

SCIENCE NOTES AND NEWS

World Scientific Conference

The International Scientific Conference, devoted to the discovery by the Indian Physicist, Sir C. V. Raman, of a new method of analysing the chemical composition of substances by light rays, was opened at Bordeaux on April 5th. Sir C. V. Raman was present at the Conference which was also attended by Prof. Max Born, of Edinburgh University.

Indian Central Cotton Committee

The Government of India are sending a delegation consisting of Dr. V. G. Panse, and Messrs. R. G. Saraiya, C. S. Patel, and N. G. Abhyankar to the Seventh Meeting of the International Cotton Advisory Committee to be held at Cairo from April 1st to 8th.

The International Cotton Advisory Committee is expected to review the world cotton situation with special reference to production, utilisation and trade and to discuss the question of the progress and efficiency in production, expanding the use of cotton products, etc.

Dr. Gilbert Fowler

Dr. Gilbert Fowler of Bangalore, S. India, has been elected an Honorary Fellow of the Institution of Sanitary Engineers in recognition of his services to sanitary science, particularly in connection with the activated sludge process of sewage purification.

He has also been elected an Honorary Member of the Engineers' Club of Manchester, England, of which he is a foundation member.

Watumull Dental Fellowship

The Selection Board of the All-India Dental Association for the Watumull Dental Fellowship for the year 1948 have selected Dr. Baij Nath Mehra of the Calcutta Dental College. He will now proceed for two years' training in the United States of America.

Dr. M. R. Jayakar

Dr. M. R. Jayakar has been appointed the first Vice-Chancellor of the Poona University for a period of two years.

The Entomological Society of India

The following have been elected as the Office-bearers of the Society and the Indian Journal of Entomology for the year 1948:—

President: Dr. H. S. Pruthi.

Editors for 1948-50: Dr. K. B. Lal, Dr. H. S. Pruthi, Mr. R. B. Ramachandra Rao, Mr. B. C. Basu, Dr. K. N. Trehan, Dr. N. C. Chatterjee, Dr. E. S. Narayanan, Mr. M. C. Cherian, Dr. I. M. Puri.

Prevention of Malaria

The Harvard scientists reported that they have opened the road to prevention of malaria by discovering a certain blood component which is vital to the growth and reproduction of the disease-causing parasite.

Doctors Ralph McKee and Q. Geiman of Harvard Medical School, suggested that the neutralisation of the component might eventually eliminate the tropical disease by depriving the malaria parasite of nourishment and halting its

reproductive cycle. They identified the subject of their research as methionine, one of the amino acid components of protein which is present in blood plasma.

A study of metabolism and feeding habits of the malaria parasite showed that the disease-producing organism feeds on methionine and other compounds, found in plasma as well as on red blood cells which plasma surrounds. They said they started to investigate other compounds in their search for the method of neutralising such blood components in a way which would prevent the malaria parasite from drawing sustenance from them.

Atomic Energy in India

The Prime Minister of the Indian Union introduced the Atomic Energy Bill in the Dominion Parliament on March 23rd.

Under the Bill, Government will acquire powers to control the development of Atomic energy in India and the disposal of the relevant raw materials so that these may be used for the advantage of the people as a whole.

The provisions of the Bill are drafted on the lines of the Atomic Energy Act, 1946, as obtaining in the United Kingdom.

Blister Blight in Ceylon

Blister Blight, tea disease, which appeared on an estate in the Dolosbage area of Ceylon late in October 1946, has now spread to most of the tea districts in the Island. Climatic conditions in the Island are said to be much more favourable to its spread than in North-East India where it is reported to be existing ever since 1858. The disease has reduced, according to the latest estimate, the total production of tea in the Island by ten per cent., but the Government which is wide awake to the situation, has under contemplation several measures to check the further spread of it.

Blister Blight caused by Fungus *Exobasidium Verans*, Masee, is mostly spread during the period of pruning when young buds and shoots are most susceptible to infection. The incubation period of the disease is said to be about three weeks.

Dr. Roland V. Norris, Director of the Tea Research Institute in Ceylon, in his annual report for 1946, published recently, says, "Bushes in North-East India are out of plucking during the winter months and are pruned during that period. In consequence, recovery from pruning during which the young buds and shoots are most susceptible to infection takes place at a time when conditions are most unfavourable to the survival of the fungus spores responsible for spreading the disease. These spores are produced in enormous numbers and it is fortunate indeed that in contrast with many other varieties of spores, they are relatively susceptible to, and their visibility greatly reduced by high temperatures and dry conditions. It may safely be assumed that it is largely due to this factor that the disease, in the ninety years during which it has been recognised, did not spread at an earlier date to South India or Ceylon."

