

# NanoAfrica2009 Preliminary Programme

## 1 - 4 February 2009

### CSIR International Convention Centre, Petoria, South Africa

**SUNDAY, 1ST OF FEBRUARY 2009**

Time	Conference Venue: CSIR International Conference Centre(CSIR ICC), Pretoria, South Africa
14:30	<i>Buses will leave from Town Lodge Menlo and VIP Guest House for the ICC</i>
14:30	<b>Registration Desk Opens</b> Venue: CSIR ICC
15:00-18:00	<b>Nanotechnology Stakeholders Meeting</b>  Venue: Diamond Room MC: Dr Suprakas Sinha Ray Welcome: Prof N Cingo, President SANi Presentation from Department of Science and Technology: Dr D. Adams Presentation from Nnational Research Foundation: Dr R. Maharaj
18:00-20:00	<b>Icebreaker Cocktail Party</b>  Venue: CSIR ICC Foyer Opening: Dr S Sinha Ray/Dr S Prins
20:10	<i>Buses will leave for Town Lodge Menlo and VIP Guest House: 20:10</i>

**Monday, 2nd of February 2009**

08:00	<i>Buses will leave from Town Lodge Menlo and VIP Guest House for the ICC</i>		
08:00-08:30	<b>Registration</b>		
08:30-08:45	Venue: Diamond MC: Dr J. Moloto		
08:45-8:55	Welcome Address: Dr Supraklas Sinha Ray, Chair, NanoAfrica2009 Organising Committee		
09:00-09:10	Introduction of the DST Minister: Dr Sibusiso Sibisi, CSIR President & CEO		
09:20-10:00	Opening: Dr Mosibudi Mangena Minister of Science and Technology, Dept. of Science and Technology		
Plenary Session	Guests: DST, NRF, Vice Chancellors from various Universities, CSIR EXCO and SANi President		
09:20-10:00	<b>Plenary Lecture 1</b>		
Plenary Session	Venue: Diamond Speaker: Prof. Sanjay Mathur, University of Cologne, Germany Title: Chemical Approaches to Functional Nanostructures: Growth, Applications and Devices Chairperson: Prof. D. Knoesen, Western Cape University, South Africa		
Time	Venue: Emerald	Venue: Sapphire	Venue: Diamond
Parellel Session	Chairperson: Prof. W. Focke	Chairperson: Dr L. Cele	Chairperson: Dr M. Moodley
10:15-10:45	K1: Advances in Conducting Polymer-Clay Nanocomposites Speaker: Dr P. Aranda, Spain	K2: Temperature-dependent Growth of W-doped ZnO Nanorods Speaker: Prof. A. Beye, Senegal	NC1: Aberration Corrected Transmission Electron Microscopy and the Characterization of Nanomaterials Speaker: Dr L. Stoter, JEOL, UK
	K3: To be confirmed	K4: Nano Oxides/Nitrides and Their	NC2: Where are we on Aberration

