



S M S
Smart Materials and Surfaces
B A N G K O K 2 0 1 4
26 - 28 August 2014

Sheraton Grande Sukhumvit Hotel - Bangkok-Thailand

Smart Materials and Surfaces- SMS Bangkok 2014 Conference Program

Conference General Chairs

Prof. Ashutosh Tiwari- Biosensors and Bioelectronics Centre, Linköping University, Sweden

Dr. Naveed Anwar - Executive Director/CEO, AIT Consulting Affiliated Faculty, Structural Engineering Director, ACECOMS, Asian Institute of Technology, **Thailand**

Prof. Joydeep Dutta- Chair in Nanotechnology Water Research Center, Sultan Qaboos University, **Oman**

Organizer



In collaboration with



Tuesday 26 th August 2014		
Smart Materials and Surfaces: Fabrication, Characterization & Properties		
7.30 - 9.00	Registration - Welcome coffee	
9.00 - 9.30	Opening Ceremony Chairs: Prof. Ashutosh Tiwari, Sweden and Dr. Naveed Anwar, Thailand	
Keynote talk 9.30 - 10.15	Prof Elias Siores - Provost, Bolton University, United Kingdom Smart functional materials for energy harvesting: from laboratory to commercialisation (E. Siores, N. Soin, T. H. Shah and S. C. Anand)	Prof Elias Siores
10.15 -10.45	Coffee break- Poster Session I	
	Chairs : Prof. Ashutosh Tiwari, Sweden and Dr. Naveed Anwar, Thailand	
Keynote talk 10.45- 11.30	H.N. Alshareef, M.A. Khan and A.J. Caraveo-Frescas Materials Science & Engineering, King Abdullah University of Science & Technology, Thuwal, Kingdom of Saudi Arabia Flexible Memory Devices Using Functional Polymers	Prof Husam Alshareef
11.30-11.45	A.S. Dhaliwal, Y. Ali and R.G. Sonkawad Department of Physics, Sant Longowal Institute of Engineering & Technology ((Deemed University) Longowal (Sangrur) -Punjab and Inter University Accelerator Centre, New Delhi, India Galvanostatic fabrication of pTS doped PANI- PPy fiber composite film	Prof Amarjit Dhaliwal
11.45- 12.00	A. Yousif, H. C. Swart, O. M. Ntwaeaborwa Department of Physics, University of the Free State, Bloemfontein, South Africa The role of particulates on the structure and optical properties of Y ₃ (Al,Ga) ₅ O ₁₂ :Tb films deposited by PLD.	Dr Abdelrahman Mohammed Yousif
12.00-12.15	E.A.B. Hughes, R. Wise and L.M. Grover University of Birmingham, School of Chemical Engineering, Birmingham and TWI Ltd, Granta Park, Cambridge, United Kingdom Formulation of covalently linked PEEK/HA composite	Mr Erik Hughes
12.15-12.30	N.Paleeya, N. Khemasiri, D. S-T Phromyothin, M. Horprathum, S.Porntheeraphat, J.Nukeaw and S. Pratontep National Electronics and Computer Technology Center, Thailand Science Park and College of Nanotechnology, King Mongkut's Institute of Technology, Thailand Silicon Nitride Protective Coating by Gas-timing RF Magnetron Sputtering Deposition	Dr Sirapat Pratontep
12.30-14.00	Lunch break- Poster Session I	
	Smart Materials and Surfaces for Energy and Environment	
	Chairs : Prof. Husam Alshareef, Kingdom of Saudi Arabia and Prof. Elias Siores, United Kingdom	
Keynote talk 14.00- 14.45	Prof Joydeep Dutta - Chair in Nanotechnology, Water Research Center, Sultan Qaboos University, Sultanate of Oman Nanotechnology for water treatment and desalination	Prof Joydeep Dutta
14.45-15.15	B. Petter Jelle, T. Gao and A. Gustavsen SINTEF Building and Infrastructure, Department of Materials and Structures, Norwegian University of Science and Technology (NTNU), Department of Civil and Transport Engineering and Norwegian University of Science and Technology (NTNU), Department of Architectural Design, History and Technology, Norway . Electrochromic Materials and their Characterization by Solar Radiation Glazing Factors for Smart Window Applications	Prof Bjorn Petter Jelle
15.15- 15:45 Invited talk	P. Hirunsit, W. Soodsawang and J. Limtrakul National Nanotechnology Center (NANOTEC), National Science and Technology Development Agency (NSTDA), Department of Chemistry and NANOTEC Center for Nanoscale Materials Design for Green Nanotechnology, Faculty of Science, Kasetsart University and PTT Group Frontier Research Center, PTT Public Company Limited, Bangkok, Thailand . Reactivity Trend of CO ₂ Electroreduction on Copper Alloys from First Principles	Dr Pussana Hirunsit
15.45-16:00	Y. Singhvi, I. V. N. Tejasvini and G. Manik Department of Polymer and Process Engineering, IIT Roorkee (Saharanpur Campus), Saharanpur, India Molecular Simulations of Anti-stain Polymeric Coatings	Dr Gaurav Manik

