M K Vamanamurthy

At the end of January this year Associate Professor M. K. Vamanamurthy (Vaman) retired after 28 years on the staff of the Department of Mathematics at the University of Auckland.

Vaman was born in Mysore, India on 5 September, 1934. His University training began at the University of Mysore, from which he completed B.Sc.(Hons) and M.Sc.\ degrees, both with first class honours in Mathematics. Following that he spent several years teaching in Bombay and Mysore before deciding to embark on higher studies. As a Fulbright Scholar he travelled to the University of Michigan in 1964 and there completed a Ph.D. degree as the seventh student of Fred Gehring (the sixth Ph.D. student of Fred Gehring formally completed his degree with his oral examination in the morning of the same day as Vaman completed his so they were really twins!). His thesis, described by his adviser as a ``beautiful thesis,'' was entitled `Quasiconformal Mappings in Space.' As well as teaching at Ann Arbor, Vaman taught at the nearby Eastern Michigan University and Bowling Green University before returning to India to a position in Madurai.

Vaman arrived in Auckland in 1971, towards the end of a boom of new staff. Lots of us were fresh from Ph.D. programmes, bursting with enthusiasm for teaching and research. Being slightly older than the rest of us Vaman was also more experienced and in those early days he was able to act as a moderating influence on the young Turks when necessary but also encourage us in our research. With respect to the latter, I am sure that my experience is similar to that of a number of others so I will describe it as a kind of prototype. Vaman soon discovered my own research interests and found that they were not so far removed from quasiconformal analysis. He reckoned that some problems in quasiconformal mappings should be able to be solved using topological techniques and he was right. That was the start of my formal cooperation with other mathematicians and thus I discovered this new kind of fun.

This leads us to one rather distinguishing feature of Vaman's mathematical career. Vaman has undertaken research collaboration with no fewer than 24 other mathematicians. While many of these collaborators are colleagues or ex-colleagues from Auckland the group collectively come from 11 different countries. This surely marks him as a rather unusual mathematician. It reflects both his great interest in what others are doing and his recognition that others can contribute to what he is working on. Consequently his work covers quite a range of mathematics, with concentration in two distinct main areas: quasiconformal analysis and point set topology.

The most sustained and successful collaboration of Vaman's career has been that with Glen Anderson of Michigan State University (another of Fred Gehring's students) and Matti Vuorinen of the University of Helsinki. Sometimes he has worked with just one or just the other but more commonly with both. Together they have covered a lot of mathematics, culminating in a long and carefully written book, `Conformal Invariants, Inequalities, and Quasiconformal Maps' (J. Wiley, 1997).

Another consequence of Vaman's enthusiasm is the close connection between the Mathematics Departments of the University of Auckland and the University of Michigan. One manifestation of this connection is the number of talented students who have gone on from Auckland to Michigan to take on Ph.D. degrees: 8 in the past 20 years, at the latest count.

In addition to his research successes, Vaman has also been one of the top teachers in the Department, earning a well-deserved reputation as an excellent teacher. He has always been willing to take on the challenge of teaching the courses that no-one else wanted. As a colleague teaching another stream of the same course he has always been a pleasure to work with.

On 19 November 1999 the Department of Mathematics honoured Vaman on the occasion of his retirement. During the day there was a mathematical conference and this was followed by a dinner in the evening. The mathematical conference featured talks given by eight colleagues, including Glen and Matti, both of whom made special trips to Auckland for this celebration. Other talks were given by another visitor from USA and members of the Department of Mathematics as well as Vaman himself. The talks covered a wide range of mathematical topics but were bound

together by the theme that Vaman himself has made significant contributions in all of the areas.

Vaman has made other contributions to the University, including a term as Head of Department. He has been honoured twice by the New Zealand Mathematical Society for his work: he received the Society's Research Award in 1997 and the same year was appointed a Fellow of the Society.

Now that he has retired we see as much of him as before. Those who enjoyed games of badminton with him continue to do so, and I am assured that he is about as vicious on the badminton court now as he was before (how many people found to their discomfort that they were between him and the shuttlecock?). He continues to talk mathematics with us or works in his office. Later in the year at least one group of students will get the chance to enjoy his lectures. Perhaps his wife Ratna is the only one who notices much difference because every day he goes home to lunch with her, something he could not do before.

David Gauld