VICE-CHANCELLOR'S DISTINGUISHED SENIOR RESEARCH MEDAL

Mr Chancellor, I have the honour of presenting to you
Pierre William Froneman,
Professor of Zoology
in the Department of Zoology & Entomology,

for the award of the Vice-Chancellor's Distinguished Senior Research Medal.

Professor Froneman is widely regarded as one of South Africa's most distinguished researchers in aquatic sciences. He stands out not only for the high standard and exceptional productivity of his research programmes, but in that he has earned scientific acclaim in not only one major branch of the aquatic sciences, but two – he is a recognized leader in both the oceanic and estuarine realms. Furthermore, at the relatively young age of 42, his accomplishments stand amongst those that have taken scientific peers most of their working careers to realize.

Reviewers use words like "outstanding" and "meticulous" when expanding on his work, and as having "indisputable academic status" when referring to him. All concur that he is a researcher of international standing.

Professor Froneman embarked on estuarine research about a decade ago as a scientist who had already achieved major recognition for his work around the Prince Edward Islands of the Southern Ocean, which included the co-publication of a book on the land-sea interactions around these islands. This has earned him a reputation as a scientist who covers many aquatic disciplines, from blue water plankton dynamics in polar seas to the microbial loop of muddy Eastern Cape estuaries. The broad range of his work has attracted students and collaborators from around South Africa and the rest of the world. He is credited as being one of very few who can authoritatively cover the various technique-specific size ranges - phytoplankton, microzooplankton, zooplankton, and even birds.

Whereas his Southern Ocean work had been directed at biotic interactions around oceanic fronts and island systems, his estuarine work has been focused primarily on the trophic functioning of Eastern Cape estuaries, with particular emphasis on the plankton community.

For his work on the Southern Ocean, he is credited with being instrumental in developing a coherent picture of the ecosystem structure and functioning in the open waters of the Southern Ocean and in the vicinity of the sub-Antarctic, Prince Edward Islands. In the estuarine realm, his work is credited with having great relevance for the impact of river discharge, and for the scientific justification for environmental flow regulations. His

publications on microzooplankton and krill are key references, and papers on phytoplankton particle size structure in the Southern Ocean are regarded as unique.

An indication of Professor Froneman's standing within the marine research community was his election in 2007 as Chairman of the South African Network for Coastal and Oceanic Research (SANCOR). He has also been appointed as one of the conveners of the South African Marine Science Symposium, which will be held, together with the European based Estuarine and Coastal Sciences Association, at Rhodes University in April 2011. His research interests extend into the climate change field, and in 2007 he was invited to chair the session on biogeochemical processes at a London biodiversity/climate interaction workshop hosted by the Royal Society and Global Environmental Change Committee. He serves on a number of additional scientific and policy committees. A further indication of his high standing within the research community is that he has been invited to act as a referee for 32 scientific journals, and has reviewed a number of local and international research programmes.

In 2001 he was awarded the very prestigious Meiring Naude Medal of the Royal Society of South Africa. Further back in his career, in 1999, Rhodes University awarded him the Vice-Chancellor's distinguished Research Medal for younger candidates, and Professor Froneman will be only the second person to hold both the regular and senior awards.

Not only is his work substantive, but his outputs are considerable. He is counted amongst the most productive researchers at Rhodes University in terms of both publication output and postgraduate supervision, despite carrying a full teaching load in his department. Among his publications are 114 Journal publications to the end of 2009, the majority in international ISI rated journals, 6 book chapters, and a huge number of conference presentations, reports, keynote addresses, public lectures, and popular science articles. Most reviewers have remarked on his exceptionally high citation rate, and his high Hindex in relation to peers in the field, an independent indicator that his work is highly regarded by his peers.

Professor Froneman has been very successful in attracting research funding in the form of grants for projects that he has initiated, lead, and participated in.

Referees have the following to say about him:

"Professor Froneman has always ensured that his work, and that undertaken by his students, was published in top rated marine and estuarine journals, and this has contributed to Grahamstown achieving recognition as a leading centre for marine and estuarine research."

Another:

"From the outset he avoided the known and was attracted by new areas of scientific endeavour".

Yet another:

"Froneman is a polite, somewhat self-effacing, person who is not one who will profile himself unnecessarily at international meetings. His input on scientific issues at such gatherings is always to the point and invariably represents important insights."

I will end with the words of a referee, who states that "Most scientists would struggle to achieve the recognition that Professor Froneman has achieved in one research field, let alone two. Perhaps this strategy is what has given William the breadth of vision to tackle research questions that others have avoided, and in the process he has made an enormous contribution to our understanding of the functioning of ecosystems as different as the coastal waters around the Prince Edward Islands to the invertebrate community of the Kasouga Estuary. Professor Froneman thrives on new research challenges and Rhodes University, his alma mater, has provided him with the opportunity to explore those challenges in the aquatic sciences."

Mr Chancellor, I request you to award the 2009 Vice-Chancellor's Distinguished Senior Research Medal to Professor Pierre William Froneman.