16.00-16.15	Coffee break- Poster Session I	
16:15-16:30	<p>K. Koyvanich, N. Muensit and P. Smithmaitrie Center of Excellence in Nanotechnology for Energy (CENE), Physics Department, Faculty of Science and Department of Mechanical Engineering, Faculty of Engineering, Prince of Songkla University (PSU), HatYai, Songkla, Thailand.</p> <p>A Microscale Piezoelectric Harvester for Mechanical Energy from Fluid Flow</p>	Mr Krit Koyvanich
16.30-16.45	<p>O. Abbes, A. Portavoce, C. Girardeaux, A. Spiesser, and V. Le Thanh GREMI CNRS-Université d'Orléans, Aix-Marseille Université, CNRS, IM2NP-UMR 6242 and Aix-Marseille Université, CNRS, CINaM-UMR 7325, Marseille, France</p> <p>Formation of magnetic phases by reactive diffusion between Mn and Ge for Spintronic Applications</p>	Mr Omar Abbes
16.45-17.00	<p>N. Belkadi, B. Dulmet and T. Baron FEMTO-ST Institute, Time and Frequency Dpt., Besançon, France.</p> <p>Development of Through Silicon Stacking Technology for Capacitive Acoustical MEMS Resonators</p>	Dr Nesrine Belkadi
17.00-17.15	<p>N. Jaiswala, S. Upadhyayb, D. Kumarc and O. Parkashd Department of Ceramic Engineering and Department of Physics, Indian Institute of Technology- Banaras Hindu University, India</p> <p>Oxide Ion Conduction in La²⁺ and Sr²⁺ Co-Doped Ceria/(Li-Na)₂CO₃ Multifunctional Nanocomposite electrolyte</p>	Prof Om Parkash
17.15-17.30	<p>G. R. Dhokane Department of Physics, Arts, Science & Commerce College, Chikhaldara, Maharashtra-India</p> <p>Study of Electrical Conductivity of Polypyridine-PVAc Composite Thin-Film doped with Ni(NO₃)₂</p>	Dr Gopal. R. Dhokane
17.30-17.45	<p>M. R. Alenezi, T. H. Alzanki, A. S. Alshammari, S.J. Henley and S. R. P. Silva College of Technological Studies, Kuwait, Nanoelectronics Center, Advanced Technology Institute, University of Surrey, United Kingdom and Department of Physics, College of Science, University of Hail, Kingdom of Saudi Arabia</p> <p>On-Chip Fabrication of High performance Nanostructured Photoetectors</p>	Dr Mohammad R. Alenezi
17.45-18.00	<p>V. Yordsri, W. Wongwiriyan and C. Thanachayanont College of Nanotechnology, King Mongkut's Institute of Technology Ladkrabang/ Nanotec-KMITL Center of Excellence on Nanoelectronic Device/ Thailand Center of Excellence in Physics/ National Metal and Materials Technology Center, Thailand</p> <p>Facile growth of carbon nanotube electrode from electroplated Ni catalyst for supercapacitors</p>	Dr Winadda Wongwiriyan

