# Spotlight

# G.T. van Rooyen 'Materials in Action' Symposium

## Pretoria, 29–30 June 1994

Professor G.T. van Rooyen has guided the Department of Materials Science and Metallurgical Engineering at the University of Pretoria in South Africa for the past 32 years. During this period, 54 masters' degrees have been awarded in the Department, and 17 doctorandi promoted. He has also made a major contribution to industry by his incisive analysis, relevant and practical synthesis, and his exceptional talent in innovative design. He is still active in fracture analysis, thermal fatigue, weld simulation transformation kinetics, and fracture mechanics, and continues to contribute to a better understanding of metallurgical problems encountered in practice. He has advised many companies, and has received many honours and recognitions.

Professor G.T. van Rooyen is well known both in South Africa and internationally for the contributions he has made in the field of Metallurgical Engineering. For this reason a symposium was organised by the SAIMM in honour of this great metallurgist.

About 80 participants from the metallurgical industry of South Africa, representing 23 companies, attended the Symposium, which was held in the Senate Hall of the University of Pretoria. Sixteen papers were presented, including two by international authors. The papers, which were of a very high standard, were published by the SAIMM as a Symposium Proceedings. The Symposium was notable for the variety of metallurgical topics that were covered by the various authors.

Two papers, presented by the chief executives of Iscor Ltd and the Columbus Joint Venture, respectively, reviewed the future prospects of South Africa's carbon and stainless steels in a competitive world market (the 'global village'). If the challenges are accepted by management, South African carbon- and stainless-steel producers, would certainly be able to grow and compete successfully in these markets. Another paper stressed the need for the local innovative design of products (local ownership of brand names) in order to be competitive in a world market.

The pyrometallurgical field was covered by papers relating to the influence of slag chemistry on refractory wear during steelmaking, emerging technologies in the ironmaking industry, and the application of the intelligent mould during the continuous casting of steel billets. Papers relating to physical metallurgy covered topics such as the development of 12 per cent chromium steels, and control of phase transformations in high-strength steels, and the embrittlement of pressure-vessel steel during heavy tempering. The application of metallurgical principles in the industry was described in two papers related to the heavy engineering industry and the manufacturing of rails.

Professor van Rooyen delivered a paper in which he reviewed major breakthroughs in research and development in the field of metallurgy during the past century, and also described the road ahead in the South African metallurgical scene. He concluded that our focus in future will have to be on 'people in action' rather than 'materials in action'. The universities, in collaboration with industry, need to pay more attention to continued education and refresher courses, so that South African metallurgists can comply with the demands set by a competitive world market. This challenge can easily be met by the metallurgical industry in the new South Africa.

*Materials in Action* was a very worthwhile and well organized symposium, and the proceedings will be a useful addition to the literature. ◆

# Mintek President Elected to Royal Academy

Mintek's President, Dr Aidan Edwards, has been elected a Foreign Member of The Royal Academy of Engineering, the UK's independent self-governing body of professional engineers from all disciplines.

The Royal Academy, which has a limit of 1000 members, elects up to 60 new Fellows annually, together with Honorary Fellows and Foreign Members who have made exceptional contributions to engineering.

Dr Edwards has gained entry to this prestigious assembly in recognition of the role he has played in the process, mining, and metallurgical engineering industries in South Africa.

The Academy's objectives are 'the pursuit, encouragement, and maintenance of excellence in the whole field of engineering in order to promote the advancement of the science, art and practice of engineering for the benefit of the public'.

In his foreword in the Academy's 1993/94 Annual Report, the President, Sir William Barlow, welcomed the recently-published UK Government's White Paper: 'Realising our Potential — A Strategy for Science, Engineering and Technology' which he says attests to 'Government's firmly stated policy to support science and engineering and the recognition of the contribution which they make to the quality of life'.

Dr Edwards said that he is likewise highly optimistic that South Africa's Government of National Unity will recognise the continuing contribution of these important disciplines to all levels of life in the new South Africa. ◆