

Pascoe, D. Rapoport.

*Graduate:* E. E. Fricke, P. A. Noble, K. R. Suttill, A. J. van den Berg, G. Venter, K. P. Schleicher, H. C. van Zyl.

*Student:* J. F. Baasden, K. J. Luxford.

*Company Affiliates:* Blackwood Hodge (S.A.) (Pty) Ltd, Hewitt-Robins-Denver (Pty) Ltd, Palabora Mining Co Ltd, The Messina (Tvl) Development Co. Ltd, The Griqualand Exploration & Finance Co Ltd, Vergenoeg Mining Co (Pty) Ltd.

## COLLOQUIUM

The following papers were presented:

'The Significance of the Mineralogical and Surface Characteristics of Gold Grains in the Recovery Process', by G. M. Koen and C. E. Feather.

'Some Factors Influencing Gold Recovery by Gravity Concentration', by M. D. Bath, A. J. Duncan, and E. R. Rudolph.

'Computer Analysis, Modelling and Optimization of Gold-recovery Plants of the Anglo-American Group', by M. I. Brittan and E. J. J. van Vuuren.

'Gold Plant Test Work and Computer Modelling at Western Deep Levels', by M. I. Brittan and D. S. MacLeod.

Lively discussion took place under the guidance of the following panels:  
*Morning Session:*

Chairman—Dr R. E. Robinson, N.I.M.; Dr S. A. Hiemstra, N.I.M.; Mr A. J. Mokken, Union Corporation Ltd; Mr H. Britten, Head Wrightson & Co S.A. Ltd; Mr G. S. James, Anglo-American Research Laboratories; Dr G. M. Koen, Anglo-American Research Laboratories; Mr E. R. Rudolph, Anglo-American Research Laboratories.

*Afternoon Session:*

Chairman—Mr H. P. Carlisle, J.C.I.; Mr D. Watt, Rand Mines Ltd; Mr H. E. Cross, Goldfields of S.A. Ltd; Dr D. I. Legge, Anglo-

Transvaal; Dr M. Brittan, Anglo-American Research Laboratories; Mr W. Ruhmer, Anglo-American Research Laboratories; Mr D. S. MacLeod, Anglo-American Research Laboratories.

The following written contributions were presented at the Colloquium and submitted for publication in the Institute's *Journal*.

'The size distribution and morphology of gold particles in Witwatersrand reefs and their crushed products', by D. K. Hallbauer and N. C. Joughin.

'The adsorption of gold from cyanide solutions onto constituents of the reef and its role in reducing the efficiency of the gold-recovery process', by M. R. Urban, J. Urban, and P. J. D. Lloyd.

Other contributions that will be published in the *Journal* include those made by H. P. Carlisle, A. H. Mokken, S. K. de Kok, J. Levin and W. D. Ortlepp.

The meeting closed at 4.30 p.m.

## Notices

### TRANSPORTATION AND THE ENVIRONMENT

The 5th Quinquennial Convention of the S.A. Institution of Civil Engineers will take place at the Carlton Centre, Johannesburg, from 20th to 24th August, 1973. The theme of the Convention has been entitled "Transportation and the Environment", and this is strongly reflected by the headings in the programme.

Enquiries should be directed to: The Secretary, 5th Quinquennial Convention, South African Institution of Civil Engineers, P.O. Box 61019, Marshalltown, Transvaal.

### ENVIRONMENTAL ENGINEERING

A conference on environmental engineering problems in industrialized and developing countries is to be held at the United Engineering Centre, New York, on 19th and 20th September, 1973.

The conference is being organized by the World Federation of Engineering Organizations (WFEO) and will follow WFEO's Fourth

### General Assembly.

Applications for programme details and registration forms should be made to Mrs Ann Cook, WFEO Conference Manager, Savoy Place, London, WC2R OBL.

