CENTREFOLD

Emeritus Professor Achim (Teddy) Zulauf

Professor Zulauf was invited to the Chair of Mathematics at the University of Waikato in 1969, when Professor Desmond Sawyer resigned in order to return to the University of Otago. When Teddy Zulauf took over the Department, the University itself was but four years old, so the Department was very small, staffed by two or three pure mathematicians. Then, when the School of Science first opened its doors to students in 1970, new staff had to be appointed. Teddy Zulauf planned to develop Mathematics across a broad band of topics, and in his first year, appointed Readers in Mathematical Physics and Statistics to help him do it. From these beginnings, the Department grew rapidly to one of some fifteen staff, dealing with over 1600 student-courses for students in five Schools. With characteristic fairness, thoroughness and untiring energy, Teddy presided over this development, and saw to it that the teaching of mathematics proceeded smoothly and well in all Schools and all areas.

Teddy took out his first degrees at the University of Mainz, in Germany, shortly after the Second World War: a B.Sc. in 1948, an M.Sc. (with distinction) in 1950, and a Doctorate of Science (magna cum laude) in 1951. His supervisor for the D.Sc. was H.H. Rohrbach, a disciple of E. Landau; and he was the first student to receive the degree after the University was re-established after the war. His early research interest was in Analytic Number Theory, especially problems involving prime numbers. Working on these problems under supervisor H. Davenport, he completed by thesis and oral the requirements of a Doctorate of Philosophy at the University of London in 1958.

In 1952, he went out to the University College of Ibadan, Nigeria. It was to be an appointment for only one year, but it continued for eight. The College was founded in 1948, in special relationship with the University of London, so when Teddy joined it, it was in its third year of operation and still housed in army barracks. F.V. Atkinson was then the Professor of Mathematics. When Teddy left in 1960, the College occupied a magnificent modern campus, and its international reputation was becoming established. In 1962, it became the University of Ibadan, one of 24 Universities in Nigeria, and now it has 10,000 students, including 3000 postgraduates, and a staff of 30 in Mathematics and Statistics, including five Professors and five Readers.

This was the first University that Teddy Zulauf helped to develop, almost from its beginning.

The second was the University of Sierra Leone. In 1827, Fourah Bay College was established on the coast in Freetown, Sierra Leone, as a theological college. It was affiliated to the University of Durham in 1876 (Freetown became known as the Athens of West Africa), and in 1960 it received the Royal Charter as an independent University institution in special relationship with the University of Ibadan. The Faculties of Science and Applied Science were then established, and Teddy was the first Professor to be appointed. And so, still but 34, he took over the job of Head of Mathematics, with the general task of helping to build a new University, in a British Colony which was to obtain its independence one year later. He held the post for eight years before coming to New Zealand, and during that period, held many high offices in the University (Dean of Science, Member of Council, Member of Senate, and so on).

And so it was that Teddy Zulauf, who from a boy had wished to be a Professor of Mathematics, achieved his career wish at an early age, and for 25 out of his 35 years as a university academic, headed Mathematics Departments and helped guide his Universities through their formative periods.

Notwithstanding the heavy administrative loads that Teddy has borne, he has always carried out a full share of teaching, and produced a steady stream of research papers as well. His teaching experience spans all levels from service courses to doctoral thesis supervision; he has always had a strong interest in curriculum development and teaching methods. His research was based on a long-term project to investigate Riemann's hypothesis, a task which had defeated many mathematicians before him and which has defeated him too, so far—the hypothesis remains for others to prove or disprove. Alongside this very difficult project, his interests range widely in pure mathematics: his published research deals with inequalities, pre-orderings, generalised integers, analytic functions, and many minor problems with an algebraic or geometric flavour. He has presented his work at numerous conferences, national and international; he has often refereed papers in number theory and complex analysis. He enjoys his mathematics, as the articles, problems and problem solutions contributed to popular publications such as the Mathematics Magazine show, and he has always encouraged teachers and students in their study and enjoyment of mathematics.

In 1986 Teddy decided to stand down from the headship of the department, and after a one-year handing-over period, he decided to retire altogether, just sixty. The University marked his long service as an academic administrator and his international repute by appointing him an Emeritus Professor of the University.

Teddy intends to continue his research in mathematics, and we look forward to seeing him, whenever he visits the Department. We hope that he will enjoy a long and happy retirement, together with his wife Trudi, who has been by his side through all the years of `University building'. At last, they have unlimited time to spend together on hobbies such as bridge and gardening, and on trips to their bach at Pauanui!

John C Turner