

SAIP2015

Tuesday 30 June 2015

Applied (10:00-10:40)

-Conveners: Ernest van Dyk

time	[id] title	presenter
10:00	[345] Reconfigurable Wavelength Selective Switching for 10 Gbps Optical Fibre Ring Networks	Mr BOIYO, Duncan
10:20	[351] Performance Comparison between the Traditional Intensity Modulation Direct Detection and Coherent Detection in a High Speed Optical Fibre Communication System	Mr CHABATA, Tichakunda Valentine

Applied: Applied (11:10-12:10)

-Conveners: Hartmut Winkler

time	[id] title	presenter
11:30	[169] Portable QKD Device Using the COW Protocol	Ms PILLAY, Sharmini
11:50	[306] Electronic tracking system for quantum cryptography and radio telecommunication	Dr MARIOLA, Marco

Applied: Applied (14:00-15:40)

-Conveners: Michael Hayes

time	[id] title	presenter
14:00	[313] NON-SPECIALIST LECTURE: Penetrating Radiation: The Power of Tomography as an Analytic Research Tool	Mr DE BEER, Frikkie
14:40	[321] Simulation of radiography beam collimation using ray tracing method	Mr NSHIMIRIMANA, Robert
15:00	[376] Spatial resolution evaluation of digital neutron radiography and tomography facilities	Mr RADEBE, Mabuti Jacob Radebe
15:20	[291] X-ray diffraction and Raman spectroscopy based residual stress measurements for assessment of fatigue in leached polycrystalline diamond tool bits	Mr VHARETA, Maxwell

Wednesday 01 July 2015

Applied: Applied (09:40-10:40)

-Conveners: Ernest van Dyk

time	[id] title	presenter
09:40	[468] Division Meeting	Prof. VAN DYK, Ernest

Applied: Applied (11:10-12:10)

-Conveners: Frikkie De Beer

time	[id] title	presenter
11:10	[92] Rutherford Backscattering Analysis using lithium ions.	Prof. DERRY, Trevor
11:30	[274] Unfolding the fast neutron fluence energy distribution of a NE230 deuterated liquid scintillator detector using the MAXED code	Dr HERBERT, Mark
11:50	[293] In-situ neutron powder diffraction temperature capabilities at SAFARI-1	Dr HAYES, Michael

Applied: Applied (14:00-15:40)

-Conveners: Frederik Vorster

time	[id] title	presenter
14:00	[204] Solar radiometry and forecasting research at UKZN	Dr MATTHEWS, Alan
14:20	[158] Monte Carlo based estimation of the effect of different aerosol classes on solar irradiance in African atmospheric conditions	Ms CYULINYANA, MARIE CHANTAL
14:40	[320] Is solar PV generated electricity cheap in South Africa?	Dr RORO, Kittessa
15:00	[367] Energy yield monitoring of photovoltaic technologies	Mr SCHULTZ, Ross
15:20	[390] Characterization of torrefied sugarcane bagasse for gasification in a downdraft biomass gasifier system.	Mr ANUKAM, Anthony

Thursday 02 July 2015

Applied: Applied (09:40-10:40)

-Conveners: Betty Kibirige

time	[id] title	presenter
09:40	[51] Determining the effect of the solar cell band gap on power yield in southern African irradiance conditions	Mr WEBBER, Graham
10:00	[259] Enhancing light absorption and life-time stability of organic solar cells using pentacene encapsulation.	Mr OTIENO, Francis
10:20	[244] Analysis of homogeneity in thin film photovoltaic modules using large area light beam induced current (LA-LBIC) measurements.	Mr OKULLO, Michael

Applied: Applied (11:10-12:10)

-Conveners: Alan Matthews

time	[id] title	presenter
11:10	[253] Qualitative assessment of Photovoltaic modules using Electroluminescence	Ms CROZIER, Jacqui
11:30	[277] Estimation of energy production decrease due to shading for the Nampower rooftop system	Ms DOBREVA, Petja
11:50	[282] On the effect of optical configuration on the performance of different multijunction cells used in H-CPV systems.	Mr SCHULTZ, Ross

Applied: Applied (14:00-15:40)

-Conveners: Trevor Derry

time	[id] title	presenter
14:00	[384] NON-SPECIALIST LECTURE: Non-destructive Testing of wind power generators	Dr JOHANNES, MANFRED
14:40	[429] Optimizing low Reynolds number wind turbine blades	Mr POOLE, Sean
15:00	[262] Hot Mirrors for Parabolic Trough Solar Receivers	Dr FERRER, phil
15:20	[290] Efficiency Increase in a Cold Sprayed Hot Mirror Parabolic Trough Solar Collector	Mr KALUBA, Victor

Applied: Applied (16:10-17:50)

-Conveners: Kittessa Roro

time	[id] title	presenter
16:10	[32] Gum ghatti-based poly(acrylic acid-aniline) IPN hydrogel: Characterization and release properties	Dr SHARMA, Kashma
16:30	[115] A comparison of solid state reaction, electrical performance and failure mechanism of ruthenium Schottky contacts on 6H-SiC and 4H-SiC after air annealing.	Mr MUNTHALI, Kinnock Vundawaka
16:50	[100] Synthesis of porous carbon nanosheets for use in high rate capability and long cycle life supercapacitors	Dr DANGBEGNON, Kouadio Julien

17:10	[123] Structural and optical properties of silicon nanowires	Prof. ARENDSE, Christopher
17:30	[199] X-ray Reflectivity Study of Si Nanowires Grown by Ag Nanoparticle Etching	Prof. MICELI, Paul F.

Friday 03 July 2015

Applied: Applied (09:40-10:40)

-Conveners: phil ferrer

time	[id] title	presenter
09:40	[171] From single nano-wire nano-electronics through gas FETs to deployable portable industrial sensing devices	Dr MWAKIKUNGA, Bonex
10:00	[432] Open-Source electronic board designed in South-Africa, for Africa	Dr MARIOLA, Marco
10:20	[10] Comparative analysis of the performance of integrated and split type air source heat pump water heaters by diagnostic characterization	Mr TANGWE, Stephen

Applied: Applied (11:10-13:10)

-Conveners: Christopher Arendse

time	[id] title	presenter
11:10	[338] Acceleration parameters for fluid physics with accelerating bodies	Dr GLEDHILL, Irvy (Igle)
11:30	[47] Characteristics and function of the South African national measuring standard for force.	Mr DLAMINI, Siphon
11:50	[104] BLAZE-DEM: A GPU based large scale 3D discrete element particle transport framework	Mr GOVENDER, nicolin
12:10	[222] Resonant absorption of electromagnetic radiation by building materials	Mr MTHOMBENI, Godman
12:30	[190] Time of crossing (TOC) in Pulsed Eddy Current Signals	Dr KIBIRIGE, Betty
12:50	[375] Progress with the Colliding Shock Lens	Mr MAHLASE, Conrad