

DONALD F. COATES (d.1981)

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Donald Coates, former Director-General of the Canada Centre for Mineral and Energy Technology, died on 19 August 1981. He will long be remembered for his dedication to rock mechanics in Canada as well as the rest of the world.

Dr. Coates was born in Prince Albert, Saskatchewan, in 1923. He graduated from McGill University with a BEng in 1948 and a PhD in mining engineering in 1965. He enlisted in the RCAF in 1943 and was discharged in May 1945 as a pilot officer. A Rhodes Scholar, he received an MA in political economy from Oxford University in 1954. He was an assistant professor in engineering at McGill University from 1951-1957, a director of Carleton University School of Engineering from 1957-1959, and a consultant from 1959-1963. Dr Coates joined the Department of Energy, Mines and Resources in 1963 as head of the Mining Research Centre. One of the major accomplishments of the centre during this time was the production of a design guide for mine waste reclamation to minimize environmental effects. In November 1973, Dr Coates was appointed director of the Mines Branch, subsequently designated the Canada Centre for Mineral and Energy Technology, in which capacity he supervised research programs on the production, processing, and utilization of minerals and fuels.

Dr. Coates was one of the founding members of the first rock mechanics committee in Canada: the Canadian Advisory Committee on Rock Mechanics. As Chairman of this committee between 1963 and 1978 he guided it through its formative years, membership in the International Society of Rock Mechanics, and its eventual affiliation with the Canadian Institute of Mining and Metallurgy as the Canadian National Committee on Rock Mechanics. On the international scene Dr Coates was a member of Council and Vice-President for North America of the International Society for Rock Mechanics and served on many of its commissions.

His publications on rock mechanics were numerous and covered a broad spectrum. He was honoured for his long and distinguished service by receiving the Gold Medal of the Canadian Rock Mechanics Group for the best applied rock mechanics paper in 1974 and the Rock Mechanics Award of the American Institute of Mining Engineers in 1978. Two of his publications deserve special mention. The monograph *Rock Mechanics Principles* is now in its fourth edition, has been translated into French, Spanish, and Chinese, and is used extensively as a standard textbook in many educational organizations. Another major achievement was the organization and direction of an intensive five-year research program which resulted in the publication of CANMET's *Pit Slope Manual*, which has been enthusiastically received by the mining industry, both in Canada and abroad.

Throughout his career, Dr. Coates maintained an interest in the teaching of rock mechanics. Over the years, he lectured at McGill University and the Universities of Ottawa, Arizona, and California.