

Notices

SYMPOSIUM ON THE RECOVERY OF PYRITE

The proceedings of the Symposium on the Recovery of Pyrite, held in Johannesburg in June 1969, may be ordered from the Secretary, S.A.I.M.M., P.O. Box 61019, Marshalltown, Transvaal, at the reduced price of R5.00.

Papers and addresses presented at the Symposium were:

Opening Address by Mr J. K. E. Douglas (President).

"The world sulphur position," by W. C. J. van Rensburg (Member).

"The South African sulphur position," by D. L. Taylor (Member).

"The recovery of pyrite at Government Gold Mining Areas Limited," by R. J. Westwood (Member), G. S. Stander (Affiliate) and H. P. Carlisle (Member).

"Recovery of pyrite concentrates from colliery-waste discards—A preliminary assessment," by W. A. Gilbert (Visitor) and E. A. Nugent (Member).

"The role of pyrite in upgrading the uranium content of Witwatersrand conglomerate ores by means of the heavy-medium separation process," by D. J. Tutt (Associate Member).

"Pyrite recovery by jigs at Durban Roodepoort Deep Limited," by E. J. Dominy (Affiliate), F. Diamond (Affiliate) and A. D. Graham (Affiliate).

"The storage of pyrite concentrates," by Joan C. Campkin (Visitor) and P. J. Lloyd (Member).

"The flotation plants of the Anglo-Transvaal Group," by L. A. Bushell (Member).

"Pyrite flotation with amines and cyanidation of the products," by E. H. D. Carman (Member).

"Gold recovery by cyanidation from mill products obtained after pyrite flotation," by P. G. Mrkusic (Graduate), M. Sciarone (Visitor) and H. E. Simonsen (Visitor).

"The influence of sulphhydryl and cationic flotation reagents on cyanidation of native gold," by K. G. Ashurst (Visitor) and W. P. Finkelstein (Member).

"Laboratory tests on the flotation of pyrite from Witwatersrand gold ores by cationic collector," by J. Levin (Member), and M. L. Veitch (Visitor).

Closing Address, by Dr R. E. Robinson (Director, National Institute for Metallurgy).

INCOME TAX: POST-GRADUATE STUDY COURSE CONCESSION

As a result of representations made by the Associated Scientific and Technical Societies of S.A. and the Suid-Afrikaanse Akademie vir Wetenskap en Kuns, engineers and scientists will now be allowed to deduct expenses incurred on post-graduate study courses from their taxable income.

The conditions of this concession are set out in section 16 of the Income Tax Act, 1969, which reads as follows:

16. (1) The following section is hereby substituted for section 16 of the principal Act:

16. "Notwithstanding the provisions of section 23(a) and (b), there shall be allowed to be deducted from the income of any person who is a dentist or medical practitioner or practises any profession referred to in paragraph (a), so much as the Secretary may allow of any expenditure incurred by such person in the circumstances contemplated in paragraph (c), if the Dental Association of South Africa in the case of a dentist, or the Medical Association of South Africa in the case of a medical practitioner, or the "Suid-Afrikaanse Akademie vir Wetenskap en Kuns" or the Associated Scientific and Technical Societies of South Africa in any other case, certifies in such form as the Secretary may prescribe that such person—

(a) if he is not a dentist or medical practitioner, is the holder of a degree in engineering or allied technology or natural sciences awarded by a recognized university on completion of a prescribed minimum period of study of not less than four academic years or the equivalent thereof and enabling the holder thereof to practise the profession of an engineer or a profession for which advanced and specialised scientific knowledge is required which relates directly to—

(i) the development or exploitation of natural resources;

(ii) mining or prospecting for minerals;

(iii) the production of pastoral, agricultural or forest produce;

(iv) the breeding or care of farm animals;

(v) any industrial process; or

(vi) the training of specialists in any branch of science or technology connected with any aforementioned profession;

(b) has practised his profession for not less than three years; and

(c) has incurred such expenditure during the year of assessment in respect of the attendance by him of any post-graduate study course approved by such body to improve his qualifications for carrying on his profession in the Republic".

(2) The amendments effected by subsection (1) shall first take effect in respect of assessments for the year of assessment ending on the twenty-eighth day of February, 1970.

From this section it is clear that the concession will only be granted if the application is accompanied by a certificate, which certificate must be either signed by the Chairman of Die Akademie or the President of the Associated Societies. In terms of the authority granted such certificates must certify that:

(i) the taxpayer concerned has practised his profession for not less than three years;

(ii) the expenditure was incurred by the taxpayer during the year of assessment indicated in the certificate;

(iii) the expenditure was incurred by the taxpayer in respect of the attendance by him of a post-graduate study course approved by the Associated Scientific and Technical Societies of South Africa or Die Suid-Afrikaanse Akademie vir Wetenskap en Kuns, as the case may be, to improve his qualifications for carrying on his profession in South Africa;

(iv) the taxpayer is the holder of a degree in engineering or allied technology or natural sciences, which degree was awarded by a recognized university,

on completion of a prescribed minimum period of study of not less than four academic years or the equivalent thereof;

- (v) that the degree referred to in (iv) above enables the holder thereof to practise the profession of an engineer or a profession for which advanced and specialized scientific knowledge is required which relates directly to—

(aa) the development or exploitation of natural resources;

(bb) mining or prospecting for minerals;

(cc) the production of pastoral, agricultural or forest produce;

(dd) the breeding or care of farm animals;

(ee) any industrial process; or

(ff) the training of specialists in any branch of science or technology connected with any aforementioned profession.