Wednesday 27 th August 2014		
Smart Materials and Surfaces for life science		
Chairs: Prof Elias Siores- United Kingdom and Suresh Valiyaveettil- Singapore		
Keynote talk 9.00-9.45	Prof Ashutosh Tiwari Biosensors and Bioelectronics Centre, IFM- Linköping University, Sweden Smart Bioengineered Nanosystems for Advanced Healthcare Devices	Prof Ashutosh Tiwari
Keynote talk 9.45-10.15	B. Ayyappa, S. Kanchi, M.I. Sabela, and K. Bisetty Department of Chemistry, Durban University of Technology, Durban, South Africa Electrochemical biosensor based on Cyt-C/GO-AuNPs/ MWCNT modified GCE for determination of Rebaudioside-A	Prof Krishna Bisetty
10.15-10.45	Coffee break- Poster Session II	
Keynote talk 10.45-11.15	Prof E. Traversa Division of Physical Sciences and Engineering, King Abdullah University of Science and Technology (KAUST), Thuwal, Kingdom of Saudi Arabia Cerium Oxide Nanoparticles for Antioxidant Therapy Perspectives	Prof Enrico Traversa
11.15-11.30	S. K. Shukla and A. Tiwari University of Delhi, India and Linköping University, Linköping, Sweden NiO encapsulated polyaniline nanostructure for Non-enzymatic glucose sensing	Dr Saroj Shukla
11.30-11.45	C.H. Chia , S.W. Chook and S. Zakaria Materials Science Program, School of Applied Physics, Faculty of Science and Technology, Universiti Kebangsaan Malaysia, Selangor, Malaysia Green approach for the preparation of regenerated cellulose-chitosan membrane containing silver nanoparticles	Dr Chin Hua Chia
11.45-12.00	K.Sharma, V. Kumar , B. S. Kaith, S. Kalia and H. C. Swart Department of Physics, University of the Free State, South Africa and Department of Chemistry, Shoolini University of Biotechnology and Management Sciences/ Department of Chemistry, Dr. B.R. Ambedkar National Institute of Technology, Jalandhar/ Department of Chemistry, Bahra University, Wahnaghat (Shimla Hills), India Synthesis of conductive biodegradable hydrogels based on Gum ghatti and their use in colon-specific drug delivery	Dr Vijay Kumar
12.00-12.15	J. M. Navarrete and G. Martinez Faculty of Chemistry, National University of Mexico and National Coordination to Restore the Cultural Inheritance, National Institute of Anthropology and History, Mexico City, Mexico Jelly Added with Food Preservatives and Formaldehyde, used as Barrier against Underground Humidity and for Consolidation of Ancient raw Materials	Prof Manuel Navarrete
12.15-12.30	M. Kurisawa Institute of Bioengineering and Nanotechnology, Singapore. Enzyme-Mediated Injectable Hydrogels with Independent Tuning of Mechanical Strength and Gelation Rate for Biomedical Applications	Dr Motoichi Kurisawa
12.45-14.00	Lunch Break- Poster session II	
Smart Materials and Surfaces for Energy and Environment		
Keynote talk 14.00- 14.45	Suresh Valiyaveettil , Department of Chemistry, National University of Singapore Developing new hybrid materials for sensors	Prof. Suresh Valiyaveettil
Chairs: Prof. Krishna Bisetty, South Africa and Enrico Traversa- Kingdom of S.A		
14.45- 15.00 Invited talk	R. K. Gupta Department of Chemical Engineering, Indian Institute of Technology Kanpur, Kanpur, India Photoluminescent Carbon Nanoparticles from Bio-waste	Dr Raju Kumar Gupta
15.00- 15.15	S. Chandra and B. Behera Centre for applied Research in Electronics, Indian Institute of Technology Delhi, India. Nanostructured metal oxides: catalyst-free synthesis, characterization and Integration with MEMS processing for gas sensor	Prof Sudhir Chandra
15.15-15.30	E. Jankowska , T. Jankowski, W. Zatorski and P. Sobiech Central Institute for Labour Protection - National Research Institute, Warsaw, Poland Influence of ventilation on transferring of the nano-sized particles from the fume cupboard to the room air	Dr Elzbieta Jankowska
15.30-15.45	K. Sivashanmugan , J-D Liao and C-K Yao	

