

## Bob Anderssen awarded the 2010 ANZIAM Medal

Graeme Wake\*, Jim Hill\*\* and Charles Pearce\*\*\*  
On behalf of ANZIAM

The ANZIAM Medal is the premier award offered by ANZIAM. It is currently awarded biennially. This year, it was awarded to Dr Robert (Bob) Scott Anderssen, CSIRO Mathematics, Informatics and Statistics, Canberra. The presentation was made at the 46th ANZIAM Applied Mathematics Conference in Queenstown, New Zealand on 3 February 2010.

### Citation for the 2010 ANZIAM Medal

#### Dr Robert Scott Anderssen



Bob Anderssen

Bob Anderssen's research career is broad and wide-ranging. He has operated across the ever-expanding spectrum of Applied and Industrial Mathematics, since receiving his first doctorate in 1968 from the University of Adelaide. His work is noted worldwide for its originality and depth. His contributions have had, and are having, a high impact across applied mathematics, industrial mathematics, science, the profession (ANZIAM and the Australian Mathematical Society) and the community generally.

The crucial importance of Bob's research is its utility in a wide and diverse range of applications: from the current work in cell-signalling models of patterns in plants; the extension of rheological interconversion methodology; to the stability analysis of first-kind Volterra integral equations; the ordinary differential equation modelling or gene silencing — in the rapidly growing area of epigenetics; the differentiation of matrix functionals — a core piece of theoretical mathematics; algorithms for determining the regularisation parameter for robust smoothing splines; derivative spectroscopy; resolution enhancement; and dilational Hilbert scales/interpolatory

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\*Institute of Information and Mathematical Sciences, Massey University, Auckland, NZ.

E-mail: [g.c.wake@massey.ac.nz](mailto:g.c.wake@massey.ac.nz)

\*\*School of Mathematics & Applied Statistics, University of Wollongong, Wollongong, NSW 2522.

E-mail: [jim\\_hill@uow.edu.au](mailto:jim_hill@uow.edu.au)

\*\*\*School of Mathematical Sciences, North Terrace Campus, University of Adelaide, Adelaide, SA 5005. E-mail: [charles.pearce@adelaide.edu.au](mailto:charles.pearce@adelaide.edu.au)

inequalities. Going back to only 1973, the Web of Science has listed more than 950 citations of his work, which underscores the significance of his creative work.

Bob Anderssen is a strong supporter and worker for the profession of Applied and Industrial Mathematics. At both state and national levels, he is a regular contributor to ANZIAM and the Mathematics-in-Industry Study Groups, and he helped ANZIAM, and its fore-runner the Division of Applied Mathematics to establish and sustain a Special Interest Group (SIG) in Computation (CTAC). He has strongly supported the expansion of the ANZIAM umbrella to embrace both countries (Aust/NZ), and he has been active so as to ensure Mathematics has a stronger voice in national and science forums. He served as Chair of the Division of the Australian Mathematical Society (AustMathSoc) and separately as President of the Society.

He is now continuing his research and wider activities productively into 'retirement' as a Post Retirement Research Fellow in CSIRO Mathematics, Informatics and Statistics, Canberra, having served CSIRO through to the role of Research Chief Scientist until 2007. His influence on, and nurturing of, emerging young scientists is well known and many can attest to his encouragement at critical points of their careers. He is always willing to participate in mathematical meetings, and he can be relied upon to give an outstanding and enthusiastic presentation. On many occasions he has acted as judge to select the prize winner for the Best Student Presentation at the NSW/ACT ANZIAM Mini-meeting. He performs this difficult and sensitive task with considerable awareness, sensitivity and flair, such that all participants, and not just the prize winners, are given positive encouragement and their confidence materially uplifted.

Bob Anderssen has lived the life of the committed Applied and Industrial Mathematician, and he has demonstrated, through his enthusiasm, energy and sustained achievement, that he well and truly meets the criteria for this award. The selection panel unanimously recommends that Dr Robert Scott Anderssen be awarded the ANZIAM medal for 2010.