10:50 -11:20		Nanostructured Coatings <b>Speaker:</b> Prof. A. K. Tyagi, India	Correction and Where do go Next? <b>Speaker:</b> Mr B. Freitag, FEI Company, The Netherland
11:25-11:50	<b>IV1:</b> Morphology and Properties of Composites of Polypropylene and a Nanostructured Wollastonite Filler <b>Speaker:</b> Prof. Adriaan Luyt, South Africa	<b>IV2:</b> High Temperature Fischer-Tropsch Behaviour of Carbon Nanotube Supported Iron Catalysts <b>Speaker:</b> Dr F. Prinsloo, South Africa	<b>NC3:</b> Ultra-High Resolution Characterization of Nano-Structured Magnetic Materials and Nanoparticles <b>Speaker:</b> Dr P. Zhdan, University of Surry, UK
11:55-12:15	<b>O1:</b> Nanocomposites of Polymer-CNTs and Polymer-Nanoclay as Advanced Materials for Structural Applications <b>Speaker:</b> Dr A. Stan, India	<b>O2:</b> One Dimensional Silica/Silver Nanoshells Fabricated By Electroless Deposition Technique <b>Speaker:</b> Prof E. Iyuke, South Africa	<b>NC4:</b> Materials Characterization by Small-Angle X-ray Scattering <b>Speaker:</b> Dr H. Schnablegger, Anton-Paar, Austria
12:20-12:40	<b>O3:</b> Enhancing Failure Behaviour of Fiber Reinforced Epoxy Composites with Multi-walled Carbon Nanotubes <b>Speaker:</b> Ms S. Mehdi, Iran	<b>O4:</b> The Manufacturing of Nano-Particles with a Plasma Process <b>Speaker:</b> Dr J. T. Nel, South Africa	<b>NC5:</b> Potential Applications of South African Small-Angle Neutron Scattering Facility at NESCA for Nanomaterials Characterization <b>Speaker:</b> Mr T. Tjebane, South Africa
12:45-13:05	<b>O5:</b> Synthesis of Polypyrrole-PEG Composites Using Electropolymerization Techniques <b>Speaker:</b> Dr A. Abbaspourrad, Iran.	<b>O6:</b> Sol-Gel Synthesis, Characterization and Luminescence Properties of ZnO-PbS Nanocomposites <b>Speaker:</b> Dr O. M. Ntwaeaborwa, South Africa	<b>NC6:</b> Nano@NECSA <b>Speaker:</b> Dr W. Augustyn, South Africa
13:05-13:50	<b>Lunch Break</b>		
	<b>Plenary Lecture 2</b>		
03:55-14:35 Plenary Session	<b>Venue:</b> Diamond <b>Speaker:</b> Prof. Eduardo Ruiz-Hitzky, Instituto de Ciencia de Materiales de Madrid, Spain <b>Title:</b> Nanostructured Hybrid Materials Based on Clays For Environmental and Biomedical Applications <b>Chairperson:</b> Prof. V. Rao, IIT Mumbai, India		
<b>Time</b>	<b>Venue: Emerald</b>	<b>Venue: Sapphire</b>	<b>Venue: Diamond</b>
<b>Parallel Session</b>	<b>Chairperson: Dr W. Augustyn</b>	<b>Chairperson: Dr R. Nemutudi</b>	<b>Chairperson: Dr C. Arendse</b>
