# **Table of Contents**

Part I SCET 2013 Conference Schedule	2
Part II Invited Speeches	4
Part III Oral Sessions	9
Session 1: Applied Mathematics	
Session 2: Material Sciences and Technology (1)	9
Session 3: Material Sciences and Technology (2)	
Session 4: Applied Mathematics and Physics	11
Session 5: Chemical Engineering, Agriculture and Food Engineering	12
Session 6: Electrical and Electronics Engineering	14
Part IV Instructions for Presentations	15
Part V Hotel Information	16
Contact Us	16

# Part I SCET 2013 Conference Schedule

#### Registration May 31~ June 2, 2013

	<u> </u>	•
Registration Time	Date	Location
14:00-18:00	May 31 <sup>st</sup> , 2013	
08:00-18:00	June 1 <sup>st</sup> , 2013	3 <sup>rd</sup> floor, Optics Valley Kingdom Plaza
08:00-10:00	June 2 <sup>nd</sup> , 2013	

### Saturday Morning, June 1

Activity Location: 3<sup>rd</sup> )loor, Optics Valley Kingdom Plaza

Invited Speech: Development of Ultrasensitive Piezoresistive Strain Sensors Made From Carbon Nanofiller/Epoxy Nanocomposites

Speaker: Prof. Ning Hu, Chiba University, Japan

Time: 08:30-09:10, June 1, 2013

Session 2, 3rd Floor, Qintai Room(琴台厅)

Invited Speech: Heteronanostructures: Preparation, and Applications in Photocatalytic Hydrogen Production and Micro/nanomotors

Speaker: Prof. Jianguo Guan, Wuhan Unviersity of Technology, China

Time: 09:10-09:50, June 1, 2013

Session 2, 3rd Floor, Qintai Room(琴台厅)

Invited Speech: Smart Polymeric Materials for Biotechnology

Speaker: Prof. Guojie Wang, University of Science and Technology Beijing, China

Time: 09:50-10:30, June 1, 2013

Session 2, 3rd Floor, Qintai Room(琴台厅)

### Saturday Morning, June 1

Time	<b>Activity</b> (Coffee Break $10:30 \pm 10:50$ )	Location: 3 <sup>rd</sup> Floor, Optics Valley Kingdom Plaza	
	Oral Session 1: Applied Mathematics	Qingchuan Room(晴川厅)	
$08:30 \pm 12:00$	Oral Session 2: Material Sciences and Technology (1)	Qintai Room(琴台厅)	

#### Saturday Noon, June 1

		1
12.00 + 12.20	T al. DCC-4	<b>Location:</b> 3 <sup>rd</sup> Floor, Western Dining Room(西餐厅)
$12:00 \pm 13:30$	Lunch Buffet	Location: 3 <sup>rd</sup> Floor, Western Dining Room(四餐厅)

### Saturday Afternoon, June 1

Time	Activity (Coffee Break 16:00 ± 16:20)	Location: 3 <sup>rd</sup> Floor, Optics Valley Kingdom Plaza	
	Oral Session 3: Material Sciences and Technology (2)	Qingchuan Room(晴川厅)	
$14:00 \pm 18:00$	Oral Session 4: Applied Mathematics and Physics	Qintai Room(琴台厅)	

### Saturday Evening, June 1

$18:00 \pm 19:00$	Dinner Buffet	<b>Location:</b> 3 <sup>rd</sup> Floor, Western Dining Room(西餐厅)
-------------------	---------------	--

# Sunday Morning, June 2

Activity Location: 3<sup>rd</sup> Floor, Optics Valley Kingdom Plaza

Invited Speech: Production Rf Novel Dairy Foods Naturally Enhanced with Omega 3 Fatty Acids

Speaker: Prof. SURESH K GULATI, University Of Sydney, Australia

Time: 08:30-09:10, June 2, 2013

Session 5, 3rd Floor, Qingchuan Room(晴川厅)

Invited Speech: Fast Block Diagonal-wise Jacket Matrices for MIMO Mobile Wireless Channels

Speaker: Prof. Moon Ho Lee, Chonbuk National University, Korea (South)

Time: 08:30-09:10, June 2, 2013

Session 6, 3rd Floor, Qintai Room(琴台厅)

Invited Speech: Optimal Rate Scheduling via Utility-Maximization for J-User MIMO Markov Fading Wireless Channels with

Cooperation

Speaker: Prof. Wanyang Dai, Nanjing University, China

Time: 09:10-09:50, June 2, 2013

Session 6, 3rd Floor, Qintai Room(琴台厅)

## **Sunday Morning, June 2**

Time	Activity (Coffee Break $10:30 \pm 10:50$ )	Location: 3 <sup>rd</sup> Floor, Optics Valley Kingdom Plaza
08:30 ± 12:00	<b>Oral Session 5:</b> Chemical Engineering, Agriculture a Engineering	nd Food Qingchuan Room(晴川厅)
	Oral Session 6: Electrical and Electronics Engineering	g Qintai Room(琴台厅)

