Proceedings

NOVEMBER GENERAL MEETING

The November General Meeting of the Institute was held in Kelvin House, Johannesburg, on Wednesday, 18th November, 1970, at 4.00 p.m.

V. C. Robinson (President) was in the Chair.

There were also present 30 Fellows, including J. K. E. Douglas, R. C. J. Goode, Dr J. P. Hugo, Prof J. de V. Lambrechts, D. G. Maxwell, Prof R. P. Plewman, Dr M. D. G. Salamon, P. W. J. van Rensburg, L. W. P. van den Bosch (Council Members), R. E. Burnton, S. Craib, D. de Villiers Oxford, J. C. Fritz, G. W. Gray, G. H. Henderson, S. D. Hill, C. H. Kruger, B. Leach, C. S. MacPhail, D. J. Molony, W. G. Pyne Mercier, R. A. Scott, M. v. R. Steyn, I. E. van Aswegan, A. D. Vos, J. M. Vosloo and N. Zolezzi.

Four Members, including I. G. Evans, R. W. Shearer, W. Wilson.

One Associate: P. M. C. Wilson.

Four Students: H. G. Albertyn, J. T. Davies, P. G. Henderson and P. J. Pretorius.

Fourteen Visitors, including S. R. Barker, F. H. Deist, Dr de Jager, L. F. Duvel, P. du P. Kruger, B. D. Maree, B. R. Meyer, R. Redmond, J. Rietief, A. W. S. Schumann, Mrs A. W. S. Schumann, T. S. Stoffberg, C. A. Visser and R. van der Walt.

Secretary, D. C. Visser.

Total present 55.

The President: "Gentlemen, I would like to welcome all members of the Institute who are present, and visitors, and I would like specially to welcome any members of the Suid-Afrikaanse Akademie who are present this afternoon."

OBITUARIES

The President: "Before starting on the agenda the first item, of course, is unfortunately obituaries and it is my sad duty to announce the death of the following:

I would like to start with a person who is not actually a member of the Institute but who, in his capacity as President of the Chamber of Mines, was Honorary President of this Institute three times and I refer, of course, to Mr Herman Calderwood Koch who passed away last Saturday.

Then I would refer to Richard Beaumont Tasker, Life Fellow, who joined this Institute in 1932, and who died on the 22nd of October, 1970.

Then, lastly, Mr Jean Francois du Plessis, a student, who joined the Institute on the 19th June, 1968, and passed away on the 11th of November, 1970, as the result of an accident. Mr du Plessis was to have received a Student Prize today for his paper entitled, 'Displacements and stresses in the vicinity of a horizontal longwall'. We were all most upset to learn of his death last week, and we are now going to make arrangements to hand his prize to his widow on a suitable special occasion.

As a mark of respect to the memory of the deceased, and in sympathy with the bereaved, I would ask you all

to stand and observe a few moments' silence. Thank you."

CONFIRMATION OF MINUTES

The President: "May we confirm the minutes of the monthly general meeting which was held on 16th September, 1970, as published in the November *Journal*?"

Agreed.

MEMBERSHIP

The President: "I have much pleasure in announcing that the names of the undermentioned candidates having been published in accordance with By-Law 5.2.2, Council has elected them to membership of the Institute in the following grades:

Fellow: Ronald White Ballantine.

Members: Jan Johannes Hertzog Viljoen, Agge Petrus Rutgerus van der Meer, Peter Anthony Reynolds, Ernest Esdaile Leyde, Hans Lutz Klingmann, Ronald Archer.

Graduates: Trevor Stanley Schultz, Thomas Cochrane Meiklejohn, Leslie Harold Heyman, Dennis William Bosch, Sydney Stuart Absolom.

Associates: Roderick James Vermaak, Theodorus Daniel van Wyk, Michael Osmond Savignac Stedman, Leslie Owen Raymer, Bryan Arthur McKay, Leon Ellis Finlay Leask, Dudley Graham Lovedren Hall, John Arthur Gibbon, Richard Reginald de Villiers, Carel Frederik Boshoff.

Students: Frederik Wilhelm Christian Coetzer, Phillippus Johannes de Wit, Jan van der Merwe Grimes, Davood Khareghani, Jan Wolvaardt Oberholzer, Johannes Lodewikus Pretorius, Pieter Jacobus Strobos, Herbert Gerald Waldeck.

MEMBERS TRANSFERRED TO A HIGHER GRADE

From Associate to Fellow: Howard Mitchell Wells. From Associate to Member: Ernest John Dominy.