14:40-15:10	<b>K5:</b> Organic-Inorganic Hybrid Photovoltaic Cells <b>Speaker:</b> Prof. V. Kumar, India	<b>K6:</b> Correlating Synthesis and Spatially-Resolved Electrical Properties of Semiconductor Nanowires <b>Speaker:</b> Prof. M. Cotta, UNICAMP, Brasil	<b>NC7:</b> From Wisram on Nanosurf <b>Speaker:</b> to be confirmed
15:15-15:45	<b>K7:</b> Polymer Architecture, Plastic Electronics and Ampero-Impedimetric Profiling of Conducting Organic Star-Polymers <b>Speaker:</b> Prof .El. Iwuoha, South Africa	<b>K8:</b> Microstructure Tomography-An Essential Tool to Understand 3D Microstructures in all Length Scales <b>Speaker:</b> Prof. F. Muecklich, Germany	<b>NC8:</b> Analysis of Carbon Nanotubes Using a High Sensitivity UV-VIS-NIR Spectrophotometer <b>Speaker:</b> Mr S. Pera, Italy
15:50-16:10	<b>O7:</b> Morphology Observation and Alignment of PVA/FeCl3 Blend Nanofibres <b>Speaker:</b> Mr M. Chowdhury, UK.	<b>O8:</b> Real Time Imaging of Electrophoresis of Nanoparticles– Surface Information from Migration Properties <b>Speaker:</b> Dr H. K Patra, India.	<b>NC9:</b> From Zeiss to be confirmed <b>Speaker:</b> to be confirmed
16:15-16:35	<b>O9:</b> Polyoxymethylene (POM)/Montmorillonite (MMT) Nanocomposites: The Effect of POM Molecular Weight On The Structure Formation And Mechanical Performance <b>Speaker:</b> Prof. J. Pielichowski, Poland	<b>O10:</b> Ge Quantum Dots on Silicon for Terahertz Detection <b>Speaker:</b> Mr S. Wissmar, Sweden	<b>NC10:</b> Non-Destructive SPM Characterization and Metrology of Nanomaterials and of Large or Immobile Samples <b>Speaker:</b> Dr P. Zhdan, UK
16:40-17:00	<b>O11:</b> Microstructural and Electrical Conductivity Properties of Cubic Zirconia with Various Amount of Titania <b>Speaker:</b> Prof. S. Tekeli, Turkey	<b>O12:</b> Simulation of Nano-Particles Manufacturing with a Plasma Process in Flow Reactor <b>Speaker:</b> Dr A. Kolesnikov, South Africa	<b>NC11:</b> Ultraprecision Machining of Iconel 718 With Nanometric Finish <b>Speaker:</b> Mr A. Oluwajobi, UK
17:00-17:20	<b>O13:</b> <b>Speaker:</b>	<b>O14:</b> Microwave Radiation and Induced Solid-State Interactions Observed for Nanoiron Particles on Silica And Implications for Fischer-Tropsch Catalysis <b>Speaker:</b> Prof. M. Scurrall, South Africa	<b>NC12:</b> Latest Improvements in Destructive (TGA & TG/IR) and NON-Destructive Analytical Techniques to Characterize Nanomaterials <b>Speaker:</b> Mr S. Pera, Italy