### Monday Morning, June 3

#### **Conference Tour**

Registration for tour on June 1st from 8:30 to 18:00

# **Part II Invited Speeches**

## **Invited Speech: Development of Ultrasensitive Piezoresistive Strain Sensors**

## Made From Carbon Nanofiller/Epoxy Nanocomposites

Speaker: Prof. Ning Hu, Chiba University, Japan

**Time:** 08:30-09:10, June 1, 2013

**Location:** Session 2, 3<sup>rd</sup> Floor, Qintai Room (琴台厅

#### **Abstract**

In this work, firstly, based on effective multi-scale numerical modeling and simulations, three possible mechanisms of piezoresistivity in polymer nanocomposites with carbon nanofiller (CNF, e.g., carbon nanotube and carbon nanofiber), i.e., 1) variation of conductive networks formed by CNFs; 2) tunneling resistance change in neighboring CNFs and 3) piezoresistivity CNFs themselves, have been systematically explored. Based on the numerically obtained knowledge for the working mechanisms of the piezoresistivity, a set of resistance-type strain sensors has been fabricated from metal-coated CNF/epoxy nanocomposites. Two nanofillers, i.e., multi-walled carbon nanotubes (MWCNTs) and vapor growth carbon nanofibers (VGCFs) with nickel, copper and silver coatings were used. The ultrahigh strain sensitivity was observed in these novel sensors as compared to the sensors made from the CNFs without metal-coating and conventional strain gauges. In terms of gauge factor, the sensor made of VGCFs with silver coating is estimated to be 155, which isaround 80times higher than that in a metal-foil strain gauge. In experiments, the possible mechanism responsible for the high sensitivity and its dependence with the networksof the CNFs with and without metal-coating and the geometries of the CNFs were further investigated thoroughly.

# Invited Speech: Heteronanostructures: Preparation, and Applications in

# Photocatalytic Hydrogen Production and Micro/nanomotors

**Speaker:** Prof. Jianguo Guan, Wuhan Unviersity of Technology, China

Time: 09:10-09:50, June 1, 2013

**Location:** Session 2, 3<sup>rd</sup> Floor, Qintai Room (琴台厅

#### **Abstract**

Heteronanostructures are composed of bi- or multiple components with heterogeneous interfaces. They may not only combine the excellent properties of the disparate components, but also possess some enhanced or novel synergistic properties that arise from the interactions between the components. For instance, semiconductor heteronanostructures with matched band positions significantly promote the separation of photogenerated



electron-hole pairs, endowing them with a competitive performance compared to the single-component nanomaterials in the applications of solar cells and photocatalytic hydrogen production etc.. As a well-defined Heteronanostructure, Janus particles show inherently anisotropic chemical and physical properties, and have gained growing interests in a number of potential applications such as two-phase stabilizers, and nanomotors etc..

This presentation demonstrates the general and convenient synthesis approaches developed in our group that allow for the facile preparation of semiconductor heterostructured composites, as well as Janus particles. These heterostructured composites exhibit highly efficient photocatalytic activities for hydrogen production due to the unique roles of the heteronanostructures in the separation and transfer of photogenerated charge carriers. Janus particles may act as micro/nanomotors due to the asymmetric release of gas bubbles. For example, our recently developed Mg/Pt Janus micromotor with the assistance of NaHCO3 exhibits efficient autonomous motion in water fuel as well as in the biological medium. It has important potential biomedical applications, such as drug delivery and cell separation etc., because of the excellent hemocompatibility as well as the harmless resultants.

- [1] F. Mou, C. Chen, H. Ma, Y. Yin, Q. Wu, J. Guan\*, Angew. Chem. Int. Ed. 2013, DOI: 10.1002/anie.201300913.
- [2] F. Mou, C. Chen, J. Guan\*, D.-R. Chen, H. Jing, Nanoscale 2013, 5, 2055-2064.
- [3] L. Li, L. Xu, W. Shi, J. Guan\*, Int J Hydrogen Energy, 2013, 38, 816-822.
- [4] F. Mou, L. Xu, H. Ma, J. Guan\*, D.-R. Chen, S. Wang, Nanoscale 2012, 4, 4650-4657.
- [5] J. Duan, W. Shi, L. Xu, G. Mou, Q. Xin and J. Guan\*, Chem. Commun. 2012, 48, 7301-7303.
- [6] L. Xu, J. Guan\*, W. Shi, ChemCatChem, 2012, 4, 1353-1359.
- [7] L. Xu, W. Shi, J. Guan\*, Catal. Commun., 2012, 25, 54-58.
- [8] L. Xu, J. Guan\*, W. Shi, L. Liu, J Colliod Interface Sci, 2012, 377, 160-168.
- [9] L. Xu, J. Guan\*, L. Gao, Z. Sun, Catal Commun, 2011, 12, 548-552.
- [10] J. Duan, W. Shi, L. Xu, J. Guan\*, Nat. Commun, 2013, to be submitted.

