

AINSE Honorary Fellowship – Dr Henk Heijnis



Dr Heijnis has made an outstanding contribution to Quaternary Science while at ANSTO and achieved this primarily by working with a wide range of AINSE collaborators.

Dr Heijnis established a laboratory for radiometric U/Th dating at ANSTO during the 1993 to 1996 period and used the staff and facilities to the full, in a project called High Resolution Palaeoclimate Records (1996-1999). This, in addition to many first author presentations in key sessions at INQUA conferences, put ANSTO at the forefront of international palaeoclimate research. This project led to joint publication of 15 refereed papers with external collaborators since 1996. He also established a low-level gamma-spectrometry laboratory at ANSTO for the measurement of ^{210}Pb and ^{137}Cs in very small environmental samples for the reconstruction of human and climate histories over the last 200 years. This facility was extensively used for the ANSTO-led Human Activity and Climate Variability Project (1999-2004). This facility is unique in the Southern Hemisphere and is internationally recognised. A total of 6 peer-reviewed papers have come out of this research.

In addition, Dr Heijnis used his expertise and the facilities that were created at ANSTO, to build a research profile in understanding the environmental history of harmful algal blooms in the south-east Asian and Australasian region. As part of this initiative, he participated in IAEA research projects as a regional expert in utilising radiometric techniques to further understand the changing extent of algal bloom. This included convening an international IAEA/RCA project on the application of isotopic techniques to study these blooms (1999-2005). Key publications are in the Australasian region with collaborators at the University of Tasmania.

Dr Heijnis has also developed a reputation over the past 12 years as an isotope specialist in coastal Antarctic research. This has included initial research into effects of ozone depletion on diatoms, which was published in *Nature* (1994) and resulted in a sustained commitment to Antarctic research by ANSTO. As part of this research, he took part in the 1995 Australian expedition to the Vestfold Hills, Antarctica, which has resulted in several co-authored peer-reviewed papers.

Dr Heijnis has been a vigorous and outspoken supporter of AINSE over more than 15 years. His personal science coordination skills have been applied as Convenor of AINSE Quaternary Dating Workshops since 1995, co-supervisor of many AINSE postgraduate research scholars, to provide strong support for the annual AINSE Winter School, and ensured a continuing recruitment of new researchers into AINSE.