

THE AUSTRALIAN NATIONAL UNIVERSITY

Curriculum vitae: Michael L. Roderick

Position: Fellow

College of Science

Joint Appointment: Research School of Earth Sciences & Research School of Biological Sciences

Date of Birth: 20 February 1962

Academic Qualifications:

1984 BAppSc (Surveying, with distinction) QUT (Brisbane)
 1990 PGDipGIS Qld (Brisbane)
 1994 PhD Curtin (Perth)

PhD thesis title: Satellite Derived Vegetation Indices for Monitoring Seasonal Vegetation Conditions in Western Australia

Principal Research Interests:

Environmental Physics, Remote Sensing, Ecohydrology (including plant-water relations), Ecological Dynamics, Global Change Science.

Present Appointment with the ANU: Fellow

Previous Appointments:

1996-2001 Research Fellow, Research School of Biological Sciences, The Australian National University
 1993-1996 Lecturer, School of Spatial Sciences, Curtin University of Technology
 1991-1993 Research Officer, Western Australian Department of Agriculture
 1990 Tutor, Department of Geographical Sciences, University of Queensland
 1985-1990 Licensed Surveyor and Manager, Brazier and Motti Pty Ltd, Townsville, Qld & Katherine, NT
 1984-1985 Surveyor, Capricorn Survey Consultants, Biloela, Qld
 1979-1984 Cadet Surveyor

Other Responsibilities:

2006- Coordinator of Bachelor of Global and Oceans (Hons) Degree, College of Science, ANU
 2006- Convenor of Global Change Science Major, College of Science, ANU
 2002-2006 CRC for Greenhouse Accounting, Project Leader: "Theoretical developments in carbon cycle science"

Academic Awards and Distinctions:

1982 Institution of Surveyors Centenary Prize. (Best 4th year student)
 1982 Cottrell Cameron & Steen Surveys Prize. (Best photogrammetry student)
 1984 Surveying Staff Prize. (QUT, Best graduating student)
 1990 N.J. Nielson Prize. (U Qld, Best post-graduate student)
 1999 J.B.S. Haldane Prize. Awarded by the British Ecological Society for the best paper published in the journal *Functional Ecology* in 1999.

Roderick, M.L., Berry, S.L., Saunders, A.R. and Noble, I.R. (1999) On the relationship between the composition, morphology and function of leaves. *Functional Ecology* **13**, 696-710.

2004 'Top 100' Award. Paper on trends in Australian Pan Evaporation with Graham Farquhar was judged as one of the top 100 Science stories (across all disciplines) for 2004 by Discover magazine, the world's largest popular science magazine.

Membership of learned societies:

Australian Meteorological and Oceanographic Society

Ecological Society of Australia

Institution of Surveyors, Australia

Spatial Sciences Institute of Australia

Service:

2002- Ecological Society of Australia representative to FASTs

2007- Participant in the Scientists in Schools Program

2007 Convenor, Hydrology Sessions on Evaporation Trends, American Geophysical Union, San Francisco

2007 Expert External Reviewer, NERC Grants (UK)

2005-2007 Expert Reviewer for IPCC Fourth Assessment Report

2005 Expert External Reviewer, NERC Grants (UK)

2004 Co-convenor, Australian Academy of Science Symposium on Pan Evaporation trends

Reviewer: Manuscript reviews for various journals; Water Resources Research, Hydrological Processes, Geophysical Research Letters, Journal of Geophysical Research, Remote Sensing of Environment, Journal of Ecology, Functional Ecology, Global Change Biology, Tellus, Functional Plant Biology, Journal of Vegetation Science, New Phytologist, Journal of Ecology.

Outreach:

Public talks & briefings:

- Numerous invited talks at local groups (landcare groups, schools, etc) about climate change
- Briefings of senior prime ministerial advisers about climate change

Media activities:

- Numerous interviews (radio, newspaper) throughout Australia, US, Europe about global climate change and the surface water balance
- Appearance on BBC science documentary titled "Global Dimming"

Teaching:

The Australian National University

- Convenor of degree program for elite students: *Bachelor of Global and Ocean Sciences (Hons)*
- Convenor of *Global Change Science* major, ANU College of Science
- Convenor of third year course: *Ocean and Atmosphere Modelling (EMSC3029)*

- Contributor: Hydrology lectures in *The Blue Planet* (EMSC1006) and *Global Cycles & Paleoceanography* (EMSC3027)
- Supervision of research students (8 PhD students, 2 Hons)

Curtin University of Technology

- Coordinator of undergraduate program in Surveying
- Convenor of undergraduate courses in Remote Sensing, Computer Programming, Field Surveying
- Initiate, convene and teach a campus wide postgraduate course in Environmental Modelling (emphasis on Ecohydrology)
- Supervision of research students (1 PhD, 1 MSc, 3 Hons)

Publications: ~ 50 peer-reviewed publications plus numerous invited presentations and conference papers (see separate list).

Last update: 28 April 2008