

The yield is increased from 35 per cent. to 72 per cent. of the theoretical, and the methylamine hydrochloride is obtained pure and free from ammonium chloride.—The study of colouring matters in solution: L. **Pelet-Jolivet** and A. **Wild**. Colouring matters exist in a state of electrolytic dissociation; some of them are partly in the colloidal state, as was shown by their behaviour in the ultramicroscope. The properties of colouring matters are intermediate between ordinary saline solutions and colloidal solutions.—Saprophytic cultures of *Cuscuta monogyna*: Marin **Molliard**.—The Secamone of the north-west of Africa: Henri **Jumelle** and H. Perrier **de la Rathie**.—Pigmentary assimilation in Actinia: Georges **Gohn**.—The hereditary chromatic substratum and the nuclear combinations in the crossing of Amphibia: E. **Bataillon**.—The gradation and improvement of the instinct in the solitary wasps of Africa of the genus *Synagris*: E. **Roubaudi**.—The affection known under the name of botryomycosis and its parasite: Gustave **Bureau** and Alphonse **Labbé**. This disease is not a mycosis, but is due to an amoeba; the botryomycoses observed in previous cases is only a plastogamic stage of this organism.—The protonephridia of the adult polychaetal annelids: A. **Malaquin**.—The existing genera of the family of the brachyopodides: A. **Menegaux**.—New researches on the radio-activity of springs producing goitre: M. **Répin**. All the goitre-producing waters of the Alps gave on examination a measurable radio-activity, due probably to radiothorium.—The accelerative influence of magnesia in the transformation of saccharose: J. **Tribot**. Sucrase was prepared from yeast and purified by fractional precipitation with alcohol. It was found that the purer the product from mineral matter the smaller was the activity, as measured by the amount of sugar fermented in a given time. The mineral substance to which the activity would appear to be due is magnesia.—The ferment from the decapod Crustacea: C. **Gerber**. This ferment is distinguished from other animal ferments by its resistance to heat and by the special action of acids. Its properties approach those of the vegetable ferments.—The numerical determination of the urinary excretion of nitrogen in various forms in a normal man: L. C. **Maillard**.—The action of the products of the reaction on the saponification of fats by the pancreatic juice: Mlle. L. **Kalaboukoff** and Émile **Terroine**.—The tonality of the sound of percussion: Gabriel **Arthaud**.—The existence of a new deposit of pre-Pyrenean strata in the middle of the north Pyrenees sheets, in the neighbourhood of Arbas: Léon **Bertrand**.—The seismic disturbance of October 13, 1908: Alfred **Angot**. A discussion of the seismograph record at the Parc Saint-Maur Observatory.—The erosion of the Fontainebleau grits: E. A. **Martel**.—The presence of the genera *Salvinia*, *Nymphæa*, and *Pontederia* in the sparnacian clays of the Montois: P. H. **Fritel**.

DIARY OF SOCIETIES.

**FRIDAY, OCTOBER 30.**  
 INSTITUTION OF MECHANICAL ENGINEERS, at 8.—Repairs, Renewals, Deterioration and Depreciation of Workshop Plant and Machinery (*Resumed discussion*): J. E. Darbishire.  
**MONDAY, NOVEMBER 2.**  
 ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Unexplored Western Asia: D. G. Hogarth.  
 SOCIETY OF CHEMICAL INDUSTRY, at 8.—Chemical Industry in Relation to Agriculture: Prof. Adolf Frank.  
**TUESDAY, NOVEMBER 3.**  
 ZOOLOGICAL SOCIETY, at 8.30.—The Development of the Lesser Black-backed Gull, *Larus fuscus*, L.: Prof. Alexander Meek.—On Mammals from Inkerman, North Queensland, presented to the National Museum by Sir W. Ingram and the Hon. John Forrest: Oldfield Thomas, F.R.S., and Guy Dollman.—(1) The Sze-chuen and Bhutan Takins; (2) On an Indian Dolphin and Porpoise: R. Lydekker, F.R.S.  
 INSTITUTION OF CIVIL ENGINEERS, at 8.—Address by the President, Mr. J. C. Inglis.  
**WEDNESDAY, NOVEMBER 4.**  
 ENTOMOLOGICAL SOCIETY, at 8  
 GEOLOGICAL SOCIETY, at 8.—The Relations of the Nubian Sandstone and the Crystalline Rocks of Egypt: H. J. L. Beadnell.—On the Fossil Plants of the Waldershare and Fredville Series of the Kent Coalfield: E. A. Newell Arber.  
 SOCIETY OF PUBLIC ANALYSTS, at 8.—The Solvent Action of Carbonic Acid on the Carbonates of the Heavy Metals: C. Seyler.—The Analysis of Camphorated Oil for Camphor Substitutes: F. W. Richardson and W. K. Walton.—The Separation and Estimation of Certain Volatile Fatty Acids by Extraction with Benzene or Toluene: T. R. Hodgson.—The Estimation of Coconut Oil in Butter: R. Ross.