# **Invited Speech: Smart Polymeric Materials for Biotechnology**

Speaker: Prof. Guojie Wang, University of Science and Technology Beijing, China

**Time:** 09:50-10:30, June 1, 2013

**Location:** Session 2, 3<sup>rd</sup> Floor, Qintai Room (琴台厅

#### **Abstract**

Recently, smart polymeric materials for biotechnology have been paid more and more attention for their wide biological and biomedical applications. Here, photo-responsive molecular switches for protein adsorption and desorption, fluorescent polymers for detection of DNA hybridization, and multi-responsive polymeric nanomicelles for drug controlled release are presented.

#### References

- [1] H. Wu, J. Dong, C. C. Li, Y. B. Liu, N. Feng, L. P. Xu, X. W. Zhan, H. Yang, G. J. Wang. Multi-Responsive Nitrobenzene-Based Amphiphilic Random Copolymer Assemblies. Chem. Commun., 2013, 49, 3516-3518.
- [2] J. Dong, Y. N. Wang, J. Zhang, X. W. Zhan, S. Q Zhu, H. Yang, G. J. Wang. Multiple Stimuli-Responsive Polymeric Micelles for Controlled Release. Soft Matter, 2013, 9, 370-373.
- [3] R. C. Zhang, L. Y. Yang, M. Zhao, J. Dong, H. F. Dong, Y. Q. Wen, X. W. Zhan, H. Yang, G. J. Wang. Synthesis and Fluorescence Study of A Pyrene-Functionalized Poly(4-vinylpyridine) quaternary ammonium for Detection of DNA Hybridization. Polymer, 2013, 54, 1289-1294.
- [4] M. Zhao, L. Y. Yang, R. C. Zhang, J. Dong, H. F. Dong, Y. Q. Wen, X. W. Zhan, G. Wang, Y. F. Lu, G. J. Wang. Detection of DNA Hybridization by a Pyrene-Labeled Polyelectrolyte Prepared by ATRP. Polymer, 2013, 54, 297-302.
- [5] L. Y. Yang, M. Zhao, R. C. Zhang, J. Dong, T. Zhang, X. W. Zhan, G. J. Wang. Synthesis and Fluorescence Study of a Quaternized Copolymer Containing Pyrene for Detection of DNA Hybridization. ChemPhysChem 2012, 13, 4099-4104.
- [6] G. J. Wang, J. Zhang. Photoresponsive Molecular Switches for Biotechnology. J. Photochem. Photobiol. C: Photochem. Rev. 2012, 13, 299-309.
- [7] J. Zhang, T. Hu, Y. B. Liu, Y. X. Ma, J. Dong, L. P. Xu, Y. D. Zheng, H. Yang, G. J. Wang. Photo-Switched Protein Adsorption on Electrostatic Self-Assembly Azobenzene Films. ChemPhysChem 2012, 13, 2671-2675.

# **Invited Speech: Production of Novel Dairy Foods Naturally Enhanced with**

# **Omega 3 Fatty Acids**

Speaker: Prof. SURESH K GULATI, University Of Sydney, Australia

Time: 08:30-09:10, June 2, 2013

**Location**: Session 5, 3<sup>rd</sup> Floor, Qingchuan Room (晴川厅)

#### **Abstract**

The microbial reactions in the rumen often limit the efficient utilisation of the dietary components of feed/pasture, which influences the composition of milk and thus limit the production of milk.

Globally research efforts are being undertaken to make nutrients in feedstuff i.e., protein, fat and other dietary components inert from ruminal degradation. As this will enable and supply increased levels of nutrients such as essential amino acids, essential fatty acids and energy to improve animal health, increase milk yield and enhance the nutritional quality of milk.

China's rapid urbanization and increasing disposable income have prompted a huge rise in the consumption of dairy products, with consumers demanding high quality products.

To meet consumer nutritional demand to reduce calories and saturated fat to overcome the world obesity and heart health crisis, the dairy Industry has become innovative with processes to manufacture milk and dairy products. A variety of dairy products such as skim, light-fat reduced and combination of dairy/vegetable oil blends are being marketed in supermarkets with consumer concern and confusion about their nutritional benefits.

Recent research has shown that (ALA, C18:3) alpha linoleneic acid along with its longer chain metabolites, which can also be derived from algal biomass i.e., (DHA C22:6) docosahexaenoic acid have an important role in cardiovascular health and other physiological functions in humans (Stark et al. 2008).