17:20-17:50	Poster Session Refreshments
17:55	<i>Buses will leave from the ICC, travel to Building 19, the National Centre for Nano-structured Materials</i>
18:00-20:00	Braai Party at NCNSM with Centre Visit
20:35	<i>Buses will leave from National Centre for Nano-Structured Materials, for Town Lodge Menlo and VIP Guest House</i>

## Tuesday, 3rd of February 2009

Time	Venue: Diamond	
08:00	<i>Buses will leave from Town Lodge Menlo and VIP Guest House for the ICC</i>	
08:00-08:30	Registration Plenary Lecture 3	
08:30-09:10 Plenary Session	Venue: Diamond <b>Speaker:</b> Prof. Neil Coville, Wits University, South Africa <b>Title:</b> Novel Carbon Support for Catalyst <b>Chairperson:</b> Prof. D. Britton, University of Cape Town, South Africa	
Time	Venue: Diamond	Venue: Emerald
Parallel Session	Chairperson: Dr T. Hillie	Chairperson: Dr G. Malgas
09:15-09:45	<b>K9:</b> A Greener Approach Towards Semiconductor Nanomaterials <b>Speaker:</b> Prof. N. Revaprasadu, South Africa	<b>K10:</b> Nano-Electro-Mechanical Systems for Cardiac Diagnostics <b>Speaker:</b> Prof. V. Rao, India
09:50 -10:05	<b>S1:</b> Synthesis of Anisotropic Gold Nanoparticles in a Water-Soluble Polymer <b>Speaker:</b> Mr M. Chili, South Africa	<b>S2:</b> Nanopowders Production in the Plasma-chemical Reactor: Modeling and Simulation <b>Speaker:</b> Mr J. Kekana, South Africa
10:10 -10:25	<b>S3:</b> Amperometric CYP3A4-Biosensors for PI Antiretroviral-Drugs Based On Composite Films of Pyrrole <b>Speaker:</b> Ms. N. Hendricks, South Africa	<b>S4:</b> Control of Nanoparticle Growth in High Temperature Flow Reactor: Application of Reduced Population <b>Speaker:</b> Ms S. Oloranti, South Africa
10:30-10:45	<b>S5:</b> Synthesis of Substituted Thioureas Complexes of Cd and Mn as Precursors for PAA-Capped Metal Sulphide <b>Speaker:</b> Mr M. Mlambo, South Africa	<b>S6:</b> To be confirmed <b>Speaker:</b>
10:50-11:05	<b>S7:</b> Study of Effects of Tetrodotoxin on Mammalian Brain Tissue Using Iron Nanoparticles-TTX Conjugate <b>Speaker:</b> Mr G. Lalwani, Chennai	<b>S8:</b> Alternative Control of Nanparticle Dispersity in High-Temperature Flow Reactor <b>Speaker:</b> Ms L. Moropeng, South Africa
11:00-11:15	Refreshment Break	
Time	Venue: Diamond	Venue: Emerald
Parallel Session	Chairperson: Prof. A. K. Tyagi	Chairperson: Prof. M. Harting
11:15 - 11:45	<b>K11:</b> Semiconductor Quantum Structures Span the Rainbow <b>Speaker:</b> Prof. R. Botha, South Africa	<b>K12:</b> Tailored Nano-Systems For Energy and Photonics Applications: Ongoing Projects within the Nanosciences African Network <b>Speaker:</b> Prof M. Maaza, South Africa
11:50 - 12:05	<b>S9:</b> Nanocomposite MFI-alumina Membranes: Influence of Operating Parameters on Xylene Vapour Mixture Separation <b>Speaker:</b> Mr M. Daramola, South Africa	<b>S10:</b> Self-Assembled Nanostructures of Iron-Phthalocyanines and Mixed Monolayers of Single-Walled Carbon Nanotubes <b>Speaker:</b> Ms D. Nkosi, South Africa
12:05-12:25	<b>S11:</b> Synthesis, Characterization and the Electrocatalytic Properties of Prussian Blue/Single-Walled Carbon	<b>S12:</b> Radical Elastic Modulus of Single-Walled Carbon Nanotubes

