

10th INTERNATIONAL SYMPOSIUM ON THE APPLICATION OF COMPUTER METHODS IN THE MINING INDUSTRY

To be held from the 9th to 14th April, 1972, in Johannesburg,
South Africa.

GENERAL INFORMATION

The first symposium in the series was staged by the University of Arizona in 1961. Since then Stanford University, Colorado School of Mines, Pennsylvania State University and the Society of Mining Engineers of the American Institute of Mining, Metallurgical and Petroleum Engineers have acted together with the University of Arizona as co-sponsors of the series.

The 9th Symposium in 1970 was sponsored by the Canadian Institute of Mining and Metallurgy together with McGill University and Ecole Polytechnique in Montreal.

The 10th Symposium, the first to be held outside the North American continent, is being organised by the South African Institute of Mining and Metallurgy (with the Council for Scientific and Industrial Research and the South African Council for Automation and Computation) in close collaboration with the previous co-sponsors.

OBJECTIVES

Mineral ventures increase in scale and complexity. The planning and control of these projects requires more and more sophisticated techniques. The intention of the symposium is to pool and exchange experience and knowledge and also to discuss new and potential developments. The papers presented in the main sessions, which will extend over one week, will together indicate progress which has been made in the successful application of operations research, mathematical, statistical and computer methods in each of the various aspects of operation in the mineral industry. A coherent account will be developed by consideration, in consecutive sessions, of the stages through which mineral prospects evolve in the course of their life.

Primary aims are thus to stimulate discussion in depth of previous applications, to highlight current trends and to provide guidelines for future developments.

PARTICIPATION

The intention is to bring together persons responsible for managing the various operations in the mineral industry and the workers engaged in the development of mathematical and computer methods relevant thereto.

SYMPOSIUM TOPICS

1. *Market Analysis*—demand and supply trends, models of mineral markets, price prediction.
2. *Exploration and ore reserve estimation*—exploration strategies, choice of drilling and sampling patterns, quantification of geological information, geo-statistical analysis, ore reserve assessment. Storage and retrieval of associated data.
3. *Project design and analysis*—influence on viability and risk of capitalisation, scale and method of operation, processing, uncertainties in design premises.
4. *Planning of operation*—planning and scheduling of construction, of development and of depletion of ore reserves. Logistics, rock mechanics and ventilation.
5. *Control of operations*—financial, production, cost and quality control as applied to both mining and processing. Flow and processing of relevant information.

CALL FOR PAPERS

An invitation is extended to intending authors to submit a synopsis, in 200 to 300 words, of papers which would develop the themes outlined above.

The Programme Sub-Committee will choose, on the basis of these synopses, some 20 to 30 authors who will be invited to submit papers. Selection will be aimed at the provision of a coherent structure.

Other authors may be invited to submit short papers either as contributions to the primary papers or for brief discussion in ancillary sessions which will be scheduled to follow on the main sessions.

The official language of the symposium will be English.

DEADLINES

Prospective authors must submit synopses of papers by	end April, 1971
Authors will be informed of results of selection of papers by	end June, 1971
Manuscripts will have to be in the hands of the Editors by	end October, 1971

PRE-PRINTS

Papers selected for presentation in the main sessions will all be pre-printed and distributed prior to the symposium. As many as possible of the shorter papers and prepared contributions will also be pre-printed.

PROCEEDINGS

All of the main and ancillary papers together with edited discussion will be published shortly after the symposium in a single volume.

TOURS AND VISITS

A choice of visits to relevant local undertakings on a day during the course of the symposium will be available to participants. These will include a deep level gold mine.

A tour which will include mineral projects of interest and the Kruger National Game Park will be arranged in the week following the symposium.

LADIES' PROGRAMME

Arrangements will be made for the reception and entertainment of ladies.

ACCOMMODATION

Accommodation will be available at hotels convenient to the symposium venue. The cost of reasonable hotel accommodation in Johannesburg is in the range R5 to R10 (7 to 14 U.S. dollars) per person per night. All reservations and associated arrangements may be made through agents to be appointed by the organisers in due course.

FEES AND COSTS

Symposium fees will not exceed R70 (100 U.S. dollars). These will include registration, one copy of the published proceedings, a set of pre-prints of the main papers, teas and lunches during the course of the symposium, and the various official social events as well as the mid-week visits.

Accommodation, travel and post-symposium tour charges are not included in this figure.

FURTHER INFORMATION

All communications should be addressed to:

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