



Contribution ID: 243

Type: Oral Presentation

Re-Positioning the Department of Physics and Astronomy at UWC for Natural and Physical Sciences teachers training and development

Wednesday, 5 July 2023 15:40 (20 minutes)

A review of undergraduate physics education in public higher education institutions undertaken by the South African Institute of Physics (SAIP) in partnership with the Council of Higher Education (CHE) has identified the major challenge of the under-preparedness of university students entering undergraduate physics programmes as a teacher development problem. As a result, student throughput and retention at universities remain a very large concern for higher education in South Africa. The Department of Physics and Astronomy, in response to the SAIP call to Physics Departments in South Africa to get involved with the training and development of teachers to address the under-preparedness of learners in our schools, established the Department Teachers' Training and Development Programme. The programme is an initiative of the Department in collaboration with the UWC Faculty of Education, Metro Education Districts in the Western Cape Education Department (WCED), Cape Peninsula University of Technology and the University's partner in the USA, the University of Missouri-Columbia. The programme aims to increase the critical mass of learners that are needed in the Science, Technology, Engineering and Mathematics (STEM) sector in South Africa by improving the physics content knowledge and pedagogical skills of Natural and Physical Sciences teachers and thereby increasing learners' interest, participation and success in the Natural Sciences and Physical Sciences in our schools. In this presentation, the programme will be described as well as its successes and challenges.

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

N/A

Level for award;(Hons, MSc, PhD, N/A)?

N/A

Primary author: Dr HERBERT, Mark (University of the Western Cape)

Co-authors: Mr AUDU, Bako (UWC); Mr ENGELBRECHT, Ronald

Presenter: Dr HERBERT, Mark (University of the Western Cape)

Session Classification: Physics for Development, Education and Outreach

Track Classification: Track E - Physics for Development, Education and Outreach