

Nov. 20, 2011, Sunday

- 09:00 - 17:00 Short Course
- 16:00 - 20:30 Registration
- 18:30 - 20:30 Reception – *Banquet Hall*

Nov. 21, 2011, Monday

- 07:30 - 16:30 Registration
- 08:15 - 10:00 Opening Remark / Keynote Speech
- 10:45 - 15:30 Conference Session

Mon AM (Nov. 21)	Opening Remark / Keynote Speech (Conference Room: Banquet Hall)		
08:15-08:30	President Jow-Lay Huang		Opening Remark
08:30-09:15	Prof. Allan Matthews (<i>Keynote</i>) (Chair: Joe Greene)	Sheffield University UK	Optimising Tribo-contact Performance Using Plasma-based Surface Engineering Processes
09:15-10:00	Prof. David Ginley (<i>Keynote</i>) (Chair: Li-Chyong Chen)	National Renewable Energy Laboratory, USA	Thin Film PV Challenges for Terawatt Production - Emerging Technologies
10:00-10:45	Group Photos / Session Break		
Mon AM (Nov. 21)	Symposium D: Tribological and protective coatings		
	<i>Session Chair: Peiling Ke</i>		Conference Room: Formosa Restaurant II
10:45-11:15	Prof. Wolfgang Tillmann (<i>Invited</i>)	Technische Universität Dortmund Germany	Tribological behavior of DLC-coatings for the tool industry
11:15-11:30	Chang Sun Park	Yonsei University Korea	Effect of boron and silicon doping on the structure and electrical conductivity of diamond like carbon films by magnetron sputtering deposition
11:30-11:45	Kung-Jeng Ma	Chung Hua University Taiwan	Study of Densification and Plastic Deformation Behaviour of Ultra-tough a-C/a-C:Cr Multilayer Coatings Under Indentation and Scratch Tests
11:45-12:00	Maisara Othman	University of Malaya Malaysia	Effect of N ₂ Flow Rate on The Properties of CN _x Thin Films Prepared By Rf PECVD System From Ethane and Nitrogen
12:00-12:15	Tobias Sprute	Technische Universität Dortmund Germany	Influence of Bias Voltage on Residual Stresses and Tribological Properties of TiAlVN-Coatings at Elevated Temperatures
12:30-13:30	Lunch Break		
Mon PM (Nov. 21)	Symposium D: Tribological and protective coatings		
	<i>Session Chair: Ju-Liang He / Fu-Hsing Lu</i>		Conference Room: Formosa Restaurant II
13:30-14:00	Prof. Ju-Liang He (<i>Invited</i>)	Feng Chia University Taiwan	Affordable High Plasma Density Physical Vapor Depositions
14:00-14:15	Wei-En FU	Industrial Technology Research Institute, Taiwan	Nano-Scratch Evaluations of Cu-CMP Films
14:15-14:30	Hsien-Wei Chen	National Tsing Hua University Taiwan	Effects of titanium contents on the microstructures and mechanical properties of Cr-Ti-B-N nanocomposite thin films
14:30-14:45	Hao-Chih Liu	National Cheng Kung University Taiwan	Ion-Beam-Sputter Deposited Titanium Nitride Thin Films for Conductive AFM Probes
14:45-15:00	Z.C. Wang	Xiamen University China	Relationship between tribological properties and oxidation behaviors of Ti _{0.34} Al _{0.66} N coatings at elevated temperature up to 1000°C
15:00-15:15	Chia-Lin Li	National Taiwan University of Science and Technology, Taiwan	The effects of sputtering parameters on the microstructures and mechanical properties of Zr-based metallic glass thin film deposited by pulsed DC magnetron sputtering
15:15-15:30	An-Ni Wang	Tsing Hua University Taiwan	Measurement of Fracture Toughness on Transition Metal Nitride Thin Films

Nov. 22, 2011, Tuesday

- 07:30-16:30 Registration
- 08:15-10:30 Keynote Speech
- 11:00-12:15 Conference Session
- 12:15-14:15 Poster Session

Tue AM (Nov. 22)	Keynote Speech (Conference Room: Banquet Hall)		
08:15-09:00	Prof. Hans Hofsä (<i>Keynote</i>) (Chair: Jyh-Ming Ting)	University of Goettingen Germany	Synthesis of Nanostructured Films by Self-organization

