

## SCIENCE NOTES AND NEWS

### ON THE PROOF OF THE INVERSE SQUARE LAW AND THE MEASUREMENT OF H

In a communication, Mr. V. R. Singal, Professor of Physics, Gordon College, Rawalpindi, has drawn attention to the common errors in the experimental verification ( $\tan \theta_A / \tan \theta_B = 2$ ) of the Gauss inverse square law using a deflection magnetometer. He suggests an alternative method of verifying the law. It may be shown that  $\tan^2 \theta_A \tan^{3/2} \phi_B = 2$ , where  $\phi_A$  is the angle between the x-axis and the linear graph between  $(d/\tan \theta_A)^{1/2}$  and  $d^2$  for the A position and  $\phi_B$  is the angle between the x-axis and the linear graph between  $\tan^{-2/3} \theta_B$  and  $d^2$  for the B position. Experimental tests show that this relation gives values close to 2. Also  $M/H$  may be calculated from the relation  $\frac{1}{2} \tan^2 \phi_A = \tan^{-8/2} \phi_B = M/H$ . The moment  $M$  of the magnet and the horizontal intensity  $H$  of the earth's magnetic field may be determined if  $MH$  is found by the oscillation method.

### UNIVERSITY OF MADRAS: "THE MAHA-RAJA OF TRAVANCORE-CURZON PRIZES" FOR 1947-48

Two prizes, one in each of the following groups of subjects; will be awarded by the Syndicate for the best essay or thesis written by any Graduate of the Madras University on any topic dealing with one of the subjects mentioned in the following two groups:—

(A) Chemistry, Biochemistry, Agricultural Chemistry. (B) Botany, Zoology, Physiology.

The value of each prize is Rs. 250.

The essay or thesis must be the result of the personal investigations of the author, and must contain clear evidence of independent and original research. Essays or theses which consist only of criticisms, compilations or the history of a subject, unaccompanied by the results of personal, independent, original research will be ineligible for the prize.

The work submitted should not have formed the basis of a work for which any prize or a degree had been previously awarded.

The prize will not be awarded to the same applicant on a second occasion.

Competitors must submit their theses so as to be received by the Registrar not later than 1st March 1948.

### COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

The Government of India have decided to continue the existing constitution for the Council of Scientific and Industrial Research, in view of the unanimous opinion of the members representing Industry and Science on that body. They have also decided to abolish from April 1, 1947, the Industrial Research Utilisation Committee which was an Advisory Body to assist the Council.

The following have been nominated to the Governing Body of the Council for a period of three years from April 1, 1947: (1) The Hon'ble Member in charge of Industries and Supplies (*President*); (2) Sir S. S. Bhatnagar, Director, Scientific and Industrial Research; (3) Sir Arthur Waugh, Secretary to the Department of Industries and Supplies; (4) Mr. A. K. Chanda, Financial Adviser; (5) Sir J. C. Ghosh, Bangalore; (6) Prof. M. N. Saha, Calcutta; (7) Sir Shri Ram, New Delhi; (8) Sir A. Dalal, Bombay; (9) Mr. J. R. D. Tata, Bombay; (10) Sir Ghulam Mohammad, Bombay; (11) Dr. Nazir Ahmad, Indian Tariff Board, Bombay; (12) Mr. Kasturbhai Lalbhai, Ahmedabad; (13) Mr. A. F. Hirtzel, M.L.A. (Central); (14) Sir A. L. Mudaliar, Madras; (15) Mr. H. Sitaram Reddy, Minister for Industries, Madras; (16) Mr. G. D. Birla, New Delhi; (17) Mr. N. V. Gadgil, M.L.A. (Central); (18) Dr. K. A. Hamied, Bombay; and (19) Sir Mohammad Yamin Khan, M.L.A. (Central).

### BOARD OF SCIENTIFIC AND INDUSTRIAL RESEARCH

The following have been nominated to the Board of Scientific and Industrial Research for a period of three years from April 1, 1947: (1) The President, CSIR; (2) Sir S. S. Bhatnagar; (3) Dr. B. C. Roy, Calcutta; (4) Dr. N. N. Law, Calcutta; (5) Mr. P. F. S. Warren, Calcutta; (6) Dr. Jivaraj N. Mehta, Bombay; (7) Dr. Nazir Ahmad; (8) Sir Rahimtoola Chinoy, Bombay; (9) Sir J. C. Ghosh; (10) Dr. M. Qureshi, Hyderabad (Dn.); (11) Sir K. S. Krishnan, Allahabad; (12) Mr. Kasturbhai Lalbhai; (13) Prof. M. N. Saha; (14) Sir Shri Ram; (15) Sir Arthur Waugh; (16) Sir A. Dalal; (17) Sir Ghulam Mohammad; (18) Scientific Adviser to the G.H.Q., New Delhi; (19) Sir Teja Singh Malik, Member, F.P.S.C.; (20) Sir C. V. Raman, Bangalore; (21) Dr. H. J. Bhabha, Bombay; and (22) Mr. D. N. Wadia, Mineral Adviser, W.M. & P. Department.

