dimensional Monolayers for Energy Storage and Harvesting"	
4:00pm-4:20pm	Prof. Fu-Hsiang KO (National Chiao Tung University) "Natural Keratin Extracted from Chicken Feathers as a Gate Dielectric Material for Organic Thin Film Transistors"	
4:20pm-4:40pm	Ms. Lingmin YAO (University of Macau) "Novel Design of Highly Oriented Barium Titanates Nanorod Array"	
4:40pm-5:00pm	Mr. Yuanju QU (University of Macau) "Hydrogenation-controlled phase transition and physical and catalytic properties of 2D TMD Monolayers"	

5:40pm-6:00pm	Final Summary Discussion Closing Remarks	
5:20pm-5:40pm	Ms. Bao TU (University of Macau) "Structure-activity relationship study between baicalein and wogonin by spectrometry, molecular docking and microcalorimetry"	
5:00pm-5:20pm	Mr. Wenzhou CHEN (University of Macau) "A First Principle Study of the Structural Transformation in Tilr Shape Memory Alloys"	

## Sunday, 11 December 2016 Venue: Campus tour of University of Macau

10:00 a m - 11:00 a m	Campus tour	
	(Optional)	Ms. Amy CHAN
	Gathering Point: PGH S1 Hostel	