

Superconductors in Power Plants

SIR,—In my article discussing engineering limitations of superconductors in power plant (*Nature*, 219, 1317; 1968) I said that excitation of the International Research and Development 3,250 horse-power superconducting homopolar machine could be achieved with conventional conductors and for the £40,000 cost of helium refrigeration plant.

I regret that an analysis which led me to this conclusion proves to be wrong and I wish both to withdraw this comment and to apologize for any confusion that it may have caused.

Yours sincerely,
K. J. R. WILKINSON

The General Electric Co. Ltd,
Hirst Research Centre,
Wembley, Middlesex.

Evaluation of 'Alcotest R80' Reagent Tubes

SIR,—Although the design and execution of their study of the 'Alcotest'¹ were impeccable, I suggest that Messrs Day, Muir and Watling are somewhat unfair to the device in their discussion and conclusions.

They state that their aim was "to evaluate the use of the 'Alcotest' tubes as a means of enforcing the 80 mg limit" and suggest that "it would be better for a blood test to be taken". In fact, of course, a blood test is always taken if the two 'Alcotest' results are positive, and the 'Alcotest' is not used for enforcement but for screening purposes only, as suggested by the OECD report that they quote.

Their conclusion that, even as a screening test, the 'Alcotest' would be unacceptable is open to question. The usefulness of a screening test depends at least as much on the circumstances under which it is used as on its accuracy and precision. Their figures suggest that the 'Alcotest' allows very few people over the limit to escape, which is obviously desirable, for the 80 mg limit is well above the levels reached in normal social drinking². Whether the relatively high false positive rate is too great a price to pay for this is a matter of opinion. It could obviously be reduced by making the test less sensitive, but only at the cost of allowing a larger proportion of the guilty to escape. Moreover, it is likely that the test is less sensitive in the hands of the police than when used by careful experimenters working in the laboratory, because, apart from possible differences of reading criteria, almost all technical errors lead to a low result³.

The test might, however, be made more precise by providing for an end tidal breath sample instead of mixed expired air as at present³. A simple and inexpensive device for doing this has been described⁴, but because it requires the subject to give a larger breath sample it increases the probability of a subject claiming to be, or being, genuinely unable to give a proper sample.

Although to have a serious charge hanging over one's head for up to 3 weeks is an unpleasant experience, the persons concerned are by no means absolutely guiltless. To have a sustained blood alcohol even as low as 30 mg they must have consumed a substantial amount of alcohol, and they must then have committed a moving traffic offence or have been involved in an accident. The reduction in fatal and serious accidents that has occurred since the Act came into force has been such that this small defect in its administration seems trivial by comparison.

Yours faithfully,
B. M. WRIGHT

National Institute for Medical Research,
Mill Hill,
London NW7.

¹ Day, M., Muir, G. G., and Watling, J., *Nature*, 219, 1051 (1968).

² Wright, B. M., *Brit. Med. J.*, 1, 814 (1963).

³ Grosskopf, K., *Alcohol and Road Traffic*, BMA, 281 (1963).

⁴ Wright, B. M., *J. Physiol.*, 184, 66 (1966).

University News

Dr K. Simkiss, Reading, has been appointed to the chair of zoology tenable at Queen Mary College, London. The title of professor has been conferred on the following: Dr A. G. Davies, chemistry, in respect of his post at University College; Dr P. J. Lawther, environmental medicine, in respect of his post at St Bartholomew's Hospital Medical College; Dr A. P. Willmore, physics, in respect of his post at University College.

Appointments

Professor W. A. Hiltner, professor of astrophysics at the University of Chicago, has been elected president of the Association of Universities for Research in Astronomy.

Mr G. H. Caldwell has been appointed chief of the Water Survey of Canada, a division of the Department of Energy, Mines and Resources.

Mr J. Blears, chief engineer of the Scientific Apparatus Department, GEC-AEI, has been appointed first permanent director of industrial studies in the University of Liverpool.

Dr R. B. Tibby has been appointed director of the Catalina Marine Science Center in the University of Southern California.

CORRIGENDUM. In the communication "New Method to Limit Abundance of Cosmic Ray Quarks" by L. Marshall Libby and F. J. Thomas (*Nature*, 219, 711; 1968) the second equation in appendix 4 should read $1/T = (4/3)$

$(\omega^3 e^2 / h^3 c^3) r^2 = \frac{1}{(3 \times 10^{-12} \text{ s})}$. The tenth line from the bot-

tom of the same appendix should read "For $Q^{-2/3}$, $Q^{-4/3}$, $Q^{-5/3}$, . . . the chains may be shorter".

ERRATUM. In the advertisement for George T. Gurr (*Nature*, August 24, 219, ix; 1968) the address should read 14 Carlisle Road, The Hyde, London, NW9. Tel.: 01-205-5432.

ERRATUM. In the issue of August 10 (*Nature*, 219, xi; 1968) the price of the book *Positive Feedback* by John Milsum, published by Pergamon Press, Ltd, was incorrectly given as 52s. It should be 52s. 6d.

ERRATUM. In Fig. 1 of the article "Significance of Sex Chromosome Derived Heterochromatin in Mammals" by J. L. Hamerton (*Nature*, 219, 910; 1968) the words "cortical stimulation" and "medullary stimulation" immediately under the XX and XY chromosomes have become transposed. Medullary stimulation refers to the XY gonad and cortical stimulation to the XX gonad and not as shown. On page 913 the last sentence of paragraph 4 should read ". . . and it may be that, like the *t*-alleles in the mouse^{44,45}, it should be considered as a short chromosome region rather than as a single gene".

ERRATUM. The opening sentence of the communication, "Rosette Forming Cells in Non-immunized Mice" by R. Laskov (*Nature*, 219, 973; 1968), should read "Antibody producing cells can be detected . . .".

ERRATUM. In the communication, "Particles associated with Australia Antigen in the Sera of Patients with Leukaemia, Down's Syndrome and Hepatitis" by Manfred E. Bayer, Baruch S. Blumberg and Barbara Werner (*Nature*, 218, 1057; 1968), the second sentence of the sixth paragraph should read "The antiserum produced in the rabbit was prepared by immunization with the serum of a patient (C. de S.) suffering from chronic lymphocytic leukaemia; subsequently the antiserum was absorbed with the sera of normal individuals".