	Department of Materials Science and Engineering, Center for Micro/Nano Science and Technology, Nation-al Cheng Kung University, Taiwan.	Mr Sivashanmugan Kundan
	Smart Focused-Ion-Beam-fabricated Nanostructures for Improving Sur-face Enhanced Raman Scattering on Trace Detection of Single Molecules	
15.45-16.00	M. Choudhary, S. S. Siwal and K. Mallick Department of Chemistry, University of Johannesburg, South Africa.	Prof Kaushik Mallick
	Oxidative polymerization of tryptophan: An evidence of PCET reaction mechanism	
16.00-16.15	Coffee Break- Poster session II	
16.15-16.30	E. G. Gholami and M. Kadkhodaei Department of Mechanical Engineering, Isfahan University of Technology, Isfahan, Iran	Dr Mahmoud Kadkhodaei
	Behaviors of Ferromagnetic Shape Memory Alloy Ni–Mn–Ga under Incomplete Biaxial Loadings	
16.30-16.45	M. R. Alenezi Public Authority for Applied Education and Training, College of Technological Studies, Kuwait.	Dr Mohammad R. Alenezi
	Self-powered Piezoelectric ZnO Nanowire Gas Sensor	
16.45-17.00	K. Rudahl and S. E. Goldin Department of Computer Engineering, King Mongkut's University of Technology, Thonburi, Thailand.	Prof Kurt Rudahl
	A Smart Material for Imaging Highway Substructure Damage	
17.00-17.15	Q. Hussain, A. Pimanmas and L. Lalin, Sirindhorn International Institute of Technology, Thammasat University, Thailand.	Mr Lam Lalin
	Strength and Ductility of SGFRP Confined Concrete	
17.15-17.30	M. Dewan and S. Ram Materials Science Centre, Indian Institute of Technology, Kharagpur, India	Ms Moumita Dewan
	A facile one-step method to produce nanocrystallites BiFeO ₃ -Graphene composite: as a promising energy transfer material	
17:30-17:45	B. Evangeline and P. Abdul Azeem Department of Physics, National Institute of Technology - India	Dr. P. Abdul Azeem
	Synthesis and luminescent features of CaZrO ₃ nanophosphors	