THURSDAY, NOVEMBER 5.

ROYAL SOCIETY, at 4.30.—*Probable Papers*. (1) Note on Tidal Bores; (2) *Voices in Oscillating Liquid*: Lord Rayleigh, O.M., Pres. R.S.—Note on Two recently-compiled Calendars of Papers of the period 1666-1806 in the Archives of the Royal Society: Prof. A. H. Church, F.R.S.—On the Osmotic Pressures of Aqueous Solutions of Calcium Ferrocyanide. Part I., Concentrated Solutions: Earl of Berkeley, F.R.S., E. G. J. Hartley, and C. V. Burton.—On the Generation of a Luminous Glow in an Exhausted Receiver moving near an Electrostatic Field, and the Action of a Magnetic Field on the Glow so produced, the Residual Gases being Oxygen, Hydrogen, Neon and Air: Rev. F. J. Jervis-Smith, F.R.S.—The Rate of Production of Helium from Radium: Sir James Dewar, F.R.S.—The Spectrum of Radium Emanation: A. T. Cameron and Sir William Ramsay, K.C.B., F.R.S.—On a Method of Comparing Mutual Inductance and Resistance by the Help of Two-phase Alternating Currents: A. Campbell.—The Effect of Pressure upon Arc Spectra. No. 2, Copper: W. G. Duffield.  
 CHEMICAL SOCIETY, at 8.30.—The Direct Union of Carbon and Hydrogen: W. A. Bone and H. F. Coward.—The Relation between Absorption Spectra and Chemical Constitution. Part XI., Some Aromatic Hydrocarbons: E. C. C. Baly and W. B. Tuck.—Organic Derivatives of Silicon. Part VII., Synthesis of *di*-Sulphobenzylethylsilylic Oxide: B. D. W. Luff and F. S. Kipping.—(1) Chlorine Derivatives of Pyridine. Part IX., Preparation and Orientation of the Dichloro pyridine, m. p. 66-70°; (2) Chlorine Derivatives of Pyridine. Part X., Orientation of the Trichloropyridine, m. p. 49-50°; (3) Chlorination of Methyl Derivatives of Pyridine. 2-Methyl pyridine. Part II.: W. J. Sell.—(1) The Triazo-group. Part V., Resolution of *α*-Triazopropionic acid; (2) The Triazo-group. Part VI., Triazoethyl Alcohol and Triazoacetaldehyde: M. O. Forster and H. E. Fierz.  
 LINNEAN SOCIETY, at 8.—Notes on some Parasitic Copepoda, with a Description of a New Species of *Chondracanthus*: May E. Bainbridge.—On some Nemertean from the Eastern Indian Ocean: R. C. Punnett and C. Forster Cooper.—Report on the Echinoderms other than Holothurians collected by Mr. Stanley Gardiner in the Western Parts of the Indian Ocean: Prof. F. Jeffrey Bell.  
 RÖNTGEN SOCIETY, at 8.15.—Presidential Address, The Amsterdam Congress.

FRIDAY, NOVEMBER 6.

GEOLOGISTS' ASSOCIATION, at 8.—On some Norwegian Lakes and Rock-Basins: H. W. Monckton.

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