

necessity for conditioning the refractory diamonds, large quantities of gangue were being recovered with the diamonds, producing unduly large quantities of concentrates for final sorting. It can be seen from the appended tables that, without the improvements brought about, final hand sorting would have become a mammoth task.

The development of the X-ray machine has been one of the greatest break-throughs in diamond recovery, but further developments in this field can be expected. Lines of research being investigated include means of differentiating between diamond and zircon fluorescence and an X-ray machine capable of handling feed at the rate of 100 tons per hour.

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Proceedings

SPECIAL GENERAL MEETING AND FEBRUARY GENERAL MEETING

A Special General Meeting, followed by the February General Meeting of the Institute, was held in Kelvin House, Johannesburg, on 18th February, 1970, at 4.30 p.m.

Mr J. K. E. Douglas (President) was in the Chair.

There were also present 24 Members: Messrs A. R. C. Fowler, R. C. J. Goode, Prof D. D. Howat, Messrs D. G. Maxwell, J. A. Nixon, P. W. J. van Rensburg (Council Members), C. A. Border, J. C. Fritz, E. K. Gibson, P. L. Grimbeek, S. D. Hill, D. A. Immelman, P. J. Lloyd, M. Mroost, C. S. Macphail, D. G. Malan, W. D. Ortlepp, R. S. Pearson, A. J. H. Pole, Dr W. S. Rapson, L. W. P. van den Bosch, R. A. von Maltitz and Dr A. Whillier.

Eight Associate Members: Dr M. I. Brittan, Messrs J. Brett, I. E. Clarke, C. L. de Jongh, W. B. Evans, D. Loubser, R. C. More O'Ferrall and G. R. Still.

One Graduate: Mr T. J. Kotze.

One Student: Mr J. A. Cruise.

Nine Visitors: including Dr N. G. W. Cook, Messrs M. D. Labuschagne, A. Nicoll, S. Sadowski, Dr A. M. Starfield and Dr H. Wagner.

Secretary: Mr D. C. Visser.

Total present: 45.

SPECIAL GENERAL MEETING

The President: "You will have received notices of the Special General Meeting and I declare it duly constituted. In keeping with the trend of overseas and local institutes, your Council recommends that we should change our membership classification as indicated in the notes of the meeting. The new grades are proposed to replace those presently in the Constitution and By-Laws.

In terms of Clause 4.8 of the Constitution a special general meeting must be held for the purpose of considering and, if approved, adopting with or without amendments, the revision of the undermentioned clauses of the Constitution, which Council now recommends should read as follows.

Clause 2.2 'Corporate Members shall comprise the grades of Honorary Life Fellow, Fellow and Member', these being the equivalent of Honorary Life Member, Member and Associate Member.

Clause 2.6. 'Non-Corporate Member shall comprise the grade of Honorary Fellow, Graduate, Associate and Student.'

Are there any questions in regard to this proposal? If not would someone propose that these clauses be amended and adopted?"

Proposer: Mr A. J. Nixon.

Seconder: Prof D. D. Howat.

The motion was then adopted.

The President: "It is recommended that Clause 2.15 should read, 'A Corporate of the Member of the Institute shall be entitled to use the following authorised letters designating the grade of Membership in the Institute.* Honorary Life Fellow and Fellow, F.S.A.I.M.M. and Member, M.S.A.I.M.M.' Previously we used the letters M.S.A.Inst.M.M. and your Council considered that we should adopt the simpler lettering. Could I ask someone to propose that this amendment be adopted?"

Proposer: Mr R. C. J. Goode.

*Members are informed that the Institute has been recognised as a Professional Engineers' Institute and all engineers registered with the Council are now requested to use the suffix Pr.Eng. immediately after their names. The correct form in Afrikaans is Pr.Eng.

Seconder: Mr P. W. J. van Rensburg.

The motion was then adopted.

The President: "I declare that the business of this meeting is now complete, and declare the meeting closed."

ORDINARY GENERAL MEETING

OBITUARY

The President: "It is my sad duty to announce the death of the following member of the Institute. C. S. McLean, Honorary Life Member, who joined the Institute in July, 1924, and passed away on the 24th of January, 1970. Mr McLean was, undoubtedly, one of our most distinguished mining engineers who reached the very top of his profession.

During the many years in which he held his high position in our mining industry he always remained a very good friend of this Institute and, on many occasions, gave us wise advice and a helping hand. We deeply mourn his passing and record our sincere appreciation of all he did for us.

We extend our sympathy to his wife and family and, as a mark of respect, I would ask you to stand and observe a few moments silence."

MEMBERSHIP

The President: "I have 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:

Members: James Ainsworth, Robert Rampton Poeter.

Associate Members: Peter Gunary Morris May, Derek Hunter.

Graduates: Steven Lee Crouch, John Shipp.

Students: Desmond Tom Bell, Colin Henry Obray.

MEMBERS TRANSFERRED TO A HIGHER GRADE

From Graduate to Associate Member: Ralf Jürgen Schmitt.

From Student to Graduate: Jean-Marc Kaltenrieder, Ferdinand Richard Bekink, André Julius Michau.

From Affiliate to Graduate: Neville Charles Black.

GENERAL BUSINESS

The President: "Are there any matters to raise under the heading of General? If not, we will proceed with the

next item on the agenda which is the presentation of tonight's paper."

PAPER FOR PRESENTATION

The President: "Mr More-O'Ferrall, may I call on you to deliver the paper entitled 'The application of the electrical resistance analogue to mining operations' written jointly with Mr J. W. Wilson?"

After the presentation of the paper the President said: "Gentlemen,

The paper presented this afternoon described very adequately an outstanding advance in mining techniques and one which will undoubtedly arouse world-wide interest. This is another example of the ingenuity of our mining engineers in solving and reducing the problems associated with deep level mines. It is a product of the valuable scientific research, which has been carried out by a number of distinguished scientists and engineers over the last few years, into understanding more about rock mechanics at great depth. I think our forebears of the early mining days would perhaps have been astonished at the complexities of mining today and might even have scorned a technique such as we have had described as having nothing to do with practical mining. However, I believe it is being adequately demonstrated on our mines that this technique has in fact very much to do with practical mining and is assisting, to an increasing extent, in planning for great safety underground. The authors are to be congratulated in presenting this subject in such a competent manner."

Dr M. D. G. Salamon, Messrs R. S. Pearson, T. J. Kotze, C. L. de Jongh, W. D. Ortlepp and Dr H. Wagner then contributed to the discussion. (These contributions will appear in a later issue of the *Journal*.)

PAPERS FOR DISCUSSION

The President: "Is there anyone who wishes to contribute to any of the papers listed as open for discussion? We seldom receive contributions to these papers and the attention of members is drawn to the fact that they are open for contribution for several months after presentation."

CONCLUSION

The President: "In conclusion I would like to thank members and visitors for their attendance and declare the meeting closed."

The meeting closed at 6.10 p.m.

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