

The dissociation constant of hydrazoic acid. *C. A. West. Jour. Chem. Soc.* 77, 705 (1900). — The value of k from the conductivity measurements is 0.0000198 in decinormal solutions and 0.0000186 for the inversion of cane-sugar. Hydrazoic acid is therefore a trifle more dissociated than acetic acid at this dilution. *W. D. B.*

Relations between electrolytic conductivity and internal friction in salt solutions. *P. Massoulier. Comptes rendus*, 130, 773 (1900). — When glycerine is added to $M/15$ CuSO_4 at 15° , the change in electrical resistance is very closely proportional to the change in viscosity; but this is no longer the case when glycerine is added to $M/40$ CuSO_4 at 0° . *W. D. B.*

On the toxicity of the compounds of the alkaline earths with reference to the higher vegetables. *H. Coupin. Comptes rendus*, 130, 791 (1900). — Barium salts are apt to be poisonous both to animals and plants. Strontium and calcium salts are relatively non-toxic to animals, but are, as a rule, poisonous to plants. *W. D. B.*

Dielectricity and Optics

The dielectric constant and dispersion of ice for electromagnetic radiations. *C. Gutton. Comptes rendus*, 130, 1119 (1900). — On varying the length of the waves from 14 cm to 2088 cm, the index of refraction n changes from 1.76 to 1.50, and the dielectric constant n^2 from 3.10 to 2.25. *W. D. B.*

The refractive and magnetic rotatory powers of some benzenoid hydrocarbons. *W. H. Perkin. Jour. Chem. Soc.* 77, 267 (1900). — The magnetic rotations and refractive powers of the following hydrocarbons have been determined: benzene, toluene, ethyl benzene, propyl benzene, isopropyl benzene, isobutyl benzene, cymene, *o*-xylene, *m*-xylene, *p*-xylene, pseudocymene, mesitylene, tetraethylbenzene. The preparations were unusually pure. Experiments on the magnetic rotation of mixtures showed that a marked falling-off from the calculated value occurs only in the aliphatic series, and not universally even there. The author has improved the usual method of reading the scale and vernier of a spectrometer by introducing a long narrow telescope, so arranged that its eye-piece is situated just below that of the observing telescope. *W. D. B.*

Note on the refraction and magnetic rotation of hexamethylene chlorohexamethylene and dichlorohexamethylene. *S. Young and E. C. Fortey. Jour. Chem. Soc.* 77, 372 (1900). — New determinations with a pure specimen of hexamethylene, the magnetic rotation being now 5.664 at 15° and the molecular refraction 45.824 for H_a . *W. D. B.*

The absorption spectra of ammonia, methylamine, hydroxylamine, aldoxime, and acetoxime. *W. N. Hartley and J. J. Dobbie. Jour. Chem. Soc.* 77, 318 (1900). — The absorption band in purified commercial ammonia is shown to be due to traces of pyridine. The spectra of methylamine, hydroxylamine, aldoxime and acetoxime were also studied. *W. D. B.*

Spectrographic studies in tautomerism. *W. N. Hartley and J. J. Dobbie. Jour. Chem. Soc.* 77, 498 (1900). — The authors have determined and measured