09:00-09:45	Prof. Stan Veprek (<i>Keynote</i>) (Chair: Fu-Hsing Lu)	Technical University Munich Germany	Design Concept for Hard and Superhard Nano-Structured Coatings, the Critical Parameters for their Preparation and Industrial Applications
09:45-10:30	Prof. Sam Zhang (<i>Keynote</i>) (Chair: Aleksey Yerokhin)	Nanyang Technological University Singapore	Toughness evaluation of hard coatings and thin films
10:30-11:00	Session Break		
Tue AM (Nov. 22)	Symposium D: Tribological and protective coatings		
	<i>Session Chair: Jyh-Wei Lee</i>		Conference Room: Formosa Restaurant II
11:00-11:30	Prof. Fu-Hsing Lu (<i>Invited</i>)	National Chung Hsing University Taiwan	Air-based sputtering deposition and corresponding processing windows of TiN, TiN _x O _y , and N-doped TiO _x thin films
11:30-11:45	Mehmet Tarakci	Gebze Institute of Technology Turkey	The Effect of Zn on the Microarc Oxidation Coating Behavior of Synthetic Al-Zn Binary Alloys
11:45-12:00	S.A. Pyachin	Russian Academy of Sciences Russia	WC-Co-based electrospark coatings: deposition, composition and wear resistance
12:00-12:15	Rong Tu	Tohoku University Japan	Preparation of alpha-Al ₂ O ₃ film by plasma enhanced chemical vapor deposition
12:15-14:15	Lunch Break Poster Session (Symposium A - Symposium F)		
14:30-18:30	Half Day Tour		
19:00-22:00	Banquet (Banquet Hall)		

Nov. 23, 2011, Wednesday

- 07:30-12:00 Registration
- 08:15-10:30 Keynote Speech
- 11:00-15:00 Conference Session

Wed AM (Nov. 23)	Keynote Speech (Conference Room: Banquet Hall)		
08:15-09:00	Dr. Kuei-Hsien Chen (<i>Keynote</i>) (Chair: Jow-Lay Huang)	National Taiwan University Taiwan	Nanomaterials for Hydrogen Energy Conversion
09:00-09:45	Prof. Yury Gogotsi (<i>Keynote</i>) (Chair: Masahiro Yoshimura)	Drexel University USA	Carbide-Derived Carbon Films for Capacitive Energy Storage
09:45-10:30	Prof. J.G. Duh (<i>Keynote</i>) (Chair: Ming-Show Wong)	National Tsing Hua University Taiwan	Quest for Multi-functional Coatings
10:30-11:00	Session Break		
Wed AM (Nov. 23)	Symposium D: Tribological and protective coatings		
	<i>Session Chair: Jia-Hong Huang</i>		Conference Room: Formosa Restaurant II
11:00-11:30	Prof. Y. Y. Chang (<i>Invited</i>)	National Formosa University Taiwan	Mechanical properties and thermal stability of multicomponent coatings synthesized by cathodic arc evaporation
11:30-11:45	Pramoda K. Nayak	National Cheng Kung University Taiwan	Graphene Coated Ni Films: A Protective Coating
11:45-12:00	Zhen-bing Cai	Southwest Jiaotong University PRC	Microstructures evolution and fretting wear properties of nitrogen implantation /Cr /CrSiN multilayered thin films
12:00-12:15	Ting-Pin Cho	National Kaohsiung First University of Science and Technology, Taiwan	High temperature oxidation of Cr ₂ N coatings in air
12:30-13:30	Lunch Break		
Wed PM (Nov. 23)	Symposium D: Tribological and protective coatings		
	<i>Session Chair: Y.Y. Chang</i>		Conference Room: Formosa Restaurant II
13:30-14:00	Prof. Jia-Hong Huang (<i>Invited</i>)	National Tsing Hua University Taiwan	The Phase Transition and Corrosion Resistance of ZrO ₂ (N) Thin Films on AISI 304 Stainless Steel Deposited by Ion Plating
14:00-14:15	Choung-Lii Chao	Tamkang University Taiwan	Study on the Design of Precious Metal Based Protective Films and Its Interfacial Reaction with Optical Glasses
14:15-14:30	H. Samadi	University of Toronto Canada	Forsterite/Mullite Coatings for Thermal Barrier Coating Application
15:00	Conference Adjourn		