### **SAIP 2011**

## Wednesday 13 July 2011

### CMPMS2: MSc For Awards 1 - Acro1 (11:00-12:45)

#### -Conveners: Mmantsae Diale

time	[id] title	presenter
	[24] Synthesis and characterization of Water soluble Covellite Copper Sulphide Quantum Dots	Ms NELWAMONDO, Swikisani
	[130] Conductivity crossover in hot filament CVD grown nano-crystalline diamond films doped with nitrogen.	Mr CHIMOWA, George
	[131] Synthesis and Characterization of Structural and Luminescent properties of long afterglow CaAl <sub>2</sub> 0 <sub>4</sub> : Eu <sup>2+</sup> , Nd <sup>3+</sup> , Dy <sup>3+</sup> nano-scaled phosphors by solution – combustion technique.	Mr WAKO, Ali
12:00	[161] Magnetic properties of carbon nanospheres at low temperatures	Mr DUBAZANE, Makhosonke
12:15	[212] Tungsten Oxide Nanostructures synthesized by Laser Pyrolysis	Mr GOVENDER, Malcolm

### <u>CMPMS2: MSc For Awards 2</u> - Acro1 (13:45-15:30)

### -Conveners: Walter Meyer

time	[id] title	presenter
13:45	[234] Carbon-Nickel Oxide Nanocomposite coatings: Preparation and characterization	Mr TILE, Ngcali
14:00	[252] Influence of ruthenium on the oxidation behaviour of Cu-CNT nanocomposite interconnect	Mr SULE, RASIDI
14:15	[275] Low-temperature Electrical conductivity and Magneto-resistance of Reduced Graphene Oxide Layers	Mr MCINTOSH, Ross
14:30	[286] Atomistic Simulation Study on Lithiated Manganese Dioxide Nanostructures	Mr KGATWANE, Kenneth
14:45	[287] Stabilities of low and high pressure structures of CoPO <sub>4</sub> and MnPO <sub>4</sub>	Mr LETHOLE, NDANDULENI LESLEY
15:00	[401] Equivalent parameters for empirical pseudopotential and k•p models	Mr MPSHE, Kagiso

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### **Thursday 14 July 2011**

CMPMS2 - Acro1 (08:00-09:30)

-Conveners: Lutz Ackermann

### CMPMS2 - Acro1 (11:00-12:45)

#### -Conveners: Moise Bertin Tchoula Tchokonte

time	[id] title	presenter
11:00	[210] The radioactive ion beam facility project at iThemba Labs and its potencial uses for materials research	Prof. PINEDA-VARGAS, Carlos
	[225] Non-linear Fowler-Nordheim plots in thin film polymer-fullerene composite devices: Transition from electron-only to hole-only conduction	Dr CHIGUVARE, Zivayi
11:30	[298] The impurity levels of lanthanide ions in silica	Dr KROON, R.E.
	[330] Thermoluminescent properties of BaAl2O4:Eu2+,Gd3+phosphors prepared by combustion method at different initiating temperatures.	Dr MOTHUDI, Bakang Moses
	[363] NON-SPECIALIST: Organic solar cells: An overview focusing on metal oxide buffer layer and post-fabrication annealing	Prof. NTWAEABORWA, Odireleng
	[371] Synthesis and Characterization of Ba1-xMgxAl2O4:Eu nanophosphors Prepared Using Solution – Combustion Method.	Prof. DEJENE, Francis
12:30	[216] Thermal damage study on diamond tools at varying laser heating power and temperature by Raman spectroscopy	Ms MASINA, Bathusile

### CMPMS2 - Acro1 (13:45-14:30)

-Conveners: Max Chirwa

time	[id] title	presenter
13:45	[288] Computational modelling of Zr-Nb alloys by solid solution approach	Ms CHUMA, Moyahabo
	[340] Ab-initio study of the energy of formation and diffusion paths of self-interstitials in silicon	Mr PIENAAR, Jacques
	[390] Tailoring of Mechanical, thermal and electrical properties of polymers composite: A micro fuel cell perspective	Mr CHEN, Hao

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# **Friday 15 July 2011**

### CMPMS2 - Acro1 (08:00-09:30)

-Conveners: Odireleng Ntwaeaborwa

time	[id] title	presenter
08:00	[400] Electrical characterization of two metastable defects introduced in GaN by Eu-ion implantation	Dr MEYER, Walter
08:15	[369] Structural features of the Cu-In-Ga-Se precursors for formation of Cu(In,Ga)Se2 thin films by thermal reaction of InSe/Cu/GaSe alloys to elemental Se vapour.	Prof. DEJENE, Francis
08:30	[184] Light scattering studies of boron carbide films grown by laser ablation: thin-film surface quality and elasticity	Dr MATHE, Bhekumusa
08:45	[345] Magnetic vector charges in the mystery of a circular current's pair of distinct Cartesian elemental magnetic dipoles	Dr CHIRWA, Max
09:00	[415] Parametric Resonance Features in the Coupled Josephson Junctions	Dr SHUKRINOV, Yury

CMPMS2 - Acro1 (11:00-12:45)

-Conveners: Japie Engelbrecht