

The difference between the observed and the expected mean service period (i.e. we expect a longer mean service period than observed) can be due to any of the following:

- (a) Under-estimate of the quartz content.
- (b) Under-estimate of the relative toxicity of coal dust.
- (c) Under-estimate of the dustiness.
- (d) Under-estimate of the true average service period.

The suggestion of a computer programme:

The author is pleased that Professor Kerrich has mentioned this because there is a wealth of information in the Department of Mines which is not yet utilised due to the absence of a ready method to recover the information from where it is kept and due to the complicated calculations involved.

Notices

THE THIRD INTERNATIONAL GEOCHEMICAL EXPLORATION SYMPOSIUM

(Summary Account)

This Symposium, co-sponsored by the Canadian Institute of Mining and Metallurgy and the Society of Economic Geologists, was held in Toronto, Canada in April, 1970. Over 700 delegates attended from 26 countries.

Ninety papers were presented at the symposium and another 18 papers were read by title. The programme included:

An Opening Session, Five General Sessions, a session on Remote Sensing Methods, a session on Geochemical Prospecting for Petroleum and Natural Gas, a session on Primary Halos and Lithochemical Methods, and a session on Statistics and Evaluation of Geochemical Data.

The delegates were welcomed by Dr J. M. Harrison, President of the Canadian Institute of Mining and Metallurgy and Dr C. H. Smith, Regional Vice-President, North America of the Society of Economic Geologists.

Dr D. R. Derry of Toronto delivered the opening address to the Symposium entitled 'Geochemistry—the link between ore genesis and exploration'. Dr Derry considered the various hypotheses on the origin of economic mineral deposits and expressed his belief that the next ten years will show evidence of an increased proportion of ore bodies that owe their origin, at some stage in time, to supergene agencies. He stressed that 'there are no sharp divisions between processes that form and destroy ore bodies at or near surface and those that form or destroy them at a depth of 20 kilometres in the earth's crust. The more we understand about the migration and concentration of metals the more accurately we can apply this knowledge to searching for unknown concentrations, whether at rock surface or at depth. To learn more about these processes of ore genesis we must rely on geochemical studies co-ordinated with field observations'.

The five general sessions included accounts of progress in geochemical prospecting in different countries of the world, case histories describing the application of soil, stream sediment, geobotanical and biogeochemical

techniques, papers on the behaviour of different elements under varied environmental conditions, discussions on analytical methods and the use of stable isotopes in mineral exploration.

It is anticipated that the proceedings of the Symposium will be published late in 1970 or early in 1971 as a Special Volume of The Canadian Institute of Mining and Metallurgy. All registrants at the Symposium will receive a copy of this publication and copies will be available for purchase.

At a special meeting called during the Symposium, charter members of the Association of Exploration Geochemists approved a constitution and elected an interim Council which will organize procedure and formulate policy during the coming year. The interim president of the Association is J. Alan Coope, Newmont Mining Corporation of Canada Limited, Toronto, Canada.

More information on the constitution and membership in the Association will be distributed to learned societies and technical magazines in the near future. Membership will be open to exploration geochemists in all countries of the world.

SOUTH AFRICAN COUNCIL FOR PROFESSIONAL ENGINEERS

Report on Registration

The Professional Engineers Act (Act 81 of 1968) came into force on the 14th February, 1969. At the time it was recognised that the success of the Act would depend in large measure on the extent to which engineers in South Africa would become registered professional engineers in terms of the provisions of the Act. The promulgation of the Act and its provisions relevant to registration were the subject of considerable publicity during 1969.

This has resulted in a rate of application for registration far beyond the capacity of the very active committees set up for this purpose by the South African Council for Professional Engineers (SACPE).

To give some idea of the task before these committees and before SACPE itself, which must ratify each case,

the following statistics are illuminating: During the first 12 months after the Act came into force SACPE received 9 392 applications for registration. Of these 3 106 have been accepted, 2 038 have been referred to referees for further information and professional opinions, while 272 have been turned down. The remaining 3 976 applications are still being processed. In addition new applications are still arriving at the rate of several per day.

Meanwhile, people who have applied to be registered but have not yet been informed of the result, are asked to be patient. The committees concerned are meeting as frequently as possible and carefully examining each case to ensure that the requirements of the Act are met.