### RABCEWICZ—COLLOQUIY

The Austrian Society for Geomechanics is to honour Professor Ladislaus V. Rabcewicz, on the occasion of his 80th birthday, with a meeting in Salzburg Congress Hall on 11th and 12th October, 1973. The themes of the four half-day sessions will be as follows.

- (1) Residual stresses in the earth's crust and their effects on rock structures.
- (2) Surface and underground rock-blasting techniques.
- (3) Shafts—their construction and stability analysis.
- (4) Specifications for rock-construction projects, with special reference to stability and rock classification.

Details are obtainable from Die Österreichische Gesellschaft für Geomechanik, A-5020 Salzburg, Austria, Franz-Josef Strasse 3.

### PYROMETALLURGICAL EVENTS IN 1974

Düsseldorf is to be the venue for the following three events:

International Iron and Steel Congress (27th to 30th May), THERM-PROCESS '74 (28th May to 1st June), and GIFA '74 (8th to 14th June).

THERMPROCESS '74 will be the first international exhibition of industrial furnaces and production processes entailing the application of heat. GIFA '74 is the fourth international foundry fair.

## O.F.S. Branch Welkom

THE MARCH GENERAL MEETING OF THE BRANCH WAS HELD IN THE ST. HELENA CLUB AT 8.00 P.M. ON TUESDAY, 6TH MARCH, 1973

Mr C. J. Isaac was in the Chair.

There were also present:

*Six Fellows:* Messrs M. G. Cullen, D. Rankin, D. A. Smith, R. B. Sutherland, S. L. S. Swart and E. T. Wilson.

*Seven Members:* Messrs J. D. Couperthwaite, E. Dominy, A. H. Edwards, W. B. Evans, H. Eschenberg, C. L. Workman-Davies and G. Young.

*Three Graduates:* Messrs D. Bosley, M. H. Smith and D. I. Watson.

*Four Associates:* Messrs D. R. Lings, A. Paschalides, D. Swart and W. M. Todd.

*Visitors:* Thirty.

*Total present:* Fifty-one.

#### GENERAL BUSINESS

The Chairman announced that arrangements were being made for a visit to Vierfontein Colliery and Power Station.

#### RESEARCH INTO GOLD EXTRACTION

The Chairman introduced Messrs James and van Vuuren of the Anglo American Research Laboratories, and called on Mr James to deliver his talk, "Research into Gold Extraction".

The presentation proved to be of great interest to the meeting and lively discussion followed the talk.

A vote of thanks to Mr James was proposed by Mr G. Young.

#### CLOSURE

After thanking Messrs James and van Vuuren and the contributors to the discussion, the Chairman thanked members for their attendance. The Chairman thanked the management of St. Helena for providing the refreshments, and invited those present to enjoy these after the meeting which he declared closed at 9.15 p.m.

### O.F.S. Branch Welkom

MINUTES OF A GENERAL MEETING HELD IN THE ST. HELENA CLUB ON WEDNESDAY, 16TH MAY, 1973, AT 8.00 P.M.

Mr E. T. Wilson (Vice-Chairman) was in the Chair.

There were also present:

Fifteen Fellows; Seven Members; Eight Associates; Five Graduates; One Student; Thirty-six Visitors.  
Total present: Seventy-two.

#### MINUTES OF THE PREVIOUS MEETING

As the Minutes of the March General

Meeting had not yet appeared in the Journal, their adoption was deferred to the next General Meeting.

#### GENERAL BUSINESS

Members going on the visit to Vierfontein were reminded to take with them their own underground clothes.

#### ROLE OF THE MINES DEPARTMENT IN THE INDUSTRY

The Chairman introduced Mr Gibbs, the Government Mining Engineer, and called on him to deliver his talk entitled 'The Role of the Mines Department in the Industry'.

The presentation of this talk, which was most interesting, was received with applause from all present.

A vote of thanks to Mr Gibbs was proposed by Mr A. N. Shand.

#### CLOSURE

After thanking those present for their attendance, the Chairman declared the Meeting closed at 9.10 p.m.