

NYRS - Gauteng

Friday 18 September 2009

08:30 – 15:00

Venue: **PTA-KNOWLEDGE COMMONS-ULWAZI AUDITORIUM-48**

08:30 – 08:45 **Coffee/Tea**

Session 1: **Dr Sabelo Mhlanga (chairperson)**

08:45 – 08:50 **Welcome**
Ms. Simphiwe Mcineka

08:50 - 09:00 **Overview of nanoscience and NYRS**
Centre Manager: NCNSM (CSIR)
Prof Suprakas Sinha Ray

09:00 – 09:30 **Nanoscience and Nanotechnology in RSA**
Deputy Director: Emerging Research Areas
Department of Science and Technology
Mrs.Nontombi Marule

09:30 – 09:50 **Properties of Nafion nanocomposite membranes based on multiwalled carbon nanotubes**
Nonhlanhla Cele (NCNSM, CSIR)

09:50 – 10:10 **Shaping the Nano-World of Carbon**
Ahmed Shaikjee (Wits University)

10:10 – 10:30 **Synthesis of CdS and CdSe nanoparticles and their incorporation into PMMA nanofibers**
Thandeka Mthethwa (UJ)

10:30 – 10:50 **Coffee/Tea break**

Session 2: Dr Sreejarani Pillai (chairperson)

- 10:50 – 11:10** **Structural and photo-physical properties of spin coated P3HT thin films**
David Motaung (NCNSM, CSIR)
- 11:10 – 11:30** **Structural and Optical Properties of CdSe nanoparticles and CdSe/ZnO coreshell nanoparticles prepared by aqueous routes**
Ben Rakgalakane (UJ)
- 11:30 – 11:50** **Synthesis and Study of Nitrogen doped Carbon Nanotubes**
Edward Nxumalo (Wits University)
- 11:50 – 12:10** **Adsorption of metal atom on carbon Nanotubes doped with Boron, Ab Initio study**
Gilbert Mashapa (NCNSM, CSIR)
- 12:10 – 12:30** **Synthetic Boehmite Alumina Filled Polyethylene Nanocomposites: Structure and Properties**
Vincent Khumalo (TUT)
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12:30 – 13:20 **Luncheon**

Session 3: Dr. Justice Moloto (chairperson)

- 13:20 – 13:40** **Nickel (II) tetra-aminophthalocyanine modified MWCNTs as potential nanocomposite materials for the development of supercapacitors**
Alfred Chidembo (UP)
- 13:40 – 14:00** **Stabilization of Gold nanoparticles on Silica and Titania via the Addition of nanoplatinum**
Dean Barrett (Wits University)
- 14:00 – 14:20** **Self-assembly and properties of encapsulated vanadium-oxide quantum dots/fullerenes and carbon modified tungsten oxide nano-platelets by laser solution photolysis**
Bonex Mwakikunga (NLC, CSIR)
- 14:20 – 14:40** **High-Performance Carbon Nanotube-Reinforced Bioplastic**
James Ramontja (NCNSM, CSIR)
- 14:40 – 14:50** **Awards**
Mrs Nosipho Moloto (CSIR)

14:50 – 15:00 **Vote of Thanks and Announcements**
Dr Lucky Sikhwivhilu (CSIR)

15:00 – 15:30 **Tour to NCNSM**