

# SPOTLIGHT

## on Gold Fields National Engineering Awards

For the Gold Fields Foundation National Engineering Awards, each university affiliated to the South African Federation of University Engineering Students (S.A.F.U.E.S.) selected a candidate who, in their opinion, presented the most outstanding design project in their final year during 1984. On 24th April, 1985, the first prize of R3000, a second prize of R1000, and five prizes of R200 each were handed to the successful candidates at a reception held at Gold Fields' new Head Office Building after the presentations of their theses at Kelvin House. The winner and runner-up were as follows:

*R3000 Gold Fields National Engineering Award*

Ian Goss-Ross (University of Pretoria). Subject: Laser target designation by means of quadrant detection.

*R1000 Gold Fields National Engineering Award*

Michael Paul Zacharias (University of Natal). Subject: Bitumen rubber as a stress-absorbing membrane interlayer in asphalt overlays.

Robin A. Plumbridge, Chairman and Chief Executive, Gold Fields of South Africa Limited, delivered a short address to the gathering before handing the prizes to the recipients.

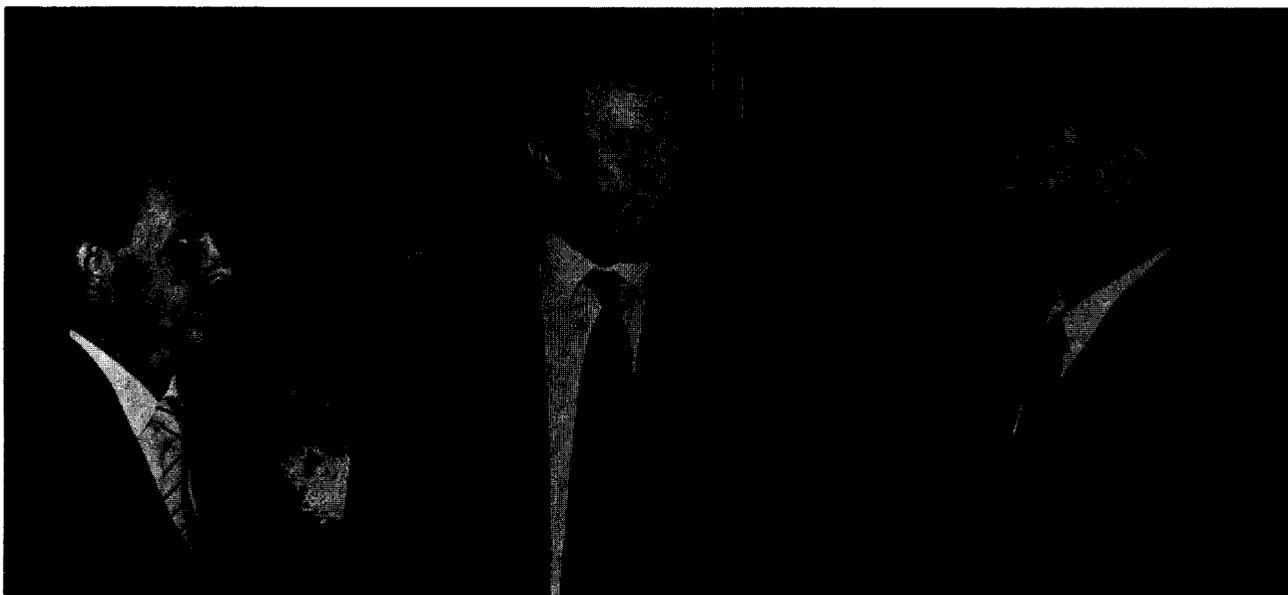
He pointed out that, in the area of social responsibility, education was the Gold Fields Group's primary commitment. South Africa faced challenges as never before, and challenges brought opportunities—opportunities to become involved in and committed to an enhanced quality of life for

every citizen. The critical shortage of skills in South Africa had become a common cause and, rather than continue to talk about it, industry was now actively seeking remedies.

Gold Fields, for its part, dedicated itself to educating and training not only its own employees but, where practical, also the community at large through its Foundation's activities. By doing this, it helped to create a more-productive labour force, which benefited not only the communities of origin but also the industry in general.

Gold Fields had channelled vast amounts of money into facilities for better technical education in those areas from which it drew its labour. However, the Group also recognised needs within the sphere of academic education and made significant grants to universities and technikons in Southern Africa. Many a building project such as libraries, residences, and resource centres carried the company's name at institutions of learning across the country. Gold Fields was very proud of the educational projects with which they had identified themselves over the years, but were also aware of the need for grass-roots contact and the motivation of the individual not only to achieve a skill but also to transcend into excellence.

Mining was a dynamic industry that demanded only the best of its people, and everybody realized the importance of recognizing excellence. To create an incentive to act as a catalyst for greater achievement was the object of The Gold Fields National Engineering Awards.



Messrs Ian Goss-Ross (left) and Mike Zacharias in conversation with Mr Robin Plumbridge at the function following the presentations.

## New President

On 29th March, 1985, Mr B.C. (Bertie) Oberholzer, Manager of East Driefontein Gold Mine, was elected President of the Association of Mine Managers of South Africa for the ensuing year.

Mr P.D.K. Robinson, General Manager of Buffelsfontein Gold Mine, was elected Vice-president of the Association. He was previously General Manager of St. Helena Gold Mine.

After starting his mining career at Blyvooruitzicht Gold Mine, Mr Oberholzer joined Gold Fields of South Africa in 1955. He was promoted to Mine Manager in 1974. Before becoming Manager of East Driefontein Gold Mine, he had spells as Manager of both Kloof and Deelkraal Gold Mines.

He obtained a B.Com degree from Unisa in 1973.

A keen rugby player in his younger days, Mr Oberholzer now plays golf and tennis. He is married and has two sons and a daughter.



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## Bullion from old film

A pollution-free chemical method of producing silver that is 99 per cent pure—and therefore of bullion quality—from scrap photographic film and paper has



been developed by a British company. In the accompanying photograph, a sample of the silver flake is being collected from a giant cathode in the process that leaves only trace levels of the metal. Depending on through-put, the makers claim that the totally enclosed process can be self-financing and adapted to customers' requirements.

The old film is separated from packing materials and mechanically disintegrated into fragments of about half a centimetre square. This residual product is then transported by a pneumatic conveyer to a large stope hopper, which feeds it into the reaction vessel for chemical treatment. The silver is recovered from the chemical solutions used in the process by electrolysis, which plates out on cylindrical cathodes. By weighing of the cathodes before and after each process cycle, the silver yield can be monitored accurately. The equipment will process between 3 and 6 t of photographic material per twenty-four hours, with 1 t of X-ray film yielding around 10 kg of silver. This is equivalent to a gross market value of around £1750, and it has been calculated that, on the basis of an eight-hour day and five-day week, the pay-back period from installation of the equipment could be as short as 7 months if the cost of the film to be processed is 50 per cent of the gross silver value.

Anticipated markets for the process are in the paper, film-printing, and metal industries.

Enquiries should be directed to Photographic Silver Recovery Limited, Saxon Way, Melbourn, Royston, Herts SG8 6DN, England. Telephone: (0763) 61622. Telex: 81603 PSR G.