

Obituary- A. S. D. Barrett

Arthur Stephen D. Barrett was born in England in 1907 and died in Mayfield, England on December 3, 2004, aged 97.

After obtaining an engineering degree at King's College, London, he was awarded a scholarship from Imperial Chemical Industries and studied at MIT, before returning to England to work for ICI. Although he was known as Arthur at MIT, he was called Stephen in England.

During World War II, he was employed by Tube Alloys, the code name for the British Nuclear Weapons programme, later folded into the Manhattan Project in the USA. He also served as a night watchman at St. Paul's Cathedral during the blitz.

W. Edwards & Co. Ltd was an unusual company. Founded by W. Edwards, as a small business engaged in furnishing laboratories. His son, F.D. Edwards, a science lecturer, joined his father to develop the business. They began to expand the business by factoring and repairing general laboratory equipment; this included imported vacuum pumps. They also began to manufacture a limited range of simple vacuum apparatus aimed particularly at laboratories. During World War 2, there was an increasing demand for radio valves and electronic tubes of all sorts for the technological war effort and 'Edwards' received encouragement and help from the government to expand building pumps itself.

This was the South London Company that Barrett joined in 1946 as Technical Director. It boasted among other things, a drawing office, a test laboratory and a research and development laboratory. It had been presented with a great opportunity: Advanced radio transmitters and receivers, domestic television and domestic refrigerators and the use of various vacuum processes on an industrial scale were just some of the many applications of vacuum about to boom.

Barrett proved to be a dynamic, imaginative and adventurous Technical Director. He set himself to build a strong technical team. The product range was however limited and old fashioned. Barrett introduced metal components and made Edwards a leading supplier of silicone pump oil. The company changed its name to Edwards High Vacuum, Ltd in 1954. Barrett was always willing to support new projects and risk new product development. He also had a good eye for new talent! Among his recruits were Les Holland, Basil Power and Walter Steckelmacher.

Barrett had infectious enthusiasm, willingness to listen to ideas and to authorise R&D programmes when the outcome was by no means certain. He was happy for his staff to go on all sorts of technical visits world wide, to publish papers, to attend and contribute to conferences, etc. and he made sure that information came their way from a wide range of technical publications. He himself was an active ambassador - getting to know key people in relevant companies, universities and government laboratories. The Company launched the journal 'Vacuum' which became the recognized British vacuum journal.

Barrett left Edwards in 1960 but continued as a consultant, a Director of Philips, UK and an active Chairman of a small private company well into his 80s.

At the second symposium of the AVS, which was then called the Committee on Vacuum Techniques, a Life Membership was awarded to Barrett, who had been the banquet speaker at the first symposium at Asbury Park, NJ in 1954. Later, the term "Life Member" was changed to "Honorary Member"

Barrett was one of the core group which founded IOVST (which later became the International Union for Vacuum Science, Technique and Applications, IUVSTA) at the vacuum conference in Namur, Belgium in 1958 and served as its first Secretary. When the IOVST structure was changed to IUVSTA in 1962, Barrett served as the UK Councillor until 1968 and, in 1971, was named one of the seven Founders of the Union. He was also the first chairman of the International Standards Organization's Technical Committee on Standards in Vacuum Technology, TC112.

Collin Alexander, Nigel Dennis, Basil Power, Ron Reid, Bill Westwood.