

02 December 2015

Dear CSIR YREF 2016/2017 evaluation committee

My name is Angus Steele and I am a permanent employee of the CSIR, in the Material Sciences and Manufacturing Unit, based in the Mechatronics research group. I was a CSIR bursar and completed my studies at UCT in 2013, after which I joined the CSIR permanently and am currently a C3 on the career ladder. I am registered at the University of Stellenbosch conducting my masters in Electrical and Electronic Engineering. My masters project is around the development of an unmanned aerial system capable of flight in a confined, close quarter environment.

Unmanned systems have been used greatly in the last couple of years to remove human risk from dangerous situations. These unmanned systems however are limited to certain environments. Creating an aerial system that can navigate inside territories that before were unreachable will inevitably be an extremely useful platform for an array of industries and applications. This grant will allow me the freedom to explore these technologies and develop a robust and reliable platform that can be used internationally.

The proposed project aligns with the strategic focus of the Mechatronics group, as we are charged with investigating mining technologies and innovations. The creation of this platform will place us on the forefront of mining technologies and we can use that advantage to gain access into previously uncharted partnerships.

With the support of the Mechatronics group at CSIR as well as the inputs I will receive from the Electronic Systems Lab at Stellenbosch give me confidence that I will be able to complete the project with promising results that could lead to further projects, developments and partnerships.

I hope that my application stresses the importance of the work and is considered for this grant.

Sincerely,



Mr. Angus William du Toit Steele

Research Engineer  
Mechatronics and Micro-manufacturing, MSM