Contribution ID: **30** Type: **Oral Presentation**

NON-SPECIALIST: Status of Aberration-corrected Transmission Electron Microscopy in South Africa

Friday, 12 July 2013 10:30 (40 minutes)

Abstract content
   (Max 300 words)

The development of spherical aberration-corrected electron microscopes in the 1990s has enabled sub-ångström resolution studies of nanomaterials in scanning transmission electron microscopy and transmission electron microscopy modes. Aberration-corrected electron microscopy allows the high-precision mapping of atom positions and the atomic-scale imaging of the chemical composition and nature of bonds between atoms. Since the characterisation of nanostructures down to the atomic scale is essential for the understanding of some of its physical properties, the availability of aberration-corrected electron microscopy is important for the development of nanotechnology. Interesting high resolution electron microscopy results from the Centre for High Resolution Transmission Electron Microscopy in Port Elizabeth, which was launched in October 2011, will be presented and discussed.

Apply to be
 considered for a student
   award (Yes / No)?

No

Level for award
 (Hons, MSc,
   PhD)?

N/A

Main supervisor (name and email)
and his / her institution

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Would you like to <br> submit a short paper <br> for the Conference
 Proceedings (Yes / No)?

No

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