	Nanotubes Composites <b>Speaker:</b> Mr A. Adekunle, South Africa	<b>Speaker:</b> Ms A. Shaban, Iran
12:30-12:45	<b>S13:</b> A Study of the Effect of reagent Residues on the Thermal Stability and Structure of CVD Synthesized Multi-Walled Carbon nanotubes <b>Speaker:</b> Mr S. Mhlanga, South Africa	<b>S14:</b> Anomalous Electronic Properties of VO <sub>2</sub> Nano-ribbons at the Semiconductor-to-Metal Transition Temperature <b>Speaker:</b> B. Mwakikunga et al.
12:50-13:05	<b>S15:</b> Investigating Nickel Phthalocyanine-Carbon Nanotube Hybrids for Exploring Electrochemical Supercapacitor <b>Speaker:</b> Mr A. Chidembo, South Africa	<b>S16:</b> To be confirmed <b>Speaker:</b>
13:05-13:50	<b>Lunch Break</b>	
13:50-14:30 Plenary Session	<b>Plenary Lecture 4</b>	
	<b>Venue:</b> Diamond <b>Speaker:</b> Prof. Pulickel M. Ajayan, Rice University, USA <b>Title:</b> Engineering at the Nanoscale: Challenges and Future <b>Chairperson:</b> Prof. N. Cingo, Tswane University of Technology, South Africa	
<b>Time</b>	<b>Venue: Diamond</b>	<b>Venue: Emerald</b>
<b>Parallel Session</b>	<b>Chairperson: Dr M. Mathe</b>	<b>Chairperson: Prof V.V. Srinivasu</b>
14:35-15:05	<b>K13:</b> Novel Nano Electrode Materials for Lithium Ion Batteries <b>Speaker:</b> Prof. Y. P. Wu, China.	<b>K14:</b> Characteristics of Platinum Group Nano-alloys On Carbon Nanostructured Materials <b>Speaker:</b> Dr L. Petrik, South Africa
15:10-15:35	<b>IV3:</b> Molecular and Nanomaterial Based Hybrid for the Development of Supercapacitors and Fuel Cell Device <b>Speaker:</b> Prof. K. Ozoemena, South Africa	<b>IV4:</b> Carbon Nano-Structures for High Speed Quantum Information Devices <b>Speaker:</b> Prof. S. Bhattacharyya, South Africa
15:40-16:55	<b>S17:</b> To be confirmed <b>Speaker:</b>	<b>S18:</b> AFM Plough Variable-Thickness Nanobridge: Josephson Effect and Critical Current Density <b>Speaker:</b> Mr A. Elkaseh, South Africa
16:00-16:15	<b>S19:</b> Tremella-Like Molybdenum Dioxide Consisting of Nanosheets as an Anode Materials for lithium Ion Battery <b>Speaker:</b> Ms L. C. Yang, China	<b>S20:</b> Synthesis and Characterization of Novel Poly(propylene imine)-Polypyrrole Conducting Star Copolymers <b>Speaker:</b> Mr A. A. Baleb, South Africa
16:15-16:30	<b>S21:</b> Comparative Oxygen Reduction at Metallophthalocyanines and their C60- Conjugates <b>Speaker:</b> Mr S. Mamuru, South Africa	<b>S22:</b> t-Butyl End-functionalization Salicylaldimine Propylenimine Tetraamine Cobalt-Dendrimer-Modified Gold Nanoparticles <b>Speaker:</b> Ms J. Martinovic, South Africa
16:30-16:45	<b>S23:</b> Functionalized Carbon Nanotubes/Nan MnO <sub>2</sub> Hybrids as Novel Materials for use as Electrochemical Supercapacitor <b>Speaker:</b> Mr J. Lekitima, South Africa	<b>S24:</b> Effect of Nanomeic Micelles on Oxidation Kinetic Study of Hydrochlorothiazide Alone and with Amino Acid <b>Speaker:</b> Mr N. Singh, India
16:50-17:05	<b>S25:</b> Distance Based Topological Indics of Dendrimer Nanostars <b>Speaker:</b> Mr H. R. Maimani, Iran	<b>S26:</b> Organic Intercalation of Koppies Bentonite from South Africa and Boane Bentonite from Mozambique <b>Speaker:</b> Mr P. H. Masinga jr., South Africa
17:05-17:20	<b>Refreshment Break</b>	
17:20	<i>Buses will leave for Town Lodge Menlo and VIP Guest House for the ICC</i>	
18:00	<i>Busses will leave from ICC and Town Lodge Menlo and VIP Guesy House for Zoo Lake</i>	
	<b>Conference Banquet, Moyo, Zoo Lake</b>	
19:30-23:00	<b>Master of Ceremonies:</b> Mr Manfred Scriba <b>Short Presentation from Organising Committee:</b> <b>Invited Guests:</b> 5 <b>Presentation Ceremony:</b> Best Oral and Poster Presentations (total 6)	
22:30	<i>Busses will leave Zoo Lake and return to the ICC, Town Lodge Menlo and VIP Guest House</i>	

