



John Fairbrother

(Photograph: Natal Witness)

J.A.V. Fairbrother 1907–1996

Professor John Fairbrother, a former Head of the Physics Department (Durban and Pietermaritzburg) in the University of Natal, Dean of the Science Faculty in both centres and Professor Emeritus, died recently in Howick at the age of 89. He leaves his wife Mildred after 65 years of married life and three married sons, Michael and Barry living in Johannesburg, Christopher in Canada.

Born in England, in fact within the sound of Bow bells in London, which reputedly made him a Cockney, Fairbrother received his university education in Reading. In his doctorate, completed in 1929 at the early age of 22, he investigated the ionizing effects of X-rays. During subsequent employment in British industry for ten years he developed a healthy but good-humoured disrespect for industrial integrity at the time. Many years later in South Africa, after an arranged meeting with a wealthy industrialist, he remarked without rancour to a friend 'I wouldn't demean myself by becoming a millionaire'. His X-ray interests were continued when he was appointed to the Medical Research Council in London to compare the therapeutic effects of X-rays and gamma-rays from radium. In 1942 he joined Sir Francis Simon's team in Oxford, working both there and at the Atomic Energy Research Establishment at Harwell on that most 'hush-hush' of military projects – the separation of the uranium isotopes for a nuclear bomb. As dreadful a weapon as this is, and Fairbrother knew it to be, he also saw nuclear fusion as the hope of a new society, bringing clean and cheap energy without the pollution and the degrading work, as it then was, of coal mining. But, in his own words, 'The scientist showed its benefits, the politicians turned it to something evil'. Fairbrother's experimental research during these years

has been recorded in a recent biography of Paul Dirac, the eminent Cambridge theoretical physicist and Nobel Laureate.

In 1948 Fairbrother and his family emigrated to South Africa where he had been appointed Senior Lecturer in the Physics Department in Pietermaritzburg. Here, after the difficult years of the war and its aftermath he built up an active Department, producing excellently qualified graduates and researchers, of whom he was personally very proud. Many carved themselves successful careers in South Africa and abroad, reflecting the love and enthusiasm for their subject which he had instilled. To his students he was spell-binding. The richness of his personality showed itself in lecture room and laboratory: his simple manner and delightful humour, colourful presentations with unusual analogies to simplify difficult concepts, even poetry, music and singing used to the same end. Strategic silences allowed some pearl of physics to sink in, while his blue eyes sparkled at the class through his glasses. His students revered him and would surely be pleased to know that the University has kept his name alive through calling its largest Physics laboratory after him. On his retirement in 1967 he took up a Physics post at the University of Waterloo in Canada, returning to this country after 5 years. Here his zest for lecturing was put to good use by the Universities of Natal, Transkei and Zululand.

Fairbrother had a love of art and a talent for it which came through to his three sons. His friends delighted in his company – a man sensitive to people and their concerns and interests, open and transparent to others, without a trace of guile, and accordingly able to see through sham and laugh at it. With his deeply enquiring mind he sought answers through science, philosophy and religion. As he wrestled with faith, he once prayed that he would be touched by the hand of God. His friends know that he was.

ROGER RAAB

(By courtesy of *The Sunday Times*)