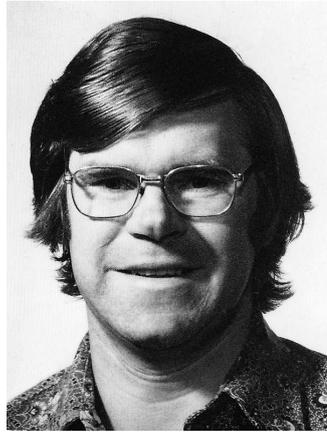




# Obituaries

## John Robert Blake

1947–2016



John Blake was born at Jamestown, South Australia, and graduated, with first class honours, from the University of Adelaide. He then did his PhD on the topic Mechanics of Ciliary Propulsion with Sir James Lighthill at Cambridge. The story goes that, while an honours student at Adelaide, John found a minor error in one of Lighthill's papers and wrote to him about it. Lighthill then invited John to do his PhD with him at Cambridge. After graduating he was made a Fellow of Trinity College, and worked, for some years, at CSIRO in Canberra.

John Blake (<http://web.mat.bham.ac.uk/J.R.Blake/>) was appointed by Joe Gani in 1974 ([http://www.austms.org.au/tiki-read\\_article.php?articleId=345](http://www.austms.org.au/tiki-read_article.php?articleId=345)) to set up an applied and computational mathematics group within the newly formed CSIRO Division of Mathematics and Statistics (DMS). John initiated various successful collaborations involving DMS mathematicians and statisticians with industry partners, as well as with various groups within CSIRO. He saw collaboration with industry as a key national role for DMS. The collaborations included work with the BHP Central Research Laboratories on coking and distribution of granular materials in blast furnaces.

John's research on cavitation was initiated through his collaboration with Don Gibson, Chief of CSIRO Mechanical Engineering. It led to his seminal research contribution to bubble formation and dynamics and fostered his various subsequent successes in linking mathematical research with industrial applications.

When the Chair of Mathematics at Wollongong was advertised after the early retirement and death of Austin Keane, its first Professor of Mathematics, John applied for the position. Each of the four shortlisted applicants, separately, were given time to talk to the staff of the mathematics department. John stood out by effectively running the meeting and was an excellent choice.

John came to Wollongong in 1980 with his then wife Denise and their children, Nick, Sam, Andy and Ben with Emily to follow. He was an excellent Head of Department and later Dean. He improved and widened course content (including statistics) and encouraged staff to teach at least one subject in their specialist area; he strongly supported research, and led by example producing many papers along with securing grants (including ARC, NHMRC, CSIRO, and the Atomic Energy Commission). His PhD students and research assistants at Wollongong included: P. Cerone, P.P. Huynh, D. Jamieson, A. Kucera, R. Paull, T. Tran-Cong, and P. Vann.

John suggested the setting up of an enrichment programme for the top five or so per cent of high school maths students, with monthly talks, on non-school mathematics, statistics and computing science. The vast majority of students who stuck with the programme came to the University of Wollongong to do maths degrees, with some taking first class honours and going onto higher degrees.

On the wider University of Wollongong front, his valuable contributions during his ten years there assisted both the growth in student numbers and the quality and quantity of research. In addition, he found time to be captain coach of the university's first grade Australian Rules team, which he took to win successive premierships in the early 1980s.

In 1989, he went to the University of Birmingham to become Head of Department. Subsequently, he became Dean of the Faculty of Science and a member of the University Executive. In Britain, he was a former Director of their Higher Education Academy's Mathematics, Statistics and Operational Research Network, and described his research interests as being in 'the area of applied mathematics and fluid mechanics with a particular emphasis on interdisciplinary research in science, engineering, medicine, sport and the environment'.

His professional affiliations included the London Mathematical Society and being a Fellow of the Institute of Mathematics and its Applications as well as longstanding membership of the Australian Mathematical Society. In addition, from 1976 to 1978, he served as Secretary of the Australia and New Zealand Industrial and Applied Mathematics group (ANZIAM) and was Chair of ANZIAM in 1984, and 1987–1988.

At Birmingham, his contributions on many fronts continued, and he welcomed over the years a series of visitors from Australia. After the unfortunate loss of his wife Denise from cancer, John later married Rachel and together had a son, Adam. Alas, John was afflicted with leukaemia which after remission came back to claim his life.

We extend our condolences to his family and to his many colleagues and friends.

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