

B.Eng. - Abel Abdul Zandamela

Antenna Design Section

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EXPERIENCE REPORT OF THE 13th European Conference on Antennas and Propagation EuCAP – MR. ABEL ZANDAMELA'S EXPERIENCE

My journey to EuCAP 2019 Krakow-Poland started in January 2018, after successful admission at the Institute of High Frequency Technology (IHF), under the supervision of Dr. Adam Naburdowicz from the Antenna & High Frequency Research Centre, Technological University Dublin, and M. Sc. Korbinian Schraml from IHF.

The work presented at the conference is an extension of Dr. Adam's project which focuses on the design of switchless pattern reconfigurable antennas. The work explored new ways of introducing a simplified beam steering and feeding network on the previous models as well as a miniaturization of the antenna. The development of this project both at TGGS and RWTH Aachen University it's been an amazing and challenging experience.

The Institute of High Frequency Technology is one of the most excellent antenna research schools. Essential contributions from this institute have been widely recognized in the academic community. Outstanding and innovative research is conducted; this is easily seen by the industrial work that the institute develops. Under this exceptional place for research, the project findings were accepted for presentation at the EuCAP 2019; the paper title is: "On the efficiency of Miniaturized 360° Beam-Scanning Antenna".

The first week of April 2019, it is one of the most unforgettable experiences in my academic career. It marked my first research exchange, allowing me to learn, share, and follow the most recent advancements in the fields of antennas and propagation.

As the spring was starting along with EuCAP, a flower also blossomed in my career goals. Attending this conference strengthen my interest in being in the field of antenna research and created an opportunity to see the current research trends, and through them shape my work and develop collaborative research.

The amount of knowledge and experience achieved during the EuCAP week is enormous. Currently, I am already trying novel ideas from the conference, as well as improving my work taken from the input of my presentation; this is to say, that the meeting created a space to boost my interest in developing new models to improve the modern communications systems.

Another essential mark of the EuCAP week was the fact that my three supervisors were also attending the conference, this created an ideal opportunity to discuss topics related to my Master Thesis, and listen to their view on the research fields to shape my career plans (Plate 2). Attending IHF colleagues' presentation to learn new presentation skills, was also one of my lessons during my time in Krakow.

Blinding in a different culture is always an exciting and challenging experience. Nevertheless, the time I spent in Krakow has been one of the most significant career experience in my academic and social journey. Poland is a country rich in culture and history (Plate 3), visiting landmarks such as the Wawel castle, and attending the Philarmonic Concert, made this academic trip a beautiful and unique memory.

My presentation (Plate 1) in Krakow was an enriching self-discovery experience, met with challenges that motivate oneself to always strive in the pursuit of knowledge. This scientific environment is a perfect atmosphere to empower my career development, sharpen my research skills, working attitude, and many life aspects.

I am thus profoundly indebted to the **Institute of High Frequency Technology (IHF)** for making this dream of developing scientific knowledge to the communities possible. I am also grateful to Asst. Prof. Dr. Adam Narbudowicz, Asst. Prof. Dr.-Ing. Suramate Chalermwisutkul, Mr. Korbinian Schraml, Dipl.-Ing. Rasmus Cornelius, and Prof. Dr.-Ing. Dirk Heberling for supporting and giving me the chance to work in this project, for the guidance, supervision and stimulating indepth analysis throughout the project.



Plate 1: EuCAP Presentation, Convened Session 45, "Recent advances on small antennas".

Plate 2: EuCAP coffee break with DIT fellows (Right), and Asst. Prof. Dr. Adam (Center), Asst. Prof. Dr. –Ing. Suramate (Right).





Plate 3: Master Thesis discussions with Asst. Prof. Dr. Adam.



Plate 4: Philharmonic Concert, ICE Krakow Congress Centre.



Plate 5: Wawel Royal Castle, Krakow, Poland.