

SPOTLIGHT

on Dr Peter Laxen and carbon-in-pulp

Dr Peter Laxen, the Mintek Consultant on gold and uranium, has won the 1982 award of the Percy Fox Foundation. The presentation was made by the Minister of Finance, Mr Owen Horwood, at a banquet on 6 March. At the same ceremony, four other top scientists were presented with the annual award of the Claude Harris Leon Foundation.

Dr Laxen received his award for his work on the carbon-in-pulp process for the recovery of gold from cyanide pulps.

The citation reads as follows: To Dr P.A. Laxen, in recognition of his original technical contributions, leadership of the Mintek team, and drive in establishing, in collaboration with the mining industry, the carbon-in-pulp technology in South Africa. This process has been referred to as probably the most important innovation

in gold-extraction metallurgy that has taken place in South Africa in this century.

The awards of the two Foundations are made annually to those South African scientists who have made the most notable contributions to the fields of science, technology, human health, education, and social welfare.

Candidates are selected by an advisory board, which includes the Presidents of the Council for Scientific and Industrial Research and the Human Sciences Research Council, the Vice-chancellor of the University of the Witwatersrand, and the Rector of the University of Stellenbosch. The Chairman of the Board is Mr Ian Mackenzie, chairman of the Standard Bank Investment Corporation Ltd.

Born in Boksburg, Dr Laxen was educated at St John's College, Johannesburg. He graduated *cum laude* in Metallurgical Engineering at the University of the Witwatersrand in 1947, and was awarded the Chamber of Mines Gold Medal and Research Scholarship.

He joined Mintek (then the Government Metallurgical Laboratory and later the National Institute for Metallurgy), and in the following year (1949) took up a scholarship at the Massachusetts Institute of Technology under Professor A.M. Gaudin, where he completed a master's degree in 1951. He went on to obtain his Ph.D. at the University of the Witwatersrand in July 1972.

In November 1980, Dr Laxen was awarded the Mintek Gold Medal, and in August 1981 he received a silver medal from the South African Institute of Mining and Metallurgy for a joint paper on the carbon-in-pulp process.

The carbon-in-pulp process, which replaces the costly filtration process in gold extraction, has been a major step forward for the mining industry. In cost efficiency alone, the capital cost of the post-cyanidation section of the plant is said to be 50 per cent lower than that of a conventional plant, and the operating costs about 30 per cent less. It is estimated that the process will eventually save South Africa many millions of rands.

With the aid of pilot plants set up at various mines in the Transvaal and O.F.S., Dr Laxen and his Mintek team devoted a great deal of effort to demonstrating the process and developing techniques to overcome problems they encountered.

CIP process plants are operating at the President Brand Gold Mine, Western Areas Gold Mine, Beisa Gold Mine, Harmony Gold Mine, Crown Sands Project, and Afrikaner Lease Gold Mine, and additional plants are being planned.



Dr Peter Laxen, a long-standing member of this Institute, who won the Percy Fox Foundation Award for 1982