Thursday 28 th August 2014		
Smart Materials and surfaces for Energy and Environment		
Chairs: Prof. Joydeep Dutta- Oman and Prof Ashutosh Tiwari- Sweden		
Keynote talk 9.00-9.45	M. Syväjärvi Linköping University, Department of Physics, Chemistry and Biology and Graphensic AB, Mjärdevi Science Park, Linköping, Sweden Advanced energy and environmental materials concepts from silicon carbide and graphene	Dr Mikael Syväjärvi
Keynote talk 9.45-10.15	H. C. Swart , Vinod Kumar, Vijay Kumar, S. Som, A. Pandey, J. J. Terblans, O. M. Ntwaaborwa, E. Coetsee and R.E. Kroon Department of Physics, University of the Free State, Bloemfontein, ZA9300, South Africa Role of surface and deep-level defects on the emission and degradation of phosphor materials	Prof Hendrik C Swart
10.15-10.30	Coffee Break	
10.30-10.45	H. Guesmi , B. Zhu, C. Mottet, J. Creuze and B. Legrand ICG, équipe MACS UMR 5253, Montpellier, CINAM UMR 7325, Campus de Luminy Marseille, ICMMO, LEMHE Université Paris-Sud, Orsay and CEA, Service de Recherches de Métallurgie Physique, Saclay, France DFT-based Ising model for the simulation of Au-Pd structure under reaction conditions	Dr Hazar Guesmi
10.45-11.00	S. Fujino and H. Ikeda Kyushu university, Fukuoka, Japan Preparation of SiO ₂ /PVA mesoporous and its sintered functional silica glass	Prof Shigeru Fujino
11.00-11.15	T. Kida , H. Furuso, K. Kumamoto, M. Yuasa, and K. Shimano Department of Energy and Material Sciences, Faculty of Engineering Sciences and Department of Molecular and Material Sciences, Interdisciplinary Graduate School of Engineering Sciences, Kyushu University, Japan Polyoxometallate-surfactant hybrid photocatalysts coupled with light antennas	Prof Tetsuya Kida
11.15- 11.30	J. Agrisuelas, R. Catalán, C. Delgado, J. J. García-Jareño, A. F. Roig and F. Vicente Department of Physical Chemistry. University of Valencia, Burjassot and Department of Analytical and Physical Chemistry. UJI, Avda. Sos Bainat, s/n.Castelló, Spain . Interfacial role of Cesium in Prussian Blue Films	Prof Francisco Vicente
11.30-11.45	S. Chaudhary , A. R. Head and J. Schnadt Division of Synchrotron Radiation Research, Lund University, Sweden X-ray Photoemission Spectroscopy Study of (3-mercaptopropyl)trimethoxysilane and n-propyltriethoxysilane on Rutile TiO ₂ (110)	Ms Shilpi Chaudhary
11.45-12.00	A. Hozumi , D. F. Cheng, C. Urata and B. Mashed National Institute of Advanced Industrial Sci and Technology (AIST), Shimoshidami, Japan . Smooth Polydimethylsiloxane Brush Surfaces Showing Unusual Dynamic Dewetting Behavior	Dr Atsushi Hozumi
12.00-12.15	Y. Wanna , R. Puingam, J. Nukeaw, A. Chindaduang, G.Tumcharer, S. Porntheerapat and S. Pratontep College of Nanotechnology, King Mongkut's Institute of Technology Ladkrabang/ National Nanotechnology Center (NANOTEC), Thailand Science Park/ Thai Microelectronics Center (TMEC), Thailand and Nara Machinery Co., Ltd, Japan . Preparation and Characterization of PEG bis(amine) grafted SPION/PMMA nanocomposite	Mr Yongyuth Wanna
12.15-12.30	N.S. Kokode , V.R. Panse and S. J. Dhoble N.H.College,Bramhapuri,Gondwana University and Department of Physics, RTM Nagpur University, India Synthesis and Optical Characterization of Ca ₂ PO ₄ Cl:Tb ³⁺ and Mn ²⁺ Green Emitting phosphor for solid state lighting	Dr Namdeo Shriram Kokode
12.30-12.45	T.Venkatappa Rao , N.Rajeswara Rao, SVS Ramana Reddy and B.Sanjeeva Rao National Institute of Technology, Warangal, India Effect of electron beam on thermal, morphological and anti-oxidant properties of kraft lignin	Dr. T.Venkatappa Rao
12.45-13.00	M. Gholampour , A. Abdollah-zadeh, R. Poursalehi and L. Shekari Nanomaterials Group, Department of Materials Engineering, Tarbiat Modares University and Faculty of Energy Engineering and New Technologies, Shahid Beheshti University, Iran Porosity Effect on Stoichiometry of GaN Nanostructures by Plasma Enhanced Chemical Vapor Deposition	Mr. Mahdi Gholampour
13.00-15.30	Lunch break and Awards Ceremony	