**Wednesday, 4th of February 2009**

Time	Venue 1	
08:30	<i>Buses will leave from Town Lodge Menlo and VIP Guest House for the ICC</i>	
09:50	<i>Buses will leave from Town Lodge Menlo and VIP Guest House for the ICC</i>	
08:00-08:30	Refreshments on Arrival	
08:30-10:00	Venue: Diamond Room <b>SANI: Annual General Meeting</b>	
10:05-10:45	Plenary Session Venue: Diamond <b>Speaker:</b> Prof. Paul O'Brien, Manchester University, UK <b>Title:</b> Using Chemistry to Prepare New Better and Interesting Functional Materials <b>Chairperson:</b> Dr. J. Moloto, Wits University, South Africa	
10:45-11:00	Refreshment Break	
Time	Venue: Diamond	Venue: Emerald
Parellel Session	Chairperson: Prof A. Beye	Chairperson: Dr L. Petrik
11:00-11:30	<b>K15:</b> Promising Success in Drug Delivery Using Nanotechnology <b>Speaker:</b> Dr H. Swai, South Africa	<b>K16:</b> Challenges to Implementing Nanotechnology Solutions to Water Issues in Africa <b>Speaker:</b> Dr M. Hlophe, South Africa
11:35 -12:05	<b>Q21:</b> To be confirmed <b>Speaker:</b>	<b>O16:</b> Challenges in Nanotechnology: Understanding and Controlling Nanomaterials for Sustainable Energy Growth <b>Speaker:</b> Dr D. Stokes, The Netherlands
12:10 -12:40	<b>O17:</b> To be confirmed <b>Speaker:</b>	<b>O18:</b> A Perspective on Possibilities in Concrete Nanotechnology for developing Countries <b>Speaker:</b> Dr S. O. Ekolu, South Africa
12:45-13:05	<b>O19:</b> Biosensing Platform Based on LBL Networks Incorporating Enzyme and Nanomaterials <b>Speaker:</b> Mr J. Pillay, South Africa	<b>O20:</b> Solving Sub-Saharan Africa's Energy Problems Using Nano-Solar Cells <b>Speaker:</b> Mr A. Oluwajobi, UK
13:10-14:00	Lunch Break	
14:00-14:40	Plenary Lecture 6 Venue: Diamond <b>Speaker:</b> Prof. Peter Hatto, IonBond Ltd, UK <b>Title:</b> Standardization for Nanotechnologies-Supporting Innovation, Safety and Good Governance <b>Chairperson:</b> Dr S. Prins, INMSA, South Afric	
Time	Venue: Diamond	Venue: Emerald
Parellel Session	Chairperson: Dr L. Sikhwivhilu	Chairperson: Dr. C. Greyling
14:45-15:15	<b>K17:</b> The Golden Future of Gold Nanotechnology <b>Speaker:</b> Dr R. T. Tshikhudo, South Africa	<b>K18:</b> Excitements and Gaps in Understanding in Nanostructured Materials Research by High Energy Ball Milling <b>Speaker:</b> Prof. B. S. Murty, India
15:20- 15:40	<b>O25:</b> Electroless Deposition of Platinum Onto Carbon Nanotubes Paper Using Scarificial Metal Substrates <b>Speaker:</b> Dr P. Ndungu, South Africa	<b>O26:</b> Characterization of Surface-Stabilized Solid Lipid Nanoparticles Composed of Beeswax and Phospholipid <b>Speaker:</b> Dr P. Akapa, Spain
15:45-16:05	<b>O27:</b> Zinc Oxide Epitaxial Thinfilm Deposited Over Carbon On Various Substrate By PLD Technique <b>Speaker:</b> Dr M. Kandan, India	<b>O28:</b> Intercalation of Vermiculate in Aqueous Media <b>Speaker:</b> Mr H. Muiambo, South Africa
16:10-16:30	<b>O29:</b> Calculation of Some Topological Index of Fullerenes	<b>O30:</b> Stable TiO2 Dispersions for Nanocoatings Preparation

	<b>Speaker:</b> Prof A. Reza, Iran	<b>Speaker:</b> Ms N. Veronovski, Slovenia
<b>16:35-16:55</b>	<b>O31:</b> Effect of Pressure and Flow Rate of Argon Gas on the Optical Emission Spectroscopy of Laser Produced Single-Walled Carbon Nanotubes <b>Speaker:</b> Dr M. Moodley, South Africa	<b>O32:</b> The Manufacturing of Nano-titanium Dioxide on Pilot Plant Scale with a Plasma Process <b>Speaker:</b> Dr K. Swanepoel, South Africa
<b>17:00-17:20</b>	<b>O33:</b> Synthesis, Characterization and Functionalization of ordered Mesoporous Silica <b>Speaker:</b> Mr Z. Godongwana, South Africa	<b>O34:</b> Quantum Phase Bridges at Micron, Submicron and Nano Scale: Laser Etching and AFM Ploughing <b>Speaker:</b> Prof V.V. Srinivasu, South Africa
<b>17:20-17:30</b>	<b>Refreshment Break</b>	
<b>17:30-18:00</b>	<b>Venue:</b> Diamond Room <b>Chairperson:</b> To be confirmed <b>Closing Ceremony/Vote of Thanks:</b> NanoAfrica 2009 Organising Committee and President, SANi	
<b>18:05</b>	<i>Buses will leave for Town Lodge Menlo, VIP Guest House and OR Tambo Airport</i>	

