

# PROGRAMME

## EMERGING RESEARCHERS SYMPOSIUM

THURSDAY 8 OCTOBER 2015

07:30 Conference registration

**08:30 PLENARY SESSION**

**10:30 Tea break**

**11:00 SESSION ON INNOVATIVE SCIENTIFIC ADVANCEMENTS**

11:00 The effect of using different organic linkers on the hydrogen storage ability of Zirconium-based metal-organic framework

**Tshiamo Segakweng, CSIR**

11:15 Improving the brightness of a commercial laser

**Darryl Naidoo, CSIR**

11:30 Degradation behaviours of alginate solutions on the properties of electrospun alginate-PEO nanofibres

**Teboho Clement Mokhena, CSIR**

11:55 Microwave irradiation as an essential step in the synthesis of spinel  $\text{LiMn}_2\text{O}_4$  cathode materials for lithium-ion batteries

**Funeka Nkosi, CSIR**

12:20 Automatic cropping using single-image perspective cues

**Yanga Tekane, CSIR**

12:45 Granular media simulations on the Graphical Processor Unit (GPU)

**Nicolin Govender, CSIR**

**13:00 Lunch**

**14:00 SESSION ON THE IMPACT OF TECHNOLOGY ON SOCIETY**

14:00 State estimation for a commercially-available hexapod robot

**Estelle Lubbe, CSIR**

14:15 Can mass spectrometry be used to diagnose TB drug resistance?

**Brendon Naicker, CSIR**

14:30 Synthetic treatments targeting drug-resistant malaria

**Jenny-Lee Panayides, CSIR**

14:55 Functional classification of the Gauteng provincial road network using the South African road classification and access management manual (TRH26)

**Pryaska Veramoothea, CSIR**

15:20 Bio-based coatings for reducing moisture absorption on natural fibre reinforced composites

**Thabang Mokhothu, CSIR**

15:45 Modelling cumulus convection over the eastern escarpment of southern Africa

**Zane Dedekind, CSIR**

16:00 - 17:00 Poster session