We have undertaken R&D globally producing inert feed-supplements fed at pasture, and in feedlots, dairy cows can metabolise dietary fat, synthesize/secrete milk fat with increased levels of omega-3 fatty acids, without causing metabolic disturbances i.e. decreasing milk fat with losses in the fat-soluble vitamins, or increase the deleterious trans-fats. Naturally derived nutritionally desirable omega 3 fatty acids have no "off" flavours that may occur in blended dairy products.

In recent years, we have been collaborating with dairy industries in Europe and Asia to produce naturally enriched milk with omega-3 ALA using soybean-flaxseed, DHA using soybean-algal biomass to enhance adult and infant nutrition. The level of omega 3 enrichment in milk can be varied by the amount and type of supplement included in the diet. DHA is also associated nutritionally with enhanced neural development, cognitive function and improved vision in neonates (Gulati et al. 2012).

# **Invited Speech: Fast Block Diagonal-wise Jacket Matrices for**

### **MIMO Mobile Wireless Channels**

Speaker: Prof. Moon Ho Lee, Chonbuk National University, Korea (South)

**Time:** 08:30-09:10, June 2, 2013

**Location:** Session 6, 3<sup>rd</sup> Floor, Qintai Room (琴台厅

#### **Abstract**

Block diagonalization (BD) is a linear precoding technique for multiuser multi-input multi-output (MIMO) broadcast channels such that it completely eliminates the multiuser interference, but it is computationally inefficient. BD supports multiple data streams per user by using precoders orthogonal to the channel of other users such that inter-user interference is cancelled. This linear precoding scheme also achieves near to the sum capacity of MIMO broadcast channels. Let be a matrix, then it is called a Jacket matrix when. That is, the inverse of the Jacket matrix can be determined by its element-wise inverse. In this abstract, we propose new matrix decomposition, called the block diagonal Jacket matrices decomposition and extend the block diagonal channel decomposition with which the MIMO broadcast channel capacity can be achieved. We also discus block diagonal Jacket matrices decomposition because it is ordinary inverse matrix. Jacket matrices are very fast algorithm, so we can calculate complexity easily. In multiuser



broadcast channels, unlike the single-user MIMO, cooperation is not permitted between different users. However, receive equalization is possible for each user. There have been several schemes proposed for low complexity MIMO broadcast communications.

Nowadays, communication environment changes to 4G mobile system employing MIMO such as multiuser channel. Coordinated multi-point transmission and reception (CoMP) technique is a new promising interference cancelling scheme which has been adopted in LTE-Advanced. For the next generation of wireless communication networks, CoMP is mostly required to reduce inter-cell interference (ICI). It also increases the intra cell edge user throughput and improves the coverage. Recently, most research works based on precoding with feedback schemes mainly focus on explicit feedback in the downlink CoMP. We have investigated MIMO CoMP based on block-wise inverse Jacket matrix.

## Invited Speech: Optimal Rate Scheduling via Utility-Maximization for J-User

## **MIMO Markov Fading Wireless Channels with Cooperation**

Speaker: Prof. Wanyang Dai, Nanjing University, China

**Time:** 09:10-09:50, June 2, 2013

**Location:** Session 6, 3<sup>rd</sup> Floor, Qintai Room (琴台厅

#### **Abstract**

We design a dynamic rate scheduling policy of Markov type via the solution (a social optimal Nash equilibrium point) to a utility-maximization problem over a randomly evolving capacity set for a class of generalized processor-sharing queues living in a random environment, whose job arrivals to each queue follow a doubly stochastic renewal process (DSRP). Both the random environment and the random arrival rate of each DSRP are driven by a finite state continuous time Markov chain (FS-CTMC). Whereas the scheduling policy optimizes in a greedy fashion with respect to each queue and environmental state and since the closed-form solution for the performance of such a queueing system under the policy is difficult to obtain, we establish a reflecting diffusion with regime-switching (RDRS) model for its measures of performance. Furthermore, we justify its asymptotic optimality through deriving the stochastic fluid and diffusion limits for the corresponding system under heavy traffic. In addition, we identify a cost function related to the utility function, which is minimized through minimizing the workload process in the diffusion limit. More importantly, our queueing model includes typical systems in the future wireless networks, such as, the J-user multi-input multi-output (MIMO) multiple access channel (MAC) and the broadcast channel (BC) under Markov fading with cooperation and admission control as special cases.

