

# Infacon 74

The National Institute for Metallurgy, the South African Institute of Mining and Metallurgy, and the Ferro-Alloy Producers' Association of South Africa extend a cordial invitation to participate in the International Ferro-alloys Congress to be held in Johannesburg, South Africa, in April 1974.

It is the aim of INFACON 74 to stimulate technical interchange on all aspects of ferro-alloy production. It is hoped that INFACON 74 will be the first in a series, and that further international ferro-alloys congresses will be held in other countries producing ferro-alloys, so that there will exist a permanent platform for the international ferro-alloy industry.

## TECHNICAL PROGRAMME

The five technical sessions will cover the whole field of ferro-alloy technology and production and will include the following topics:

1. Burden preparation, blending, pelletization, handling, reducing agents.
2. Electric smelting furnaces — design, operation, management, smelting optimization, shop practice, refractories.
3. Mineralogy, reduction behaviour, smelting reactions, slags.
4. Automation, pollution control.
5. Application, trends in consumption, trends in composition specifications.

There will be no parallel sessions.

A full programme will be included in the Second Circular.

## INVITED LECTURERS

The following persons have already agreed to present paper:

- |                      |                                       |
|----------------------|---------------------------------------|
| Mr W. H. Magruder    | Union Carbide Corp., U.S.A.           |
| Dr Juji Nasu . . . . | Awamura Metal Industry Co.,<br>Japan. |
| Dr Mario D. Cavigli  | Società Montecatini Edison,<br>Italy. |
| Mr R. Bjorklund . .  | A/B Ferrolegeringar, Sweden.          |

## DEADLINE DATES

- |                     |                               |
|---------------------|-------------------------------|
| 30th November, 1972 | Titles and abstracts          |
| 31st December, 1972 | Preliminary application forms |
| 31st July, 1973     | Complete papers               |
- Information on the Congress can be obtained by writing to:

The Secretary, Organising Committee,  
INFACON 74,  
Private Bag 7,  
AUCKLAND PARK  
Transvaal,  
South Africa.

# Obituary

## RICHARD AUSTIN COOPER

On the 31st March 1972, a once very active member of the Institute, R. A. Cooper, died at the age of 82. He had served on the Council for many years and was Vice-President in 1933/34.

Starting work on East Rand Proprietary Mines Limited as a Laboratory Assistant in 1912, he was transferred to the Rand Mines Laboratories in 1919. From 1933 until his retirement in 1948, he was Reduction Officer on various mines of the Rand Mines Group. He was also a versatile scientist, credited with having designed the first circular konimeter.

While he worked at the Rand Mines Laboratories, he published a number of papers, and was awarded the Institute's Gold Medal in 1922 for his papers—"Notes on the Manipulation of Osmiridium Concentrate", and "The Acidity of Mine Waters", (this jointly with F. W. Watson). In 1929 he received the Certificate of Merit for his paper—"Development of the Chlorine Process of Extraction of Platinum metals from Ores".

It is interesting to recall that this modest man's most important paper—"Mineral Constituents of Rand Concentrates", which was published in October 1923 and which is the first recorded statement concerning the presence of uranium in Witwatersrand ores, went relatively unnoticed until towards the end of the second World War. Based on the knowledge published in this paper, the Uranium industry in South Africa was started.

R. A. Cooper had the gratification of having seen the Uranium industry grow to become a most important contributor to the National economy.

M.B.

## ALEXANDER JEREMIAH ORENSTEIN

C.B., C.M.G., C.B.E., LL.D., D.Sc., M.D., M.R.C.S.,  
F.R.C.P., F.R.S.H.

Dr Orenstein, who died on the 7th July 1972 at the age of 92, was so well known and so widely acclaimed during his lifetime that it is difficult to add to the tributes which have already been paid to him. The impressive list of his achievements, awards, orders and decorations is far too long to quote here, where we can merely comment on some of these, which are indeed remarkable.

His long career of service to humanity began in 1905 in the Panama Canal Zone where he worked in the medical team which did so much to eradicate yellow fever and to apply preventative medicine.

In 1914 he was brought to Johannesburg by Rand Mines. From then on his contributions to the health conditions of the mine workers of Rand Mines in particular, of the mining industry in general, and of the South African army would take pages to describe.

Some of the reforms with which Dr Orenstein was concerned have become so much a way of life that it is quite startling to realize that he was largely, often wholly, responsible for them as innovations. These include the appointment of full-time medical officers on mines; sweeping reforms in the layout of mine hospitals,

compounds and the feeding of Bantu workers; gradual replacement of male orderlies by Bantu nurses 50 years ago; training in first aid for White and Black miners; and the formation and training of proto teams.

Dr Orenstein joined the Institute in 1916 and was Vice President during 1924/1925.

He was awarded the Institute's gold medal in 1958. He was also the second President of the A.S.T.S., holding office in 1921 and in 1922. He was elected an Honorary Life Fellow of the Institute in April, 1960.

Another signal honour was his appointment in World War I (as Colonel) and in World War II (as Major General) to the position of Director of Medical Services of the South African forces. Indeed, he was the only senior officer on either warring side who held the same appointment in both World Wars.

Mentally active and remaining a high performer, he chose never to reap the fruits of retirement. He was 77 when he accepted appointment as the first director of the Pneumoconiosis Research Unit of the C.S.I.R. Because of his drive and past achievements, he was an effective spokesman whenever support was sought for research concerned with the mine worker's health.

He was over 92, with pins in both his hips, when he was asked to express an opinion on the likely health hazard created by a complicated chemical process under development. He insisted on climbing up two flights of stairs to inspect the operation and his perspicacity with

regard to the process itself, astounded the research workers. Since he was known to be a linguist, he was also asked whether he could help with a translation of a research report published in Russian. Next morning he sent a full and lucid translation in his steady, clear handwriting. His daily tasks obviously did not extend his intellect.

M.B.

## Book review

### AUSTRALIAN MINERAL INDUSTRY REVIEW FOR 1970

The Review is prepared by the Bureau of Mineral Resources, Geology and Geophysics, and gives an interesting and up-to-date account of the Australian minerals industry.

The book is in three sections. The first is a general review and summary of the mineral industry. The second deals in detail with individual minerals from "abrasives" to "zirconium". The third section covers miscellaneous items and general statistics.

It is interesting to note that the value of mineral production in Australia has increased from 852 million dollars (Aus.) in 1968 to 1 447 million dollars in 1970.

This is a useful reference book.

H.P.C.