The societies concerned may also consider particular international conferences as post-graduate study courses if satisfied that they could in fact be regarded as such.

In addition to the above the certificates must disclose the following information:

- (i) the full name and address of the person to whom it relates;
- (ii) the nature of the course and the place where it was attended;
- (iii) the exact period, with commencing and closing dates, of the taxpayer's attendance of the course;
- (iv) in the case of an overseas course, in addition to the dates required under (iii) above, the dates of the taxpayer's departure from and arrival back in in South Africa;
- (v) the amounts and particulars of expenditure (including travelling expenses but excluding living expenses) incurred by the taxpayer during the year of assessment in respect of the attendance by him of the study course. The expenditure must have been incurred in respect of the taxpayer personally and not in respect of any other person such as, for example, a wife or child;

(Please note that the concession, if granted, is granted by the Secretary for Inland Revenue and not the Associated Societies nor Die Akademie and that the amount allowed to be deducted is not necessarily the expenditure actually incurred, but so much of any expenditure as the Secretary may allow. In so far as living expenses are concerned, the Secretary for Inland Revenue is prepared to allow an amount of R15 per day for the duration of the course, where the relevant course is undertaken in the United States of America, Canada or Japan. In respect of all other parts of the world (excluding South Africa) the allowance will be R10 per day. Where, however, conclusive proof is furnished by the taxpayer that his living costs, for the period of the course, exceeded the amount calculated at the abovementioned rates, a deduction in respect of the actual expenditure will be allowed. If the course is attended in South Africa at a centre other than that in which the taxpayer ordinarily resides or carries on his profession, an allowance of R8 per day will be granted. No deduction will be allowed for interest payable on moneys borrowed to meet the cost of the post-graduate course.)

- (vi) particulars of any appointment or post held by the taxpayer while attending the course and particulars of any emoluments or honoraria derived by him;

- (vii) whether or not the taxpayer was accompanied by his wife and/or children.

Application forms for these certificates are obtainable, at request, from the Associated Scientific and Technical Societies, P.O. Box 61019, Marshalltown, Transvaal.

ENGINEERING EDUCATION CONFERENCE

The fifth conference on Engineering Education will be held on the 25th, 26th and 27th January, 1971, at the University of Pretoria.

The publication of the Straszacker Report, Part III, has, once again, drawn attention to the importance of the education of engineers.

The conference is being arranged by the Federation of Societies of Professional Engineers and, to ensure that you get a letter of invitation, please contact Mrs Bresler at P.O. Box 61019, Marshalltown, Transvaal (Tel.: 834-1271).

The following papers have been arranged:

MONDAY: 25th JANUARY, 1971

PAPER A—The education of engineers:

Speaker: Dr R. L. Straszacker (A). **Introducer:** Mr J. P. Coetzee (A).

This paper will be introductory and will only give a broad outline of the work and reports of the Straszacker Commission. The paper contains a progress report to indicate to what extent the recommendations of the Commission have already been implemented and which recommendations have not yet been implemented. It also deals with the aims of engineering education (chap. 12), the motivation for improving the training of engineers—the failure rate (chap. 13)—as well as the role played by the school. It will also deal in broad outline with the general plan for engineering education.

PAPER B—Undergraduate training of engineers:

Speaker: Prof O. Whiplinger (E). **Introducer:** Prof F. G. Heymann (A) and member of SAFUES Mr E. A. G. MacKay (E).

This paper should deal with the proposals for improving undergraduate academic training: the student, educational methods, examining, the general pattern, curricula and the duration of undergraduate training (chap. 15-22). It will give particular attention to what will be necessary to introduce the necessary improvements. The whole afternoon of the first day will be devoted to the discussion of undergraduate academic training—at first in small disciplinary orientated groups, and thereafter in joint session.

TUESDAY: 26th JANUARY, 1971

PAPER C—Post-graduate Academic Training and Research:

Speaker: Prof K. Knight (E). **Introducer:** Mr C. Skeen (E).

This paper will deal mainly with chapter 24 and will, *inter alia*, pay attention to the question of continuation education.

PAPER D—Undergraduate and Post-graduate experience in engineering work:

Speaker: Mr J. G. H. Loubser (A). **Introducer:** Mr R. C. J. Goode (E) and member of SAFUES Mr J. W. Walls (E).

Undergraduate and post-graduate training will be discussed in the light of chapter 23—what engineering work, which should be of sufficient variety and satisfactory nature and standard, should embrace, and how students and graduates can acquire the necessary experience of it. The proposed central liaison committee and the proposed levy pool can be discussed, as well as the recognition which may be given to post-graduate study and research, for purposes of registration. The emphasis should fall on the possible role of the universities, the profession and industry.