# **Part III Oral Sessions**

# **Session 1: Applied Mathematics**

Session Chair: Pin Tian Ng, Northern Arizona University, USA

Time: 08:30-12:00, Saturday, June 1

Location: 3<sup>rd</sup> Floor, Qingchuan Room(晴川厅)

Paper Id	Paper Title	Author	Affiliation
60094	Changepoint Analysis by Modified Empirical Likelihood	Hualing Zhao	Wuhan University of
	Method in Two-Phase Linear Regression Models		Technology
60524	Trajectory Controllability of Semilinear Differential	Maojun Bin	Guangxi University for
	Evolution Equations with Impulses and Delay		Nationalities
60569	Existence and Uniqueness Of Positive Solutions for A	Minjie Li	Guangxi University for
	Coupled System of Nonlinear Fractional Differential		Nationalities
	Equations		
60155	Models of The Short Interest Rate in Discrete Processes	Naoyuki	Hitotsubashi University
		ISHIMURA	
60530	Imputed Empirical Likelihood for Varying Coefficient	Peixin Zhao	Hechi University
	Models with Missing Covariates		
60580	A Geometrical Theorem about the Static Equilibrium of A	Guoquan	Wuhan University
	Common-Point-Force System and Its Application	Zhou	
60411	XLR: A Free Excel Add-In for Introductory Business	Pin Ng	Northern Arizona
	Statistics		University
60586	A Modified Augemented Lagrangian Method for A Class	MHBM	Khalifa University of
	of Nonlinear Ill-Posed Problems	Shariff	Science, Technology and
			Research
60356	Images of Linear Block Codes over Fq+Ufq+Vfq+Uvfq	Jane Palacio	University of the
			Philippines Los Banos
60216	Courant-) UHUHW Hypothesis And Stability of The Weak	Dmitry	Sobolev Institute of
	Shock Wave Satisfying the Lopatinski Condition	Tkachev	Mathematics

# **Session 2: Material Sciences and Technology (1)**

Invited Speeches: Prof. Ning Hu, Chiba University, Japan

Prof. Jianguo Guan, Wuhan Unviersity of Technology, China

Prof. Guojie Wang, University of Science and Technology Beijing, China

Session Chair: Alexander Naumov, Nekrasov Kostroma State University, Russia

Time: 8:30-12:00, Saturday, June 1 Location: 3<sup>rd</sup> Floor, Qintai Hall(琴台厅)

Paper Id	Paper Title	Author	Affiliation
60505	Use of Strain Energy Density W and Qo as Quality Indices	Prateek Sibal	VIT University
	for Rating the Quality of Cast Aluminium Alloy354 as A		
	Function of Processing Parameters		
60332	Synthesis and Photoelectrical Properties of	Qianqian Zhu	Qingdao University of
	Graphene-CuxO Nanostructures		Science and Technology
60404	Dissolution, Crystallisation, and Sintering of A Raw Matt	Chin Chiat Lee	Rio Tinto Minerals Asia
	Glaze for Porcelain Tiles		Pte. Ltd.
60300	Microwave Dielectric Properties and Its Compatibility	Hui Shao	Jiangsu University of
	With Silver of Glass-Ceramic Based on Co-Fire at Low		Science and Technology
	Temperature		
60293	Anodic Plasma Electrolytic Saturation of Steels by Carbon	Alexander	Nekrasov Kostroma State
	and Nitrogen	Naumov	University
60271	Anodic Plasma Electrolytic Nitrocarburizing of	Sergei	Nekrasov Kostroma State
	Low-Carbon Steel	Kusmanov	University

# **Session 3: Material Sciences and Technology (2)**

Session Chair: Dongyan Ding, Shanghai Jiao Tong University, China

Time: 14:00-18:00, Saturday, June 1

Location: 3<sup>rd</sup> Floor, Qingchuan Room(晴川厅)

Paper Id	Paper Title	Author	Affiliation
60130	Mechanical Properties and Fatigue Behavior of Age	Zuqi Hu	Huazhong University of
	Treated Die Cast Almg5si2mn Alloy		Science and Technology
60046	Microstructure and Electrochemical Properties of	Dongyan Ding	Shanghai Jiao Tong
	Ce-Containing 7072 Al Alloy		University
60364	Damage Progression in Unidirectionally Arrayed Chopped	Hang Li	Kyushu University
	Strands Laminates with Different Slit Patterns under		
	Tension		
60035	High Temperature Resistance Effect of SrO/ (SrO+CaO) in	Yingliang Tian	Beijing University of
	Alkali-Free Boro-Aluminosilicate Glasses		Technology
60347	Characterization of Iron Oxide Nanoparticles for Sol-Gel	Janina Setina	Riga Technical University
	Dip-Coating Method Prepared Thin Films		
60040	Comparison of One-step Method and Two-step Method of	PAN Rong-jian	Xihua University
	Ilmenite Concentrate Smelting Titanium Slag		
60308	Morphological Studies of Polyphosphazenes and Its	Chuchu Sun	University of Lethbridge
	Nano-composites Using Solid-state Nuclear Magnetic		
	Resonance Spectroscopy		
60572	Electrical Transport Properties of Single SiC NW-FET	Gang Peng	National University of
			Defense Technology
60334	Solidification Paths within the Ceramic Systems	Vasily Lutsyk	Russian Academy of
			Sciences