"I welcome the newly elected members to the Institute and congratulate the members who have been transferred to a higher grade."

AWARDS

The President: "It is with very great pleasure that I can announce that Council has agreed to make the following awards for papers presented to the Institute during the year ended July, 1970.

Gold Medals to Prof Plewman and W. D. Ortlepp for their paper entitled 'The development and application of a digital computer method for the solution of strata control problems' written jointly with F. H. Deist (Visitor) and presented in September, 1969.

A Silver Medal to Dr Finkelstein for his paper entitled 'The influence of sulphydryl and cationic flotation reagents on cyanidation of native gold' written jointly with Dr K. G. Ashurst (Visitor), and presented in June, 1969, at the Symposium on the Recovery of Pyrite.

May I congratulate these gentlemen on the high honour they have won with their papers.

As new medals are in the process of being designed, the actual awards will be made at a later date to be announced to members.

Student Prizes: Here I think we should congratulate not only the students but their universities as well on the very high standard of papers submitted for the Student Prize Competition. It gives me great pleasure to announce that the following students have been awarded prizes, and I would ask them to come up as I announce their names.

- Mr J. T. Davies for his paper entitled, 'Electrolytic extraction from powder metallurgical compounds'.
- Mr H. G. Albertyn for his paper, 'The utilisation of the critical path method in the practical mining situation'.

Then Mr D. I. Watson who wrote a paper entitled, 'Measurement of the electrical resistance of components involved in the manufacture of high-carbon ferrochromium'. Mr Watson, unfortunately, can't be here today, so we shall have to send his award to him.

And then, of course, as I have said, Mr du Plessis's award will be handed to his widow on a suitable occasion."

PAPER FOR PRESENTATION

Die President: "Here, ons kom nou by die vernaamste item op ons agenda. Dit is vir my 'n genoeë om mnr A. W. S. Schumann te vra om sy referaat te lewer. Mnr Schumann is aan ons almal as Hoofbestuurder, Afdeling Onedele Minerale van die General Mining and Finance Corporation Limited, goed bekend. Hy was onlangs as Voorsitter van Trans-Natal Steenkoolkorporasie, Msauli Asbes en ander maatskappye benoem. Hy is tans lid van die Goudprodusentekomitee, en was in die verlede Voorsitter van die Steenkoolmynekomitee van die Kamer van Mynwese.

Hy is 'n besoeker aan ons Instituut maar is ook 'n volle lid van die Instituut in Londen."

Mnr A. W. S. Schumann lewer sy referaat "Die gebruik en bewaring van steenkool in Suid-Afrika".

Die President: "Baie dankie, mnr Schumann, vir u referaat wat sover ek weet die eerste is wat in Afrikaans by hierdie Instituut gelewer was. Die lede het met groot belangstelling na u bespreking van die onderwerp

geluister aangesien brandstof op die oomblik van die allergrootste belang vir die Republiek is.

So many of us are so often in the habit of thinking and talking airily about the massive coal measures in South Africa, but very few of us really have ever seriously considered — much less investigated — the actual problem of their evaluation in terms of tonnage, length of life to extinction, what will take their place, and so on. You, Mr Schumann, have focussed attention on this, and I believe that in your paper there are the possibilities for a great deal more work on this problem. I am sure that there are among us this afternoon those who want to refer in their contributions to alternative sources of energy and related problems which you have opened up so very well.

Again, thank you very much for a most interesting paper.

Mr Maunders, of the Atomic Energy Board, who is to give us a contribution, is probably a little diffident this afternoon because he is sitting right next to his Vice-President whom we welcome here. In case you don't know him, he is also our Vice-President, Dr Hugo. I would like you to show your approbation of the fact that he has been elevated to this rank."

Messrs G. H. Henderson, F. W. Stutterheim (read by Mr Stoffberg), and E. J. Maunders then contributed to the paper. (These contributions will appear in a later issue of the *Journal*.)

Mnr B. D. Maree: "Mnr die President, ek wil graag namens die Akademie u Instituut bedank vir die geleentheid om hier saam te vergader. Daar was 'n soortgelyke geleentheid in 1966 toe die Akademie ook 'n gesamentlike vergadering gehad het met u Instituut.

Baie dankie, mnr die President, vir die samewerking."

CONCLUSION

The President: "Dankie mnr Maree. Gentlemen, this brings us to the end of our session. I wish to thank members and visitors for their attendance, and now declare the meeting closed."

The meeting closed at 5.25 p.m.