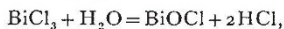


the spectrum: H. **Buisson** and Ch. **Fabry**.—The hydrolytic dissociation of chloride of bismuth: René **Dubrisay**. If the equation usually given for dissociation,



the solution should be divariant at constant pressure; from thermochemical data an elevation of temperature ought to correspond with a diminution in the degree of dissociation. Both these conclusions have been experimentally confirmed.—The calculation of molecular weights by means of vapour densities. The case of toluene: A. **Leduc**. The author has applied the formulæ developed by him in previous papers to the experimental data of Ramsay and Steele for toluene vapour. The molecular weight thus deduced is 92.083, as against 92.088 deduced from the atomic weights, the difference being less than the experimental error. The method of reduction used by Ramsay and Steele gave a result nearly 0.5 per cent. different from this.—The radioactivity of the thermal springs of Bagnères-de-Luchon: Charles **Moureu** and Adolphe **Lepape**. The radioactivities of the gases given off spontaneously by the waters, and those of the waters themselves, have been determined. It is noteworthy that, in spite of the close analogy in composition and geological origin of these twenty springs, the radio-activities found are very unequal, and cannot be connected with any other physical or chemical property of the waters.—The impossibility of predicting by thermochemistry the relative stability of comparable compounds of lead and silver: Albert **Colson**. A study of the comparative stability of the carbonates and nitrates of lead and silver. The results obtained do not correspond with the heats of formation of these salts.—The preparation of some new silicon chlorides of the silicemethane series: A. **Besson** and L. **Fournier**. When the silent discharge is passed through a mixture of silicochloroform and hydrogen a reaction takes place, an oily liquid being deposited. From this the authors were able to isolate SiCl_4 , Si_2Cl_6 , Si_3Cl_8 , all of which have been previously described. In addition to these, two new compounds are obtained, possessing the composition $\text{Si}_5\text{Cl}_{12}$ and $\text{Si}_6\text{Cl}_{14}$. The method of preparation ensures the complete absence of oxychlorides.—The purification of hydrated sulphuric acid from arsenic by freezing: M. **Morance**. A crude acid was partially frozen, the crystals formed being about one-half the weight of the acid employed. The percentages of iron and arsenic in the solidified acid were much less than in the original sample.—The colouring and tinctorial properties of picric acid: Léo **Vignon**. The coloration of solutions of picric acid in various solvents varies in the same sense as the electrical conductivity of these solutions.—The condensation of methyl-diketobutyrate with hydrocarbons and with aromatic amines: A. **Guyot** and V. **Badonnel**. This ester undergoes condensation readily with dimethylaniline, diethylaniline, and toluene. The chief properties and reactions of the compounds thus made are given.—Allylcarbinol. Passage to the furfuran series: H. **Pariselle**. An improved method of preparing this compound from magnesium, trioxymethylene, and allyl bromide is described. The addition of bromine to the allylcarbinol gives



and this, under the action of caustic potash, gives monobrom-tetrahydrofurfurane.—The cyclisation of the acyclic diketones: E. E. **Blaise** and A. **Koehler**.—The hybrids of barley and the law of Mendel: L. **Birmingham**.—The natural immunity of snakes against the venom of batrachians, and in particular against salamandrine: Mme. M. **Phisalix**.—The incoagulability of the blood resulting from the ablation of the liver in the frog: M. **Doyon** and Cl. **Gautier**.—A method of coloration of the myelin of the peripheral nerve fibres, and on certain analogies between the microchemical reactions of myelin and mitochondria: Cl. **Regaud**.—Proof of the presence of *Treponema pallidum* in the cephalorachidian liquid arising from acquired syphilis of the nervous centres: E. **Gaucher** and Pierre **Merle**.—The therapeutical activity of d'Arsonvalisation: E. **Doumer**.—General experimental infection with hepatic localisation: A. **Le Play**.—Orientation in certain molluscs: Georges **Bohn**.—Cochineal of

the south of France and Corsica: Paul **Marchal**.—A new genus of Zeinæ: A. **Cligny**.—The composition of the Lower Eocene in the south and centre of Tunis and Algeria: J. **Roussel**.—The Cretaceous escarpment of the S.W. of the Paris basin: Jules **Welsch**.—The age of the Primary limestones of the eastern Pyrenees: O. **Mengel**.—The Upper Cretaceous of the basin of Seybouse (Algeria): J. **Blayac**.—Analysis of the Arctic submarine deposits: J. **Thoulet**.—Lithological study of the deposits of the pool of Thau: L. **Sudry**.

DIARY OF SOCIETIES.

FRIDAY, APRIL 16.

MALACOLOGICAL SOCIETY, at 8.—Description of *Pomatias Harmeri*, n.sp., from the Red Crag of Essex: A. S. Kennard.—Fossil Pearl Growths: J. Wilfred Jackson.—The New Zealand Athoracophoridae, with Descriptions of Two New Forms: Henry Suter.—On the Family Ampullariidae, No. 1, Ampullarina (*sensu stricto*), List of Species, Varieties, and Synonyms, with Descriptions of New Forms: G. B. Sowerby.

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