Paper Id	Paper Title	Author	Affiliation
60214	Li,Na,Rb,La  F System for Molten Salt Reactor: 3D and 4D	Vasily Lutsyk	Russian Academy of
	Computer Models		Sciences
60292	Quaternary Reciprocal Systems with the Inner Diagonals:	Vasily Lutsyk	Russian Academy of
	Variants of Polyhedration		Sciences
60374	Luminescence properties of Al2O3 nanopowders with	Laima Trinkler	University of Latvia
	different phases		
60455	Blue Luminescence of Hexagonal Boron Nitride	Baiba Berzina	University of Latvia

# **Session 4: Applied Mathematics and Physics**

Session Chair: Yun Chiu, University of Texas at Dallas, USA

Time: 14:00-18:00, Saturday, June 1 Location: 3<sup>rd</sup> Floor, Qintai Hall(琴台厅)

Paper Id	Paper Title	Author	Affiliation
60529	A Cosmological Model with Varying G and in General	Harpreet Kaur	Punjab Technical
	Relativity.		University
60310	Numerical Simulations of the Equations of Particle Motion	Kelong Zheng	Southwest University of
	in the Gas Flow		Science and Technology
60445	Empirical Processes in Stochastic Optimization	Dietmar Ferger	Technische Universitat
			Dresden
60108	A Closed-Form Solution of Effective <rxqi for<="" nmodulus="" td=""><td>Dongmei Luo</td><td>Foshan University</td></rxqi>	Dongmei Luo	Foshan University
	Composites Including Multi-Shape Inclusions Using		
	Improved Mori-Tanaka Model		
60422	On the Sub-Critical Bifurcation of Anti-Phase and In-Phase	Yih Ferng Peng	National Chi Nan
	Synchronized Vortex Shedding Forms		University
60145	An Arbitrated Quantum Signature Scheme Based on	Ying Guo	Central South University
	Chaotic Quantum Encryption Algorithm		
60100	The M3Y Double Folding Dissipative Model in Agreement	Igor Gontchar	Omsk State Transport
	with Precise Fusion Cross Sections		University
60576	Laser Conoscopic Research Technique for Single Crystals	Olga Pikoul	Far Eastern State
	LiNbO3:Mg		University of
			Transportation
60379	Acousto-Resonance Spectroscopy of Nonlinear-Optical	Oleg	Moscow Institute of
	Crystals in Process of Laser Frequency Conversion	Ryabushkin	Physics and Technology
60110	Phenomenological and Semi-Microscopic Analysis for The	Nurlan	Eurasia University
	Elastic Scattering of Protons from 12C Nuclei at Different	Amangeldy	
	Energies		
60176	Essential Topics on Constructing WCDS-based Virtual	Chie Dou	National Yunlin University
	Backbone in Wireless Sensor/Mesh Networks		of Science and Technology
60297	Reliability of Attenuation Properties Recovery for	Ekaterina	Trofimuk Institute of
1	Viscoelastic Media	Efimova	Petroleum Geology

Paper Id	Paper Title	Author	Affiliation
60755	A Comparative Study of Amplitude and Timing Estimation	Yun Chiu	University of Texas at
	in Experimental Particle Physics using Monte Carlo		Dallas
	Simulation		
60759	Convergence to Common Solutions of Various Problems for	Kyung Soo	Kyungnam University
	Nonexpansive Mappings in Hilbert Spaces	Kim	
60731	1-A Cosmological Model with Varying G and Λ; In General	harpreet Kaur	PTU
	Relativity		
60693	Influence of Tensor Interaction on Evolution of Nuclear	Rupayan	University of Calcutta
	Shells	Bhattacharya	
60809	Search for AA Hyper-nuclei Using Antiprotons in PANDA	Hannan Younis	Politecnico Di Torino,
			INFN ITALY
60658	Bulk Properties of Symmetric Nuclear and Pure Neutron	Hesham	Sohag University
	Matter	mansour	
60119	Geometrically Exact Theory of Contact Interactions $\pm$	Alexander	University of
	further Developments and Achievements	Konyukhov	Nottingham-Ningbo China

# Session 5: Chemical Engineering, Agriculture and Food Engineering

Invited Speeches: Prof. SURESH K GULATI, University Of Sydney, Australia

Session Chair: Zainal Samicho, Universiti Teknologi MARA, Malaysia

Time: 08:30-12:00, Sunday, June 2

Location: 3<sup>rd</sup> Floor, Qingchuan Room(晴川厅)

