

# SPOTLIGHT

## on equipment alternatives in underground mining

by J.A. CRUISE\*

From 27th to 29th September, The South African Institute of Mining and Metallurgy held a Colloquium on Equipment Alternatives in Underground Mining in Johannesburg. The Colloquium, which was highly successful, was held concurrently with the 1988 Electra Mining Exhibition.

The Colloquium ran over three mornings, thus permitting delegates to visit the Exhibition in the afternoons. In addition, to boost attendances at the Colloquium, delegates had the option of attending on a daily basis or for the full three mornings. As a result, the attendances for the three days were 175, 175, and 100.

On the first morning, the Colloquium was opened by the President of the SAIMM, Mr Gene Fivaz, who stated the reasons for working in close co-operation with the convenors of the Electra Mining Exhibition, and said that it was planned to continue this working partnership with Specialised Exhibitions on a two-yearly basis, with every

alternate conference having an international flavour.

On the first day, the theme of the presentations was mechanized and trackless mining, papers being presented by delegates from the Chamber of Mines, Premier Mine, JCI, Salzgitter, Tsumeb Corporation, and Southern-Denver.

On the second day, the presentations generally dealt with mechanized stoping systems, with papers from the Chamber of Mines, Gold Fields, Randfontein Estates, and the Changsa Institute of Mining Research (China).

The presentations on the third day featured explosives and mechanization in underground coal mines. Papers were presented by delegates from Directional Explosives, AECI, Matla Coal Mine, New Denmark Colliery, and Voest-Alpine Maschinenbau.

The eighteen papers presented provided something for everyone and, after the Colloquium lunch each day, the delegates had ample time to view and sample the wares offered at the various stands at the Exhibition.

\* Managing Director, Directional Explosives, P.O. Box 785641, Sandton, 2146 Transvaal.

## Particle characterization

The Fourth European Symposium on Particle Characterization is to be held in Nürnberg, West Germany, from 19th to 21st April, 1989.

The behaviour, the properties, and the state of solid and liquid particulate materials depend to a high degree on the size and the size distribution of particles dispersed in a gas or a liquid stream, or present as a bulk material. Within the scope of the Symposium, experts in the field will report on the state-of-the-art and their new scientific findings.

The Scientific Committee and the sponsors of the Symposium invite all scientists active in particle characterization to present their newest scientific results at the Symposium and to discuss these with an international audience.

The topics to be covered include the following:

- Sampling and sample splitting
- Basic theoretical background of measuring techniques and of presentation of data
- Shape analysis and description
- New methods for the measurement of particles from 10 nm to 1  $\mu$ m or above
- Optical methods (light scattering, diffraction-pattern analysis, image analysis, etc.)

- New results in surface-area measurement
- On-line measurement of particle-size distributions, surface areas, particle velocities (e.g. LDA), and concentration
- Methods for the simultaneous measurement of several particle characteristics in multiphase flow systems (for example, size, velocity, and concentration)
- Measurement of properties of bulk materials
- Measurement of other size-dependent characteristics (for example, solubility, strength)
- Property functions.

The official Congress languages are English and German. It is intended to translate all the papers and discussions simultaneously.

For further information, apply to

Prof. Dr.-Ing. Kurt Leschonski  
Technische Universität Clausthal  
Institut für Mechanische Verfahrenstechnik  
und Umweltverfahrenstechnik  
Leibnizstrasse 15  
D-3392 Clausthal-Zellerfeld  
West Germany.