## Poster Presentations

<b>P1:</b> Size and Shape Dependence of Nickel Selenide Nanoparticles <b>Authors:</b> Ms N. Moloto et al.	<b>P2:</b> Microwave assisted hydrothermal synthesis of Al doped ZnO <b>Authors:</b> Dr L. Sikhvivilu et al.
<b>P3:</b> Highly Conductive Core-Shell Nanocomposite of Poly(N-vinylcarbazole)-Polypyrrole with Multiwalled Carbon Nanotubes <b>Authors:</b> Dr A. Maity et al.	<b>P4:</b> The properties and Applications of New Composite Materials Based on Acrylic Hydrogels <b>Authors:</b> Prof. J. Polaczek et al.
<b>P5:</b> A Critical Assessment of the Methods for Intercalating Anionic Surfactants in Layered Double Hydroxide <b>Author:</b> Ms L. Moyo et al.	<b>P6:</b> Carbon Nanotubes Based Nafion Nanocomposite Membranes for Fuel Cells <b>Authors:</b> Ms N. Cele et al.
<b>P7:</b> Optical Properties of Sucrose-Capped Cadmium and Zinc Oxide Nanoparticles <b>Authors:</b> Ms N. Faleni et al.	<b>P8:</b> Effect of promoters (Cu, K, Cu/K, SiO <sub>2</sub> ) on the synthesis of Iron Catalysts Supported on Carbon Nanotubes <b>Authors:</b> Ms T. Kente et al.
<b>P9:</b> Synthesis and Thiophene Functionalization of Carbon Nanotubes for use in Photovoltaic Solar Cells <b>Authors:</b> Ms M. Maubane et al.	<b>P10:</b> Sorting of Micron and Sub-micron Particles using Microfluidic Devices <b>Author:</b> Ms. F. Khumalo
<b>P11:</b> Carbon Nanostructures Synthesis: Is it all a Game? <b>Author:</b> Mr. A. Shaikjee	<b>P12:</b> Synthesis of silicon carbide Materials by Floating Catalyst Chemical Vapour Deposition <b>Author:</b> Ms. M. Kao
<b>P13:</b> Non-catalytic Conversion of Methane for Hydrogen and Carbon Production <b>Author:</b> Mr. K. Salipira	<b>P14:</b> Technology for the Design of Nanostructured Composite Coatings <b>Author:</b> Prof. A. Urbahs et al.
<b>P15:</b> Special Intermetal-Ceramic Coatings for Protection and Restoration of Details for Gas-Turbine Engines <b>Author:</b> Prof. A. Urbahs et al	<b>P16:</b> Control of Nanoparticle Size Distribution in High-Temperature Gas Phase Reactor <b>Author:</b> Dr A Kolesnikov
<b>P17:</b> Silica on Carbon Nanocomposites with Variable Morphologies Synthesized by a Simple Carbonization Process <b>Author:</b> Ms S. Dube et al.	<b>P18:</b> Insights into electro-oxidation Properties of Fuel Cell Related Solvents at CNT-Metal Nanoparticle and N4-Macrocyclic Platforms <b>Authors:</b> Ms. N. Maxakato et al.
<b>P19:</b> One-step Synthesis and Characterization of CoS Nanoparticles Decorated Multi-Walled Carbon Nanotubes <b>Authors:</b> Dr S. Pillai et al.	<b>P20:</b> Morphology and Thermal Properties of Poly (butylene succinate-co-adipate) / Polystyrene Blend Nanocomposites <b>Authors:</b> Ms I. V. Mashilwane et al.
<b>P21:</b> The Structure-Property Relationship in Organoclay Compatibilized Polystyrene/ Poly [(butylene succinate)-co-adipate] Blends <b>Authors:</b> Ms C. Maepa et al.	<b>P22:</b> Optical Properties and Energy Transfer of the Sol-Gel Derived Nano-Phosphors <b>Authors:</b> Ms G. Mhlongo et al.
<b>P23:</b> Synthesis of Nitrogen-doped Carbon Nanotubes Using Ferrocene and N-Heteroatom Derivatives in a Confined Space	<b>P24:</b> Green Lifestyle in Homes with Energy Conservation by Nanotechnology

