

## **L.S. Theobald (Transcript of pages 134 and 135, *Anal. Proc.*, Vol 24, May 1987)**

Since the Analytical Division has instituted the ***L.S. Theobald lecture***, the second of which was delivered (by R.A. Chalmers) earlier this month, some curiosity has been expressed regarding Theobald's life and career in analytical chemistry. Finding out anything about him has not proved easy: in fact, Professor E. Bishop has described him as "a retiring ascetic."

Leslie Stuart Theobald, Theo to his friends, was born in Basingstoke and, after enjoying all-round success at the local grammar school, joined the army. In April 1918, he was wounded and taken prisoner. Repatriation in the autumn was followed by nearly a year in the First London General Hospital and eventual discharge in 1919.

In the October of that year he entered the Chemistry Department of Imperial College and graduated with first-class honours in 1922. He then joined the staff of the British Refractories Research Association (BRRA) in the Potteries under J.W. Mellor, FRS. Here was kindled a lifelong interest in the chemistry and analysis of silicate rocks and minerals. In 1925, he returned to Imperial College as a demonstrator of chemistry, and he was to remain there, becoming reader in analytical chemistry in 1945, until he retired in 1963.

He will not be remembered for a large number of published papers. Rather he served a "lifelong apprenticeship" in analytical chemistry and sought to instil into students, both undergraduate and postgraduate, the care, experimental and scepticism required in a true chemist. (It may be that he ploughed an even harder furrow when he tried, with considerable success, to improve their unpublished English.) Generations of practising analysts and those in other branches of chemistry all over the world would have professed their gratitude for his skill, experience and scholarship.

One of his former students, Mike Thompson, recalls:

"I encountered 'Theo' while an undergraduate student of IC. Students generally went in considerable awe of him, and tiptoed past his room. The awe was inspired mainly by the extraordinarily high standards he demanded in analytical exercises. Duplicates had to agree to 1 part in 500 for volumetric analysis and 1 part in 1000 for gravimetric analysis, or one had to repeat the exercise. Most students were so nervous that they were shaking while trying to achieve this standard. He was also 'minded' by two formidable lady technicians who added to the general atmosphere of nervousness.

Theo was quite uncompromising in the quest for accuracy. Before one could start actually analysing things. One had to calibrate the balance weights, the burette, the pipettes and calibrated flasks. These results would be checked against results obtained by previous students almost back to the dawn of time. Breaking one of those sacred objects amounted virtually to an act of sacrilege. Apart from having to pay the fine, one felt that one had destroyed a link with history.

Theo's collection of references was staggeringly large. I remember a bank of about 50 drawers for 3 x 5 inch index cards in his office. Every article he had ever read was listed there, I believe.

When he discerned a genuine interest in analytical chemistry (at that time very rare among undergraduates) he was unstintingly helpful. To me he represented a perfect embodiment of the SAC motto 'Accuracy and Precision'. While now I think that 'cost effectiveness' is a comparable importance. I will never forget the lessons that he taught me. While he did not teach me everything that I know, he is in some way responsible for all that I know, because he showed me how to think."

Mr Theobald gave freely of his time to outside bodies, notably the Society for Analytical Chemistry (where he was Associate Editor to *The Analyst* for 5 years and served on the Publications Committee for 17 years), the BSI, and the BP Commission (the Inorganic Chemicals and Reagents Committees). He was particularly pleased to become a member, and later Chairman of the BRRA analysis sub-committee, which enabled him to return to his old stamping ground, and of the British Ceramic Research Association Testing Committee.

Theo was an extremely good games player in his younger days and retained a keen interest in tennis and cricket all his life. He was overjoyed when his native Hampshire won the County Championship for the first time. He retired in 1963 to Littlehampton, on the Sussex coast, where he and his wife (who died in 1971) enjoyed quieter pursuits, his being the growing of superb grass and roses and the enjoyment of music "as Beecham made it". He eventually died, aged 81, in October, 1979.

*The biographical sections of this article have been taken from an obituary written by Dr. J.F. Herringshaw for Chemistry in Britain. Both Dr. Herringshaw and the Editor of Chemistry in Britain are thanked for their assistance.*