Paper Id	Paper Title	Author	Affiliation
60382	Study on Extraction of Cucurbitacin B from the Pedicel of	Xing Xu	Zhejiang University of
	Cucumis Melo L. By Acid Hydrolysis		Technology
60060	Stress Analysis of the Underground Gas Storage Well	Chengli Song	Northwest University
	Stored CNG Based on the Finite Element Method		
60055	Synthesis of (S)-Tert-Butyl 3-Hydroxybutyrate by	Zhimin Ou	Zhejiang University of
	Asymmetric Reduction of Tert-Butyl Acetoacetate with		Technology
	Saccharomyces Cerevisiae B5		
60408	Recovery of Uranium (VI) from Water Solutions by	Grazyna	Institute of Nuclear
	Membrane Extraction	Zakrzewska	Chemistry and
			Technology
60111	The Development of Soy Sauce from Organic Soy Bean	Shoupeng Wan	Tianjin University of
			Science & Technology
60431	Slight Free Falling Impact Test for Assessing Guava	Cheng-Chang Lien	National Chiayi
	Maturity		University
60135	Determination of Okadaic Acid Related Toxins from	Hai-qi ZHANG	Zhejiang Fisheries
	Shellfish (Sinonovacula constricta) by High Performance		<b>Quality Testing Centre</b>
	Liquid Chromatography Tandem Mass Spectrometry		
60584	Effect of Organic Fertilizers Used in Sandy Soil on The	Yongxia Hou	Shenyang University
	Growth of Tomatoes		

Paper Id	Paper Title	Author	Affiliation
60494	Biochemical Changes During Composting of Coir Pith	Muthu rayar	Sathyabama
	Waste as Influenced by Different Agro Industrial Wastes		University
60088	Conversion of Ragi husk (polysaccharides) to reducing	S Chandraju	University of Mysore,
	sugars by acid Hydrolysis and its estimation by different		Tubinakere
	standard volumetric methods		
60301	Amino Acid Composition of Droughtmaster Beef at	ZAINAL	Universiti Teknologi
	Various Beef Cuts	SAMICHO	MARA
60551	The Worst Thermal Runaway Behaviors of Four	Tsai-Ying Hsieh	National United
	Commercial 14500 Lithium-ion Batteries with Closed		University
	Heating Instrument		
60553	Thermal Hazard Study on Electrolytes in Lithium-ion	Yu-Yun Sun	National United
	Battery		University
60376	Physicochemical and Radical Scavenging Activities of	Norul Liza	Universiti Teknologi
	Honey Samples From Malaysia	A.Rahaman	Malaysia
60319	Effect of Radio Frequency (RF) Treatments for Pest	Su-Der Chen	National Ilan
	Control and Qualities of Vacuum Packed Rice		University
60313	Study of Microwave Extraction Crude Polysaccharides and	Bo-Han Chen	National Ilan
	Triterpenoids from Poria cocos Soild-state Fermented		University
	Products		
60543	Accumulation of microcystins in water and economic fish	Niwooti	Maejo University
	in Phayao Lake, Northern Thailand	Whangchai	
60792	The role of the membranes in sustainable development	Andrzej	Warsaw University of
		Koltuniewicz	Technology
60378	Evaluation of pesticide residues in fruit from Poland and	Bozena Lozowicka	Plant Protection
	health risk assessment		Institute - National
			Research Institute
60649	Mechanical And Morphological Properties of	Sirirat	Silpakorn University
	Polypropylene/Polyoxymethylene Blends	Wacharawichanant	
60198	Optimisation of Beef Tenderisation Treated with Bromelain	ZAINAL	Universiti Teknologi
	Using Response Surface Methodology(RSM)	SAMICHO	MARA
60746	Study of Germination Method for GABA Rice Production	Umaporn Yoosabai	Kasetsart University
	by Using Gaseous and Heat treatment		
60747	Statistical Comparison of Nitrate Concentrations in Three	WAI-KUN CHAN	Taiwan National I-Lan
	Vegetables as Affected by Environmental Changes over 24		University
	H Periods		
60620	Antimicrobial Effect of Ozonated Water against Salmonella	Ilkin Sengun	Ege University
	Typhimurium on Salad Vegetables		
60309	Isolation of aromatic yeasts(non-Saccharomyces	Choi Ji Ho	Rural Development
	cerevisiae) from Korean traditional nuruks and		Administration
	identification of fermentation characteristics		
60384	Superabsorbent polymer for water management in forestry	Miguel Casquilho	Technical University
			of Lisbon

# **Session 6: Electrical and Electronics Engineering**

Invited Speeches: Prof. Moon Ho Lee, Chonbuk National University, Korea (South)

Prof. Wanyang Dai, Nanjing University, China

Session Chair: Charlie Wang, University of Colorado, USA

Time: 08:30-12:00, Sunday, June 2 Location: 3<sup>rd</sup> Floor, Qintai Hall(琴台厅)