Posters sessions
Poster session I: 26th August 2014

Poster N°.	Abstract's details	Participant
1	Visible-Light-Activated Photocatalytic Hydrogen Production by Hybridized TiO ₂ with Tin(IV) Porphyrin Complexes Sung Hyun Kim, Gi-Seon Lee, Beom Hyeok Park, Hee-Joon Kim Department of Applied Chemistry, Kumoh National Institute of Technology, Gumi 730-701, Republic of Korea	Prof Hee-Joon Kim
2	Establishment of Optimized Metallic Contacts on Porous Silicon for Thermoelectric Applications O. Abbes , A. Melhem, K. Snabi, C. Leborgne and N. Semmar GREMI CNRS-Université d'Orléans, Orléans, France	Mr Omar Abbes
3	Photoresponse of Composites of Zinc Oxide and Poly(3-hexythiophene) under Selective UV and White-Light Illumination P. Pattamang, P. Piyakylawat, U. Asawapirom, S. Porntheeraphat, K. Tantisantisom J. Nukeaw and S. Pratontep College of Nanotechnology, King Mongkut's Institute of Technology Ladkrabang, National Nanotechnology Center, National Science and Technology Development Agency Thailand Science Park, National Electronics and Computer Technology Center, National Science and Technology Development Agency Thailand Science Park and ThEP Center, CHE-Bangkok, Thailand	Dr Kittipong Tantisantisom
4	Optical and magnetic properties of doped ZnO: Experiment and Simulation S. Jantrasee , P. Moontragoon and S. Pinitsoontorn Materials Science and Nanotechnology Program, Faculty of Science and Department of Physics, Faculty of Science, Khon Kaen University and Nanotec-KKU Center of Excellence on Advanced Nanomaterials for Energy Production and Storage, Thailand .	Mr Sakwiboon Jantrasee
5	Newly designed π -conjugated thiazolo [5,4-d]thiazole based oligomer for efficient small molecule organic solar cells M. Nazim , S. Ameen, H-K. Seo, M. Song, D-R. Park and H-S Shin Energy Materials & Surface Science Laboratory, Solar Energy Research Center, School of Chemical Engineering, Chonbuk National University, Republic of Korea	Mr Mohammed Nazim
6	Fully inorganic tin halides perovskite as light harvesting materials S. Del Gobbo , J. Eid, I. Gereige, S. Masala Solar and Photovoltaic Engineering Research Center (SPERC), King Abdullah University of Science and Tech-nology (KAUST), Thuwal, Saudi Arabia	Dr Silvano Del Gobbo
7	Designing Hierarchical Nanostructures for Enhanced Gas Sensing Properties M. R. Alenezi Public Authority for Applied Education and Training, College of Technological Studies, Kuwait .	Dr Mohammad R. Alenezi
8	The optical and surface properties of Mg _{0.3} Zn _{0.7} O thin films deposited by PLD methods on the PES substrate H. M. Lee , S. H. Kim, J.H. Ock and N. Jang Division of Electrical and Electronics Engineering Korea Maritime and Ocean University, Busan, Korea	Mr Hyun Min Lee
9	Applicability of PEDOT:PSS Films for Highly Conductive Transparent Electrode by New Effective Dopant Mi-im An , Se-jin Kwon, Seung Young Jeong, Gyojic Shin, Kyung-ho Choi, Sangkug Lee Korea Institute of Industrial Technology, Korea	Ms Mi-im An
10	Novel Photopolymer with High Photosensitivity and Superior Alignment Characteristics for 3D Retardation Film Ju Hui Kang , Si Yeol Yang, Seung Yong Jeong, Sangkug Lee, Kyung Ho Choi, Gyojic Shin Korea Institute of Industrial Technology, Korea	Mr. Gyojic Shin
11	Application of Spark Plasma Sintering for Fabrication of Functionally Graded Thermal Barrier Coating on a Superalloy Substrate M. Bahrami , A.H. Pakseresht and A. Simchi Department of Material Science and Engineering, Sharif University of Technology, and Department of Ceramics, Materials and Energy Research Center, Karaj, Iran	Mr Mohsen Bahrami

12	An electrochemical polyamines biosensor for biogenic amines determination in biomedical applications based on zincoxide nanoparticles–polypyrrole modified platinum electrode R. Devi , C. Raman Suri and D.K. Sahoo Institute of Microbial Technology (CSIR), Chandigarh, India .	Dr. Rooma Devi
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Poster session II: 27th August 2014