THE TECHNOLOGY AND POTENTIAL OF TUNNELLING

Volumes I and II

The first of these Volumes, published in June, 1970, contains thirty-six papers which were presented at the South African Tunnelling Conference 1970 attended by four hundred and fifty registrants in Johannesburg during July. These papers provide a wide coverage of most aspects of tunnel utilization, exploration, design and construction for civil and mining purposes. Written by practising experts in the many different skills involved in tunnelling they comprise a comprehensive reference on tunnelling technology and many of them indicate where future improvements can be effected.

The second of these Volumes, due to be published in November, 1970, contains the opening and keynote address, reports on the discussion at the Conference sessions and an appraisal of, and recommendations for the codification of tunnel standards and practice.

The two Volumes of 'The Technology and Potential of Tunnelling' cover the Proceedings of TUNCON 70, supported by the South African Institution of Civil Engineers, The South African Institution of Mechanical Engineers, The South African Institute of Mining & Metallurgy and The Geological Society of South Africa, provide an exceptionally broad and complete coverage of tunnelling technology today and probable future developments. This record should provide practising engineers and students of this subject with an important reference on tunnelling.

Copies of this volume are available from:

The Secretary,
TUNCON 70,
P.O. Box 1183,
Johannesburg,

at R20 for the pair, or R12.50 each. Orders for either or both of these Volumes and copies of offprints of the papers can be placed immediately.

MEMBERSHIP

In terms of By-Law 7.7.1 members are hereby notified that the membership of the following has been cancelled and their names removed from the Membership Register:

R. W. Leigh (Member); D. Loudon, D. K. Harper, A. Richardson, M. C. Krogh (Associates); R. M. F. Hull, D. J. Mulligan, J. N. S. Sibson, H. I. J. van der Merwe, B. R. Lear (Graduates); F. J. Cloete (Affiliate),

J. S. Carr, P. C. Connolly, A. S. Cronje, R. J. Duncan, N. J. Els, A. M. Lombard, J. P. Mulder, R. C. Nupen, J. C. van der Linde, N. J. van Deventer (Students).

ADVANCES IN EXTRACTIVE METALLURGY AND REFINING

The Institution of Mining and Metallurgy will hold a symposium entitled 'Advances in extractive metallurgy and refining' at the Institution of Electrical Engineers, Savoy Place, London, from 4th to 6th October, 1971. Topics to be covered will relate to the extraction and refining of metals and metallic compounds from ores and residues, including secondary and scrap materials.

Further information from:

The Secretary,
The Institution of Mining and Metallurgy,
44 Portland Place,
London, W1N 4BR,
England.

TENTH INTERNATIONAL MINERAL PROCESSING CONGRESS 1973

The Tenth International Mineral Processing Congress will be held at Imperial College, London, from 2nd to 14th April, 1973. The Congress is being organized by the Institution of Mining and Metallurgy, under whose auspices the first Congress was held in 1952. Subsequent meetings have been held in Czechoslovakia (1970), England (1960), France (1953 and 1963), Germany (1955), Sweden (1957), the U.S.A. (1964) and the U.S.S.R. (1968).

The first week of the Tenth Congress will be devoted to the discussion of the 50 papers to be presented at the technical sessions, the following week being taken up with technical tours and visits.

The *First Circular*, in which more detailed information will appear, will be distributed towards the end of 1970. Preliminary enquiries may be addressed to the Secretary, Institution of Mining and Metallurgy, 44 Portland Place, London, W1N 4BR.

PROCEEDINGS OF THE NINTH COMMONWEALTH MINING AND METALLURGICAL CONGRESS 1969

- Vol. 1—Mining and petroleum technology.
- Vol. 2—Mining and petroleum geology.
- Vol. 3—Mineral processing and extractive metallurgy.
- Vol. 4—Physical and fabrication metallurgy.

Mining and petroleum technology

London: Institution of Mining and Metallurgy, 1970. Cloth. 9 in. × 6 in., lvi + 1 059 p., illus, £12 (*Proc. 9th Commonw. Min. Metall. Congr. 1969, vol. 1*).

Volume 1 of the Proceedings of the Ninth Commonwealth Mining and Metallurgical Congress 1969—*Mining and petroleum technology*—contains the 38 papers presented under this general heading at the Congress. Also included are discussion, authors' replies, name and subject indexes, and plenary addresses by Sir Val Duncan, O.B.E. and Sir Ronald L. Prain, O.B.E.

Volumes 2 and 4 of the Congress proceedings have already been published; information on volume 3 will be circulated shortly.