dispersion has been recorded. P. G. N. NAYAR: *Temperature variation of the Raman frequency of diamond.* Over the range of temperature −190° C. to 860° C. the characteristic Raman line varies from 1333·8 cm.$^{-1}$ to 1316 cm.$^{-1}$ From the thermodynamical relation between the thermal expansion of the crystal and the variation of the characteristic frequency, it has been found that the change observed is greater than that expressed. R. NORRIS: *The Raman spectrum and the specific heat of crystalline sulphur.* D. NARAYANAMURTI AND V. RANGANATHAN: *The thermal conductivity of Indian timbers. Part I. Variation of conductivity with density in the air-dry condition at ordinary temperature.* S. RNGASWAMI, T. R. SESHADRI AND V. VENKATESWARLU: *The remarkable fluorescence of certain coumarin derivatives.*

SECTION B.—T. S. RAGHAVAN AND V. K. SRINIVASAN: *Morphological and cytological studies in the scrophulariaceæ. Part IV. The development of the embryo-sac and endosperm in* Scoparia dulcis *Linn.* T. S. RAGHAVAN AND K. R. VENKATASUBBAN: *Studies in the capparidaceæ. VIII. The floral morphology of* Crataeva religiosa *Forst.* B. R. SESHACHAR: *The interstitial cells in the testis of* Ichthyophis glutinosus *Linn.* H. CHAUDHURI AND A. R. QURAISHI: *A study of the fungal endophyte of some* Anthoceros erectus *Kashyap.* M. SRINIVASAN, S. RAMASWAMY AND M. SREENIVASAYA: *A rapid method of determining peroxidase activity.*

Indian Association for the Cultivation of Science: (*Proceedings*)

December 1940.—G. N. BHATTACHARYA: *Specific heat of lac.* K. R. RAO AND M. G. SASTRY: *The first-spark spectrum of tellurium.* M. G. SASTRY: *Interferometric measurements of certain lines in the spectrum of bromine.* S. D. CHATTERJEE: *Study of thermal neutrons in the atmosphere.* L. D. MAHAJAN: *Adsorption of moisture from the moist air by the soils.* A. C. DEB: *Penetration of thin ionospheric layers.* B. N. SINGH: *Joule-Thomson and Joule effects for Bose-Einstein and Fermi-Diric gas.* M. GHOSH: *Dynamics of the pianoforte string and the hammer. Part IV (Study of duration of impact).* M. GHOSH: *Dynamics of the pianoforte string and the hammer. Part V (Some special theories).*

Meteorological Office Colloquium, Poona:

March 11, 1941.—B. N. DESAI: *Variation of lapse rate of temperature near the ground at Drigh Road, Karachi.*

March 18, 1941.—K. R. RAMANATHAN: *Atmospheric visibility.*

March 25, 1941.—P. R. CHIDAMBARA IYER: *Sunspots and prominences.*

Botanical Society of Bengal:

March 26, 1941.—G. P. MAJUMDAR: *On the origin of medullation in Selaginella.* A. K. GHOSH: *On the theoretical significance of bisporangiate sporophyll in* Lycopodium phlegmaria *Linn.*

Tin and Its Uses

The latest issue of the Tin Research Institute's Quarterly Review (No. 8) gives details of some improved pewter alloys containing over 90 per cent. of tin, which have all the merits of malleability and attractive sheen associated with the usual pewter alloys, but are substantially stronger. Spinning and other fabricating operations are as easily carried out as with ordinary pewter, but when finished articles of the new pewter are given a simple heat treatment; they develop 70 to 80 per cent. greater strength, and this strength is permanently retained in service conditions.

An announcement is made of the Institute's new booklet on Hot-Tinning (Publication 102), which describes the process as applied to cast iron, steels and alloy steels, copper and copper alloys, and shows how to overcome the difficulties which may arise.

An article on electro-tinning contrasts the old-fashioned stannous chloride bath with modern plating baths; it is shown that the former bath is of value only for producing very thin tin coatings of bright appearance, but modern baths will give tin coatings of any thickness desired, and so are of particular value for food processing equipment.

An article on opacifiers for vitreous enamels indicates that the special qualities of tin oxide have enabled it to maintain its position in the enamelling industry.

An example of the value of tin as a protective coating on steel is provided by its use in connection with the nitriding process, in which surfaces to be kept in an unhardened state are protected by a layer of tin. Nitriding is applied to cylinders, crankshafts, gears, shacklepins and valve sleeves for aero, automobile and Diesel engines as well as to textile, cement and plastic-moulding machinery.

Among the examples of the Institute's free Technical Service are particulars of a simple but sensitive chemical test for identifying tin in white-metal scrap, and of special tin solders which have higher melting points and greater strength than the usual tin-lead alloys.

ERRATA

Vol. 10, *No.* 4, *April* 1941:—

Contribution entitled "Cinchona Cultivation in India", page 223, para 2, line 8, *for* "21,00 lbs." *read* "210,000 lbs.".

Note entitled "Modified Equations for Adsorption and Base-Exchange in Soils", page 203, Table II, column 4, *for* $x = \frac{BU}{I+C'}$ *read* $x = \frac{BI}{I+C'}$;

Table II, column 5, the last but one value *for* 1·123 *read* 1·213.

814.41—Printed at The Bangalore Press, Bangalore City, by G. Srinivasa Rao, Superintendent, and Published by B. N. Sastri, M.Sc., A.I.C., A.I.I.Sc., for the Board of Editors, "Current Science", Bangalore.