Poster N°	Abstract's details	Participant
1	Determination of Copper (II) Ions in Wastewater by Colorimetric Detection P. Muensri and S. Danwittayakul National Metal and Materials Technology Center, Pathumthani, Thailand .	Ms Phitchaya Muensri
2	Hansen solubility parameters for an amphiphilic block co-polymer selection for SU-8 modification through self-assembling O. Mednova and K. Almdal Denmark Technical University, Department of Nanotechnology, Copenhagen, Denmark	Mr Olga Mednova
3	Spectral selectivity of unbalanced magnetron sputtered TiN, TiAlN and TiAlSiN coatings: XRD, SEM and optical analyses M. Mahbubur Rahman , Zhong-Tao Jiang, Chun Yang Yin, Khalil Ibrahim, Zhonghan Xie, Zhi-feng Zhou, Amun Amri5, Nick Mondinos. School of Engineering & Information Technology, Murdoch University, Murdoch, Australia , School of Science & Engineering, Teesside University, United Kingdom , School of Mechanical Engineering, University of Adelaide, Australia , Department of Mechanical and Biomedical Engineering, City University of Hong Kong, China , Department of Chemical Engineering, Riau University, Indonesia	M. Mahbubur Rahman
4	Immobilization of Urease Based on Adsorption in Eggshell Membrane for Urea Biosensor Application T. Suwanchaituch, S. Imthong and K. Panpae Department of Chemistry, Faculty of Science, King Mongkut's University of Technology Thonburi, KMUTT, Bangkok, Thailand	Prof Kornvalai Panpae
5	Effect of the combined radiation and oxidation pretreatment on the surface properties of lignocellulosic materials D.P. Melnikov, Ya.A. Masyutin, A.V. Beskorovaynyy, D.S. Kopitsyn, A.A. Novikov and V.A. Vinokurov1 Gubkin Russian State University of Oil and Gas, Department of Physical and Colloid Chemistry, Moscow, Russia	Mr. Dmitry Kopitsyn
6	Antibiotic-Labelled Nanomaterials for the Rapid Detection of Microorganisms by Surface-Enhanced Raman Spectroscopy A.V. Beskorovaynyy, D.S. Kopitsyn, A.A. Novikov , E.A. Bochkova and E.V. Ivanov Gubkin Russian State University of Oil and Gas, Department of Physical and Colloid Chemistry, Moscow, Russia	Dr Andrei Novikov
7	Optimization of enzyme immobilization onto nano-structure materials for enhancing bio-gas production from anaerobic digestion C. Kang, K.Y. Lee, .S.J. Kim, K.Y. Park and H.S. Kim Environmental Engineering, Konkuk University and Civil and Environmental System Engineering, Konkuk University, Seoul, Korea	Mr Han Kim
8	Needle-less Jet Injection System with Multi-Pore Nozzle for Viscous Drug Delivery Applications Y. C. Jo , H. K. Hong, Y. S. Choi and H. S. Kim Korea Electronics Technology Institute, Medical IT Convergence Research Center, SeongNam-Si and Korea Electronics Technology Institute, Contents Research Center, SeongNam-Si, South Korea	Dr Young-Chang Jo
9	Simple Methods to Fabricate Multilayer Microfluidic Devices T. Jiemsakul , C. Kortchana, S. Manakasettharn National Nanotechnology Center, Integrated Nanosystem Laboratory, Pathum Thani and King Mongkut's Institute of Technology Ladkrabang, College of Nanotechnology, Bangkok, Thailand	Mr Thanakorn Jiemsakul
10	Effect of Annealing Temperature on Microstructure and Optical Properties of ZnO Thin Films with Mg Dopant K. Verma , B. Chaudhary and M. Kumar Nanomaterial and Environmental Sensors Research Laboratory Department of Physics, University of Lucknow, India	Mr Kartikey Verma
11	Investigation of Structural and Optical Evolution of Excitonic Grade Cu-Ga-Se Polycrystalline Films Grown by Molecular Beam Deposition Technique P. Chityuttakan , S. Chatraphorn and C. Chityuttakan	Dr. Panita Chityuttakan

	Thin Film Technology Laboratory, Department of Physics, Faculty of Science, King Mongkut's University of Technology Thonburi, Bangkok, Thin Film Technology Research Laboratory, ThEP Center, Bangkok, department of Physics, Faculty of Science, Chulalongkorn University, Bangkok, Thailand and Shanghai Photovoltaic Novel Material Ltd., Shanghai, China .	
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