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CENTREFOLD

Marston Conder

Marston Conder gave his first seminar at the University of Auckland in 1982. One colleague recalls, "It was immediately apparent to me that he was engaged in a worthwhile and deep part of group theory and was making substantial progress in it. He seemed to be a very good lecturer and have a pleasant manner. I was delighted to support his appointment as a Lecturer here." Since his initial appointment as a Lecturer in 1983 Marston rose rapidly through the ranks to become a Professor in 1993 at the age of 37. He is currently Head of the Mathematics Department.

Born in Hamilton in September 1955 Marston was educated at Matamata College (1968-72), the University of Waikato (1973-77), and University of Oxford, where he obtained his doctorate in 1980 with a thesis on "minimal generating pairs for permutation groups" that won him the Senior Mathematical Prize and the Johnson Prize.

This was followed by two years of postdoctoral research, one at the University of Otago and the second at the Universität Tübingen (Germany) with a Research Fellowship from the Royal Society of London.

Jenny and Marston were married in Palmerston North in 1984, and they have two children, Jonathan (born in 1990) and Matthew (1993). His hobbies are gardening, music, crosswords, wine tasting and jogging. (It is often remarked that he looks very un-Head-of-Department-like, after returning from his mid-day run and becoming too involved with work to change out of his jogging gear until much later in the day.)

Marston specialises in combinatorial group theory, which is the study of groups given by generators and relations, an area which has diverse and significant applications in other parts of mathematics, especially combinatorics, geometry and topology; and also in theoretical physics and crystallography, and more recently, in the construction and analysis of efficient

communication networks. In particular he is acknowledged as the world's leading authority on Hurwitz groups, which are maximal symmetry groups of Riemann surfaces, and on the use of Schreier coset diagrams for constructing permutation representations of finitely-presented groups.

He came to the Mathematics Department in Auckland at a time when computational methods were beginning to greatly influence the study of discrete objects, such as groups. His colleagues were introduced to John Cannon's Group Theory package Cayley (now known as Magma), which has played a major part in departmental research ever since.

Marston won the New Zealand Mathematical Society's Research Award in 1993, with a citation reading "for research exhibiting insight and originality in solving problems in algebra and combinatorics, in which, by his outstanding skills in machine computation, he has demonstrated the effectiveness of the computer when guided by real intelligence".

Marston has over sixty publications in refereed international journals, he has completed more than sixty invited reviews for *Mathematical Reviews* and *Zentralblatt für Mathematik*, and he is on the Editorial Board of several journals. In addition, he is a Fellow of the Alexander von Humboldt Foundation (Germany), has held Visiting Professorships at the Universities of Waterloo (Canada), St. Andrews (UK) and UNED (Madrid), and has been a Visiting Fellow at the University of Oxford.

He has given numerous invited lectures, the most recent being at conferences in Singapore, Canberra, Oberwolfach and Melbourne.

This year he has been admitted as one of the first Fellows of the New Zealand Mathematical Society.

Research grants, including an inaugural one from the Marsden Fund, have often been used generously to help support students and colleagues. Certainly Marston is an impressive and prolific researcher, but perhaps an even more important contribution has been his willingness to share ideas and expertise with others.

At the national level Marston was President of the New Zealand Mathematical Society (1993- 95), and jointly with Derek Holton he founded the Mathematical and Information Sciences Council of New Zealand in 1993, and was its inaugural convenor before helping to establish it as the Royal Society of New Zealand's Standing Committee for Mathematical and Information Sciences in 1995.

He was appointed as a member of the Marsden Fund Committee (and convenor of its Mathematical and Information Sciences advisory panel), and as a member of the New Zealand Science and Technology Postdoctoral Fellowship Advisory Committee in 1996.

In the same year he was appointed by the Ministry of Research, Science and Technology to its "lead expert" group for its review of the New Zealand scientific knowledge base, and he coordinated the area profile report for the mathematical sciences.

Over the years it has been a great pleasure to be associated with Marston as a colleague and friend.

Peter Lorimer
Margaret Morton