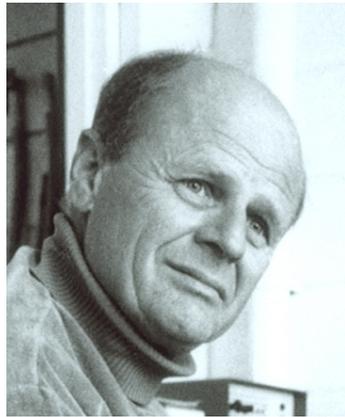


Obituary



Prof. J.R.M. (Rainer) Radok
18 Feb 1920 – 23 Aug 2004

Professor Rainer Radok has died in Bangkok (Thailand), at the age of 84. Rainer was co-founder with Professor Ren Potts of the annual meetings of academics and research students that are now the Applied Mathematics Conferences, attended regularly by many ANZIAM members and nowadays also by other mathematicians from beyond Australasia. The first gathering was held on Kangaroo Island (South Australia) in 1966, and the first interstate meeting was at Hall's Gap in the Grampians (Victoria) in 1968, co-organised by the author (then at the Flinders University of South Australia) and Professor Bruce Morton of Monash University. Subsequent Applied Mathematics Conferences in other Australian states and New Zealand have continued to encourage postgraduate research students to present

talks, a tradition reinforced by the Cherry Prize award. The idea that the meetings should normally be held away from academic institutions has also been preserved, to foster an informal atmosphere where both younger mathematics students and more senior researchers can interact in enjoyable surroundings. To date the Applied Mathematics Conferences have not been held outside Australia and New Zealand, but even that may happen some day if relative travel costs permit!

Rainer was born at Koenigsberg (Germany), the fourth of five children labelled "Non-Aryans" during the Nazi regime because their father (although not a Jew) came from an old Jewish family. In 1938 Rainer enrolled to study engineering at the Technische Hochschule Munich but just before the outbreak of the Second World War Rainer managed to join his brothers Uwe and Jobst who were both working in Scotland. The three brothers were interned in England. They survived the sinking of their deportation ship *Arandora Star* in the Atlantic, and were then sent to Australia via Cape Town on the 'Dunera', reaching Melbourne and internment at Tatura in September 1940. After Pearl Harbour, they were allowed to join the Australian Army Labour Corps to move supplies and equipment in stores and across platforms at the gauge-breakstations Albury and Tocumwal. Rainer used the early morning hours before the heavy physical labour to study arts at Melbourne University, gaining credits in higher mathematics that led to him being hired to work on problems in elasticity at the then CSIR Aeronautics Division in 1945. Here he developed his lifelong interest in translating mathematical texts, beginning with the famous monograph "Singular Integral Equations" by N. I. Muskhelishvili. After gaining his MA in 1949, he was sent to the College of Aeronautics at Cranfield (England) to work on the stability of plates reinforced by ribs. This gained him a Diploma with Distinction and led to his Engineering Doctorate awarded by the Technische Hochschule in Munich in 1955, during an appointment at the Applied Mathematics Division of Brown University (USA) led by Professor W. Prager. Following other appointments in the USA (Emeryville

Laboratories and the Brooklyn Institute of Technology), in 1961 Rainer joined Interscience Publishers as foreign editor stationed in Vienna (Austria). His translation interests developed further, but when Interscience was taken over by Wiley he decided to take up an appointment at the University of Adelaide as Reader, in the Applied Mathematics Department led by Professor Potts. Ren encouraged Rainer to develop his own research specialization – and he chose oceanography, in the period he considered to be the most successful and satisfying in his life. An early highlight was the “Shell Rip Project” in 1965, when Rainer led a team including other (then and future) well known Australian applied mathematicians to study the under-keel clearance of tankers entering Port Philip Bay, to determine whether larger vessels could negotiate this treacherous shallow passage in the presence of waves and swell. This work was both mathematical and experimental – involving instrumentation, data collection and analysis from both an actual 70000-tonne Shell tanker and wave-rider oceanographic buoys. It is interesting that possible entry of larger vessels to Port Philip Bay is only now being re-visited.

After he became Foundation Professor of Applied Mathematics in 1966 at the emerging Flinders University of South Australia, Rainer founded “The Horace Lamb Centre for Oceanographical Research”, involving several other academics and a large number of postgraduate students – including Roger Braddock, John Noye, Bill Summerfield and Alan Easton. It was during this period that the annual Applied Mathematics Conferences were established (cf. R.D. Braddock, “An Anecdotal History of the Applied Mathematics Conference and the Division of Applied Mathematics”(1984)). Rainer continued to emphasise the importance of fieldwork, and his visit with Professor Munk and others at La Jolla (USA) led to a joint Southern Ocean expedition. There was also the experiment organised with John Noye, to determine the influence of wind on the water levels of the Coorong, involving about 80 South Australian schoolchildren! Rainer initiated the School of Earth Sciences at Flinders University, to the benefit of several others appointed to associated senior academic positions at around the time he became Foundation Professor of Oceanography in 1971. However, Rainer resigned shortly afterwards, to become a “demeritus professor” as he ironically put it. This led to a period of consulting to earn a living in his backyard Horace Lamb Institute, which left behind previous conflicts but was only partly successful. During a secondment as Professor of Applied Mathematics at the Asian Institute of Technology (AIT) in Bangkok, the author proposed that Rainer take over in 1981. After retiring from that position in 1985, Rainer continued to live in Thailand for the rest of his life. He taught applied mathematics at Silpakorn University, and then as Visiting Professor at Mahidol University. He remained a close friend of Professor Vilas Wuwongse at AIT, and continued to assist postgraduate students there and elsewhere with their theses. His last years were lived in a Thai village, with Kanueng and her grandson Nop. Here he maintained his intellectual interests at his personal computer, which he considered offered far more satisfying activity for mental survival than television, golf and bowling! He found life in Thailand refreshing and joyful especially in the countryside, including the area where he chose to live. Rainer is survived by his daughters Stephanie and Kathy, and their children.

Roger J Hosking (with assistance from Rainer’s family members, former colleagues and students)