

Researching wireless broadband technologies

CHAIR in
Broadband
Wireless
Multimedia
Communications

The Sentech Chair in Broadband Wireless Multimedia Communications (BWMC), hosted in the Department of Electrical, Electronic and Computer Engineering, was formally established in 2005 with the support of Sentech.

Its primary objective is to promote research into wireless broadband technologies and their practical applications in a developing country. It participates in state-of-the-art research activities, and delivers world-class research and educational outputs for the benefit of its sponsor, the University of Pretoria and South Africa in general.

Since its official inauguration in 2006, the Chair has operated under the leadership of Prof Sunil Maharaj, Dean of the Faculty of Engineering, Built Environment and Information Technology. Among other things, it aims to promote research in the field of BWMC, collaborate on Sentech's related products, develop high-quality technical skills and expertise for industry and the research fraternity, and contribute to the global competitiveness of Africa and South Africa.

Research is focused on multiple-input and multiple-output (MIMO) systems with orthogonal frequency division multiplexing (OFDM) technology in wireless communication systems and cognitive radio technology. In 2013, collaborative work conducted by the BWMC research group earned Prof Maharaj a Technology and Human Resources for Industry Programme (THRIP) Award in the Advanced Hi-Tech Research category. The interdisciplinary nature of this research requires a wide range of skills.



→ Ms Leago Takalani, Executive: Technology of Sentech (left) joins Prof Sunil Maharaj, Dean of the Faculty of Engineering, Built Environment and Information Technology, in celebrating the renewal of Sentech's support of the Chair in Broadband Multimedia Wireless Communications.



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The initiative therefore enhances collaboration between different skills bases and creates an environment that will teach people to communicate, adapt and work in a multicultural environment.

In recognition of a decade of research excellence, Sentech has allocated funding for another four-year term for the research group to continue its innovative work in this globally relevant field. ➔