River Projects

Planning for multi-purpose river projects in India entered upon a new phase with the Government's establishment of a Central Designs Organisation under the Central Water-Power Irrigation under Navigation Commission.

"CWINC", as this Commission is called for short, is at present engaged in preliminary investigations of the Kosi, Mahanadi, Narbada, Tapti, Indravati and Assam Valley projects, while its investigations in respect of the Hirakud Dam Project, on the Mahanadi, have reached a stage when construction work has been authorised.

The Central Designs Organisation, which will have seven sections dealing with dam, canal, mechanical and hydroelectric engineering, technical studies, drawing and research for dams and appurtenant works, is expected to take up immediately the designing of the Hirakud Dam, the power plant proposed there and the canals and other features of the scheme. At the same time, it will prepare preliminary, and whenever necessary detailed, designs for the Kosi, Narbada, Tapti, and other projects.

It is proposed to send abroad, during the next five years, selected engineers for specialised training. These trainees to be sent out at the rate of six a year, will receive training abroad for about two years, the main centres being the U.S.A., the U.K., Canada, Sweden, Switzerland and the U.S.S.R.

The Government of India have also decided to sponsor an "International Commission on Irrigation and Canals" with its central office in this country. The Commission's objects will be to encourage progress in the design, construction, maintenance and operation of irrigation works and navigation canals by the interchange of information among its various national committees, by holding conferences, by organising studies and experiments and by the publication of reports, documents, etc. The Central Board of Irrigation will be the Commission's National Committee for India.

Preservation of Fruit and Vegetables

Practical advice to wholesale firms, and some retail shops in the fruit and vegetable trade are given in a "Food Investigation Leaflet No. 9—Entrepot Cool Storage of Fruit and Vegetables", published by H.M. Stationery Office (Price 2d., by post 3d.). The leaflet deals with short-term refrigerated storage over a period ranging from four to ten days.

Recommendations are given for the specifications of cool stores in which temperatures ranging from 32° F. to 45° F. and a relative humidity of around 85 per cent. are maintained, with automatic control of temperature.

Details of storage temperatures for different fruits and vegetables are given, together with hints as to special treatment required for certain products. For ease of operation of the cool stores, the fruits and vegetables are divided into two classes, those to be stored at 32° F. to 34° F. and those to be stored at 40° F. to 45° F.

Notes are given on tainting of one variety of fruit or vegetable by another in the store.

Further information can be obtained from the Officer in Charge (Dr. J. C. Fidler), Covent Garden Laboratory, D.S.I.R., 9-13, Kean Street, London, W.C. 2.

A Goniometer cum Microscope

The Andhra Scientific Instruments Co., Masulipatam, has designed a new theodolite goniometer of a universal type of crystals at all possible orientations. An outline of the general features and the use of the instrument is given in an article appearing in the December issue of the *Journal of Scientific and Industrial Research (India)*. The main features of the instrument are (1) two circular scales, one in the horizontal and the other in vertical plane; (2) the crystal-holder, (3) the Collimator with illuminating arrangement, and (4) the telescope with a combination objective enabling its use as a low power microscope as well. The system is mounted on a rigid cast iron base provided with levelling screws for the adjustment of the scales exactly horizontal and the other vertical. The instrument is a self-contained unit provided with a low tension transformer feeding the illuminating system direct on the 220 volt A.C. mains. The instrument will be a valuable aid to X-ray specialists and crystallographers.

National Institute of Sciences

Pandit Jawaharlal Nehru, the Prime Minister of the Indian Union, laid the Foundation Stone of the National Institute of Sciences of India on the 19th of April at New Delhi. Sir S. S. Bhatnagar, the President of the Institute, welcomed the Prime Minister on the occasion, and Pandit Nehru delivered an address before performing the ceremony.

Training Colleges in Britain

The British Ministry of Education proposes to set up a chain of national training colleges for technologists, scientists and industrial research workers. The plan will be worked out by an important new Advisory Council on Education for Industry and Commerce, consisting of representatives of educational bodies, local authorities, employers and trade unions.

The Council will keep in close touch with the leaders of industry, science and universities and will have the task of co-ordinating the activities of the training establishments to ensure that full use is made of the nation's brains and technical skill. In addition, the Council will study the question of examinations and scholarships and will be entrusted with the task of seeing how training facilities and equipment can be improved to the fullest possible extent.

ERRATUM

Volume 17, No. 3, March 1948, page 101, line 5: Read "variety did not seem to develop" for "variety did seem to develop", etc.