**Author:** Dr V. Nyamori

**P25:** Unique Crystallization Behaviour of Poly(ethylene succinate) Nanocomposite

**Author:** Dr S. Sinha Ray et al., South Africa.

**P27:** Some Theoretical Study on the Second-order Nonlinear Optical Properties of a Series Imino Compounds with Various Donor-Acceptor Constituents

**Author:** Dr I. Sheikhshoale

**P29:** Thermal Stability of Clay Containing Polymer Blend Nanocomposites Studied by Conventional and Modulated TGA

**Author:** Dr S. Sinha Ray et al., South Africa.

**P31:** Numerical Study of Convective Heat Transfer of Nanofluids in a Circular Tube: Two Phase versus Single-Phase Model

**Author:** Dr M. Haghshenas Fard

**P33:** Screening of methanol tolerant oxygen reduction reaction catalysts for Direct Methanol Fuel Cell Applications

**Author:** Ms. A. N. Valisi

**P35:** The simultaneous in Vitro Analysis of Poly(lactic co-glycolic acid) and poly (glucuronide)-Rich Alginate Nanoparticles: A Formulation Approach

**Author:** Mr V. Ndesendo

**P37:** Sustained Release and Permeation of Timolol from Surface Modified Solid Lipid Nanoparticles through Bio-Engineered Human Cornea

**Author:** Dr A. Attama

**P39:** Preparation, Characterization and Viscoelastic Properties of Linear Low-Density Polyethylene/POSS Nanocomposites

**Author:** Mr. M. J. Hato et al.

**P41:** Effect of Nano-clay on the Structure and Morphology of Poly(propylene)/Poly(butylene succinate) Immiscible Polymer Blends

**Author:** Mr. T. Gcwabaza et al.

**P43:** Nanocomposites of Acrylic Polymer and Montmorillonite for Agrochemical Applications

**Author:** Prof J. Polaczek, Poland.

**P45:** Biodegradable Microspheres as a Single Dose Delivery System for Ehrlichia Ruminantium Vaccines

**Author:** Mr N. Tshikhudo, South Africa.

**P47:** Synthesis and Characterization of Au-CdSe Hybrid Nanoparticles Capped with Cysteine

**Author:** Dr VSR Rajasekhar Pullabhotla et al

**P49:** Synthesis of Graphitic Single-Helix Carbon Microcoils by Simple Hot-ware CVD

**Author:** Mr C. Oliphant, South Africa

**P51:** Synthesis and Characterization of HAD, Glucuronic Acid and Sugar-Capped Metal Sulphide Nanoparticles

**Author:** Mr P. Shumbula, South Africa.

**Author:** Ms. I. Khosravi

**P26:** Optimisation of Hydrothermal Synthesis of Zeolite-P From Coal Fly Ash

**Author:** Mr. N. Musyoka

**P28:** A New Synthetic Route to Organically Capped CdTe Nanoparticles

**Author:** Mr. N. Mntungwa

**P30:** Effects of RF Power and Substrate Temperature on the Semiconductor-metal Phase Transition Characteristics of Radio Frequency Sputtered VO<sub>2</sub> Thin Films

**Author:** Dr J. B. Kana Kana

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**Author:** Mr. X. Ralam

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**Author:** Mr. O. U. Gcilitshana

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**Author:** Dr C. Arendse

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**Authors:** Ms. L. Matlhokoa et al.

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**Author:** Mr. J. Ramontja et al.

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**Author:** Ms. M. E. Makhatha

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**Author:** Ms N. Mongwaketsi, South Africa

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**Author:** Dr Y. Al Angari

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**Author:** Prof. H Yaghoubi

**P50:** Anomalous Electronic Properties of VO<sub>2</sub> Nano-ribbons at the Semiconductor-to-Metal Transition Temperature of 70 degrees Celsius

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