WEDNESDAY: 27th JANUARY, 1971

PAPER E—The training of technicians and alternative avenues whereby the required academic standard for registration can be obtained.

Speaker: Mr S. C. M. Naudé (A). **Introducer:** Mr L. T. Campbell Pitt (E).

The emphasis should fall on the training of technicians, but the possibility of evening and part-time University training, as well as of alternative avenues of training, should be discussed. The role of the universities, the Colleges for Advanced Technical Education and industry should also receive attention.

PAPER F—Provision of personnel, facilities and the necessary finance:

Speaker: Mr A. W. S. Schumann (A). **Introducer:** Prof J. E. B. Jennings (E).

The acquisition of the funds necessary to provide the personnel and facilities which are essential if the required standard of training is to be achieved and maintained, will be discussed in the light of chapters 25 and 26.

The possibility of increased contributions by the profession and industry should receive particular attention.

Great progress will be made if the conference can result in the establishment of a sort of levy pool, to which every employer of engineers would contribute and from which realistic salaries could be paid to lecturers, thereby increasing their numbers.

THE SOUTH AFRICAN INSTITUTE OF MINING AND METALLURGY

INFORMATION ON MEMBERSHIP

The Institute was founded in 1894 as the Chemical and Metallurgical Society of South Africa. In 1904 it was reconstituted as the Chemical Metallurgical and Mining Society of South Africa and in 1956 it became the South African Institute of Mining and Metallurgy.

The objects of the Institute are to advance the science and practice of mining and metallurgy, to afford opportunities for the interchange and recording of knowledge of mining and metallurgy and to ensure high standards of professional conduct and competence.

Membership benefits include monthly issues of the *Journal* of the Institute, monthly General Meetings at which papers are read, symposia, excursions to mining and industrial concerns and the use of club facilities at Kelvin House. Technical journals received on an exchange basis are available to members at the Johannesburg Public Library. The current membership of the Institute is over 1,600.

Membership applications are accepted from suitably qualified persons and the requirements for entrance to the various grades of membership are summarised below.

Fellows shall not be less than 30 years of age, shall be university graduates in pure or applied science or shall produce evidence to the satisfaction of the Council that they have successfully completed a co-ordinated course of study in pure or applied science of at least three years' duration at an approved university or institution deemed by the Council to be of equivalent status. Members shall have been employed in senior technical positions in important mining or metallurgical undertakings for at least five years or they shall have practised as mining or metallurgical consultants for at least five years. They shall be practising their profession at the time of application.

Entrance fee R10.00, Annual subscription R17.00.

Letters of designation: F.S.A.I.M.M.

Members shall be not less than 25 years of age and shall be university graduates in pure or applied science, or shall have successfully completed co-ordinated courses of study in pure or applied science of at least three years' duration. They shall have been engaged in work of an approved technical character in the mining or metallurgical industries, of which not less than two years shall have been in positions of responsibility. A candidate shall be practising his profession at the time of his application.

Entrance fee R8.00, Annual subscription R15.00.

Letters of designation: M.S.A.I.M.M.

Associates shall be not less than twenty-five years of age, and shall have been engaged in positions of responsibility in, or associated with, the mining or metallurgical industries for periods of not less than three years. If, however, the candidate for admission to the higher grade of Associate, is at the time of his application, already a Student, he need satisfy the Council only that he is, at the time of his application, engaged in a position of responsibility in or associated with the mining or metallurgical industries. In all cases the applicants shall satisfy the Council that they are fit and proper persons to become Associates.

Entrance fee R8.00, Annual subscription R15.00.

Graduates shall be not less than 21 years of age and shall be university graduates in pure or applied science, or have completed co-ordinated courses of study in pure or applied science of at least three years' duration at an approved university or institution. They shall not remain Graduate members after attaining the age of 30 years without the permission of Council.

Entrance fee R2.00, Annual subscription R10.00.

Students shall be persons not less than 18 years of age who are being educated or trained in a manner approved by the Council, to occupy a technical position in or associated with the mining or metallurgical industries and who, furthermore, shall not have attained the qualification required for a higher grade of membership.

They may remain Students until they have obtained the necessary qualifications for transfer to a higher grade of membership, but not after the end of the Institute's financial year in which they attain the age of 28 (twenty-eight) years. They shall then transfer to a higher grade to retain membership of the Institute. The Council may relax the provisions of this clause in such cases as it considers appropriate.

Entrance fee nil; Annual subscription R3.00.

Other. The Council has the power to elect to the grade of Fellow or Member, candidates who may not fulfil all the requirements for entrance to these grades but whose status, professional achievements and practical experience in mining or metallurgy justify such election.

Applications. Requests for membership application forms should be addressed on the attached form to the Secretary, South African Institute of Mining and Metallurgy, P.O. Box 61019, Marshalltown, Transvaal.

The Secretary,
South African Institute of Mining and Metallurgy,
P.O. Box 61019,
MARSHALLTOWN,
Transvaal, Republic of South Africa.

Kindly send a membership application form (Student/Other)* to:

Signed.....

*Please delete whichever is not applicable.