### AN INTERNATIONAL CONGRESS ON THE EXPLOITATION AND UTILISATION OF WOOD

An International Congress on the exploitation and utilisation of wood was held in Paris from September 16th to 30th, 1946, according to For. Abstracts, under the auspices of the Services de la Production Forestiere. Special attention was given to the exploitation of copice for firewood. France at present produces only one-quarter of her pulpwood needs, but has a large surplus of small firewood which could be used for the manufacture of cardboard, etc. The utilisation of firewood for charcoal manufacture and modern methods of heating was also considered.



## 17TH INTERNATIONAL PHYSIOLOGICAL CONGRESS

The 17th International Physiological Congress will be held in Oxford, England, July 22-25, 1947, under the presidency of Sir Henry Dale. A tentative programme may be obtained from the Secretary, E. W. Geidt, University Laboratory of Physiology, Oxford. Physiologists in London plan to entertain members of the Congress from abroad, for a few days, immediately after the Oxford meeting. It is hoped that accommodation can be arranged for those visiting members who wish to take advantage of this invitation to visit Physiological Laboratories and Medical Institutes in London. It is hoped also that it may be possible to arrange for small parties of members to visit laboratories in certain other towns during the week following the Congress.

## THE INTERNATIONAL UNION OF CHEMISTRY

The International Union of Chemistry is being revived within a broader framework, and meetings of the world-wide scientific organisation will be resumed with a world chemical congress and conference in London, July 1947. M. T. Bogert of Columbia University will be president. During meetings recently held at London, a temporary bureau has been set up (R. Delaby, Paris, Gen. Secy.), which will prepare the congress and conduct the affairs of the Union for the time being. Many of the commissions of the Union have been active in spite of the war. At present these are as follows:—(1) Analytical reagents and reactions, (2) Atoms, (3) Atomic weights (Annual Tables), (4) Fats, (5) Finances, (6) Nomenclature, Inorganic, (7) Nomenclature, Organic, (8) Nomenclature, Biologic, (9) Physical constants, (10) Physical chemistry data, (11) Physical chemistry standards, (12) Physical chemistry symbols, (13) Radio-active constants, (14) Thermochemistry, (15) Weston File. The creation of three additional commissions is now under study, viz., (16) Macromolecular compounds, (17) Determination of small quantities of toxic substances in industrial atmospheres, and (18) Normalisation of laboratory materials.

## THE 13TH INTERNATIONAL CONGRESS OF ZOOLOGY

The 13th International Congress of Zoology will be held in Paris during 1948. E. Fisher-Piette, the General Secretary, Lab. de Malacologie, 55, Rue de Buffon, Paris V, urgently asks the directors of all zoological institutions to send him a complete list of the members of their staff in order that he will be able to inform all colleagues well about the Congress.

## INDIAN INSTITUTE OF METALS

An Indian Institute of Metals has been formed with a view to developing metallurgical research and to promote the study of metallurgy in India. This is the first Metallurgical Institute of its kind in India and will be organised

and run on lines of the British and American Metallurgical Institutes. Sir J. J. Gandhi, Director, Tata Iron and Steel Company, has been elected President of the Governing Council and Dr. D. P. Antia, Metals Department Officer, Director-General of Industries and Supplies, Government of India, has been elected Honorary Secretary.

## A NEW COMET

The discovery of a new Comet was announced on the 1st of April by Dr. J. S. Paraskevopoulos, Director of the Borden Station of the Harvard Observatory at Bloemfontein in South Africa.

The Comet was first spotted on March 24th in the Constellation of Centaurus moving southwards across the line between the star Alpha, Centaurus and Southern Cross. Two days later it was recorded at the Cardova Observatory in Argentina. It is at present in the Constellation of Chameleon.

## ATOMIC RESEARCH

It is learnt that Sir S. S. Bhatnagar, Director of the Council of Scientific and Industrial Research, and Dr. H. J. Bhabha, Director of the Tata Institute of Fundamental Research, have been deputed by the Government of India to investigate the possibility of developing atomic energy from the monazite sands of Travancore.

## NATIONAL PHYSICAL LABORATORY

It has been announced that Sir K. S. Krishnan has been appointed Director of the National Physical Laboratory at New Delhi.

## NATIONAL CHEMICAL LABORATORY

We understand that Prof. S. Siddique has been appointed Director of the National Chemical Laboratory, the foundation of which was laid at Poona by the Hon'ble B. G. Kher on the 6th of April.

## HOWARD MEDAL—1946

Mr. A. C. Dey, of Chemistry and Minor Forest Products Branch, Dehra Dun, has been awarded the Howard Medal for 1946 at the annual Convocation of the Forest Research Institute and Colleges, presided over by the Hon'ble Dr. Rajendra Prasad, Member for Agriculture and Food, Government of India, in recognition of his contribution to the advancement of research at the Forest Research Institute. This award specifically relates to Mr. Dey's meritorious research work on Ocimum.

## ERRATA

Vol. 16, No. 1, p. 34, line 4—Review of the book *An Introduction to Textile Bleaching*: The price of the book is 32sh. net and not 23/- as printed. Line 13: for 'what' please read 'which'.