Contemporary Birthdays.

October 5, 1861. Sir Thomas L. Heath, K.C.B., K.C.V.O., F.R.S.

October 7, 1842. Sir Philip Magnus, Bart. October 8, 1850. Prof. Henry Louis le Chatelier,

For. Mem. R.S. October 8, 1857. Sir Richard C. Garton, G.B.E. October 9, 1879. Prof Max T. F. von Laue. October 9, 1863. Prof. Albert Charles Seward,

F.R.S.

Sir Thomas Heath, who was born in Lincolnshire, was educated at Caister Grammar School and Clifton College, passing thence to Trinity College, Cambridge, where he graduated 12th wrangler, whilst also acquiring distinction in classical studies. Entering the public service, he was early attached to H.M. Treasury, fulfilling successively the highest offices. Since 1919 he has been Comptroller-General, National Debt Office. Among many dissertations and works, he is the author of "A History of Greek Mathematics" (2 vols., 1921). Sir Thomas is an honorary fellow of Trinity College, Cambridge, and Hon. D.Sc. Oxford.

Sir Philip Magnus, to whom very hearty congratulations are due on the approaching anniversary of his eighty-fourth birthday, was educated at University College School, graduating thence at the University of London. Organising director and secretary of the City and Guilds of London Institute from 1880 until 1888, he was afterwards and for nearly thirty years the able and zealous secretary of its Technology Department.

Prof. LE CHATELIER'S name is associated with important discoveries in several branches of chemistry. In conjunction with Mallard he conducted elaborate investigations on the ignition and explosion of gaseous mixtures, in which principles of fundamental importance were established. His thermo-electric couple inaugurated a new period in the measurement of high temperatures. One of the pioneers of micro-metal-lurgy, he was among the first to introduce exact methods into the science of industrial silicates. Prof. le Chatelier was elected a foreign member of the Royal Society in 1913, and allotted the distinction of its Davy medal in 1916, in respect of his eminence

Sir RICHARD GARTON was educated at Owens College, Manchester, and the University of Marburg. As honorary secretary of the British Empire Cancer Campaign he has carried out work of widespread importance.

Prof. Max von Laue, Nobel laureate, 1915, was born at Pfaffendorf, near Coblentz. His studies were conducted at the Universities of Strasbourg, Munich and Berlin. In 1912 he occupied a chair in the University of Zurich, and was afterwards at Frankfort. Since 1919 he has been professor of theoretical physics in the University of Berlin. Prof. Max von Laue was allotted the Nobel prize in physics for 1915, for his discovery of the diffraction of Röntgen rays in crystals.

Prof. SEWARD, Master of Downing College, Cambridge, professor of botany in and vice-chancellor of the University, was educated at Lancaster Grammar School and St. John's College, Cambridge. The Royal Society awarded Prof. Seward a Royal Medal last year for his fruitful studies in palæobotany, which have proved of direct stratigraphical value to geologists, enabling the principles and facts of one science to aid, and even solve, the problems of another.

Societies and Academies.

PARIS.

Academy of Sciences, August 30.—Bigourdan: The regularity of the diurnal movement and the possibility of verifying it by means of observatory clocks (see also NATURE, September 18, p. 425).— Boris Delaunay: The theory of parallelohedra.—G. Polya: The linear functional operations exchangeable with the derivation and the zeros of the sums of exponentials.—Mlle. N. Bary: The analytical representation of a class of continuous functions.—A. Kovanko: The integration of suites of functions capable of summation.—Kyrille Popoff: The convergence of series and celestial mechanics.—Krawt-chouk: The method of N. Kriloff for the approximate integration of the equations of mathematical physics. -N. Bogoliouboff and N. Kriloff: The justification of Rayleigh's principle by the order of the error committed at the nth approximation.—Jacques Bourcart: An attempt at the morphological interpretation of the Bouches de Cattaro.—Lucien Daniel: Researches on the grafting of garlic and cabbage.—Antonin Němec: Chemical methods for determining if agricultural soils are in need of nitrogenous or potash manures. Details of the analytical methods and limits of nitrate and potash suitable for sugar beet, barley, and oats.—Raymond Hamet: The inversion of the normal action of adrenaline.—E. Ducloux and Mlle. G. Cordier: The virus of sheep scab treated with various aldehydes.

CAPE TOWN.

Royal Society of South Africa, August 18.-L. P. Bosman: The nature of the co-enzyme of lipase. The lipase extract (from sheep's pancreas) is dialysed against distilled water and the lipolytic actions of the dialysate and the 'inside' liquid on ethyl butyrate are studied. The inside liquid loses approximately 50 per cent. of its hydrolytic power. The dialysate, while having no hydrolytic power, when coupled with the inside liquid, restores the lipolytic power of the original extract. The dialysate was investigated and the so-called co-enzyme was found to be inorganic salts.—W. Rose and J. Hewitt: Description of a new species of Xenopus from the Cape Flats. The new species, Xenopus gilli, differs from X. laevis in that tentacles are not apparent and that there is in the mouth an organ which is either a posteriorly attached tongue or a deflated air-sac.—J. H. Power: Notes on the habits and life histories of South African Anura with descriptions of the tadpoles .-- C. von Bonde: The vascular system of the Plagiostomi, with special reference to the common dogfish (Squalus acutipinnis, Regan). The author has previously worked out the morphology of the vascular system of the South African dogfish S. acutipinnis and it is now compared with the structure typical of the Plagiostomi in general. The absence of vascular loops round the gill-arches together with the absence of a precardiac extension of the dorsal aorta presents an interesting feature. The arterial circulation of the cephalic region also shows a distinctive difference from the normal distribution of the carotid arteries in the Plagiostomi.—Neville S. Pillans: The African genera and species of Restionaceae.— H. G. Fourcade: A new method of aerial surveying.

ROME.

Royal National Academy of the Lincei: Communications received during the holidays.—T. Levi-Civita: Einsteinian motions in second approximation.-Ferruccio Zambonini and S. Restaino: Double sulphates of the rare earth and alkali metals (vi.). Cerous