Paper Id	Paper Title	Author	Affiliation
60298	Robust Performance of Scene Matching Algorithm	Zhaohui Xia	; LYDQ5 HNHDLFK, QVRV
			High-tech
60150	A Adaptive Particle Filter Based Method for Real Time	Wei-Ming	National Ilan University
	Face Tracking	Chen	
60597	Quantum Group Signature Scheme Based on Chinese	Xin Sun	Central South University
	Remainder Theorem		
60156	Economic Analysis of the Investment in Smart	Wang Yaping	State Grid Beijing
	Substation		Economic and
			Technology Research
			Institute
60106	Three-defense Line Coordination Strategy of the	Wen-cheng	South China University
	Guizhou Power Grid with the New Security Situation	Zheng	of Technology
60128	Design and Application of A MCU-based Smart	Huang Fuqing	Civil Aviation
	Contactor System		University of China
60141	Reliability Improvement Strategies for HVDC	Yidong Hong	South China University
	Transmission System		of Technology
60114	Equivalent Substitution Based Method for Calculation	Jinming Li	South China University
	of Best Installed Capacity of Pumped Storage Power		of Technology
	Station		
60284	Designing a Full Adder Circuit Based on	Sahar	Azad University
	Quasi-Floating Gate	Bonakdarpour	
60515	Optimal Power Allocation Scheme for Downlink CoMP	Jun Li	Chonbuk National
	Systems		University
60999	Optimal Channel Sensing Order and The Related	Junyuan	Wuhan University
	Stopping Rule in Cognitive Radio	Huang	
60582	Jacket Matrix Based on Modular (3, 5, 6) Lattice	Wei Duan	Chonbuk National
	Triangular Expansion		University
60278	Survey of Clustering Schemes in Mobile Ad hoc	Abdelhak	University of Bachir el
	Networks	Bentaleb	Ibrahimi, Bordj Bou
			Arreridj
60661	A Sphere Detection Based Adaptive MIMO Detection	Xuanli Wu	Harbin Institute of
	Algorithm for LTE-A System		Technology Harbin
60306	An Analysis of Buck Converter Efficiency in	CHIAJIU	University of Colorado
	PWM/PFM mode with Simulink	WANG	
60600	Computer Assisted Alerts Using Mental Model	Abid Ghaffar	International Islamic
	Approach for Customer Service Improvement		University Ma-laysia

Paper Id	Paper Title	Author	Affiliation
60725	An Iterative Maximum Likelihood Synchronization	Chi-Min Li	National Taiwan Ocean
	Method for OFDM System		University
60786	A Space Vector Modulation Based Three-level PWM	Azeddine	Uinversity of Hail
	Rectifier Under Simple Sliding Mode Control Strategy	Draou	
60828	Robustness and Accuracy Test of Particular Matter	Jiamei Deng	Kingston University
	Prediction Based on Neural Networks		London
60736	An Automatic Synchronization Method for Distributed	Cheng Zhang	Huazhong University of
	Power Electronics System		Science and Technology
60692	Optical Design of OCT with Gapped Magnetic Ring	SU Xiaoyi	Fuzhou University
60647	Energy Harvesting based on Magnetic Dispersion for	Cleonilson	Universidade Federal da
	Three-Phase Power System	3 URWARCH	Paraiba
		Souza	

# **Part IV Instructions for Presentations**

# **Devices Provided by the Conference Organizing Committee:**

- Laptops (with MS-office & Adobe Reader)
- Projectors & Screen
- Laser Sticks

## **Materials Provided by the Presenters:**

PowerPoint or PDF files

### **Duration of each Presentation:**

- Regular Oral Session: 15 Minutes of Presentation, 5 Minutes of Q & A
- Plenary Speech: 40 45 Minutes of Presentation, 5 Minutes of Q & A

## **Part V Hotel Information**

#### **About Hotel**

Optics Valley Kingdom Plaza, Wuhan centrally located in the heart of Optics Valley, Wuhan, China, with the beautiful East lake Scenic Spot and Desheng Mountain. Situated on landscape road of East Lake, it will become another landmark at the bank of East Lake. Close proximity to Wuhan Science&Technology Convention and Exhibition Center.

Address: No.1 Wujiawan, Hongshan, Wuhan, Hubei, P.R.China

武汉市洪山区吴家湾特1号(珞喻路武汉科技会展中心旁)

Homepage: http://www.whkingdom.com/ggkingdom.aspx

**Telephone:** +86 27 87887788 **Facsimile:** +86 27 87881188

**E-mail:** kingdomplaza@whkingdom.com

#### How to Get to the Hotel

#### From the Tian He Airport:

Take a taxi to No.1 Wujiawan, Hongshan, Wuhan (Time: about 90 minutes)

#### From the Railway Station:

Take a taxi to No.1 Wujiawan, Hongshan, Wuhan (Time: about 30 minutes)

For non-Chinese author, please show the following info to the driver if you take a

taxi:

请送我到:武汉市洪山区吴家湾特1号 光谷金盾大酒店

# **Contact Us**

## **SCET Organizing Committee**

Secretary: Mr. Zhang

Telephone: +86-151 7233 0844

E-mail: scet@engii.org