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(Natl. Inst. Public Health, Utrecht, Neth.). *Rec. trav. chim.* 74, 889-96(1955)(in English).—A method is described whereby 20 mg. glycyrrhetic acid (I)/24 hrs. urine can be detd. It is based on the fact that a soln. of I in 96% EtOH has a max. absorption at 248 mμ. With a column of Floridine earth I can be removed quantitatively from urine and freed from interfering substances. When up to 2.5 g. I was given orally in 24 hrs. it could not be detected in the urine. M. H. Neustadt

Microscopic analysis of mineral dust in lung sections. A. Policard. *Compt. rend. congr. soc. Savantes Paris et dépts., Sect. sci.* 1955, 295-301.—Particles of soot, silica, mica, kaolin, asbestos, and Fe oxide can be characterized by the use of microincineration technique and a polarizing microscope. Brahani Norwick

Clinical use of the simplified Porter-Silber method for the determination of the 17-hydroxycorticosteroids in plasma. Endre Góth, L. Lengyel, and C. Sávely (Med. Dept. Margit Hosp., Budapest). *Acta Med. Acad. Sci. Hung.* 11, 227-36(1958)(in English).—Minor modifications of the Porter-Silber method (C.A. 44, 9504c) are reported for the clinical detn. of free 17-hydroxy corticosteroids in plasma. The normal range was found to be 11-26 γ/100 ml. N. S. O.

Colorimetric determination of fluorine in animal tissues with thorium-neothorin. Koichi Emi and Tadashi Hayami (Okayama Univ.). *Nippon Kagaku Zasshi* 78, 1532-4(1957).—A 10 g. dry sample of animal tissue was mixed with 1.5-2.0 g. of CaO (C.A. 52, 3007b) and ignited at 700-750° for 0.5-2 hrs. The F in the residue was distd. as fluosilicic acid and detd. photometrically with Th-neothorin (C.A. 51, 12747h). The recovery of 1 mg. F through the entire procedure was 98.9%. H. Onishi

Enzymic determination of myoinositol. Arthur Weissbach (Natl. Insts. of Health, Bethesda, Md.). *Biochim. et Biophys. Acta* 27, 608-11(1958)(in English).—An inositol dehydrogenase obtained from *Aerobacter aerogenes* grown on a medium comprising myoinositol (I) is used for the estn. of γ amts. of I. The method is based on the reduction of diphosphopyridine nucleotide (DPN) by I in the presence of an ext. of the cells. Under the assay conditions, max. reduction of DPN by I was proportional to the I concn. At I concns. higher than 10⁻⁴M, however, this proportionality tended to fall off. This could be accounted for, in part, by the accentuation of a DPNH oxidase system present in the bacterial ext. A no. of cyclic alcs. and sugars tested did not interfere with the assay. Morton Pader

Isolation of cynodontin (1,4,5,8-tetrahydroxy-2-methyl-anthraquinone) from a saltant of Helminthosporium victoriae. Ross B. Pringle (Rockefeller Inst. Med. Research, New York, N.Y.). *Biochim. et Biophys. Acta* 28, 198(1958)(in English); cf. *Phytopathology* 47, 369(1957).—The pigment of washed, dried mycelium of the red-colored variant of *H. victoriae* was extd. with CHCl₃. Red-bronze crystals, m. 274.5-5.0°, were obtained from the ext. These were identified as 1,4,5,8-tetrahydroxy-2-methylanthraquinone, as detd. by analysis, chem. behavior, and lack of depression of the m.p. of the natural material when mixed with the synthetic compd. Morton Pader

Preliminary fractionation of parathyroid extract with ammonium sulfate. Samuel Friedman and Paul L. Munson (Harvard Univ.). *Biochim. et Biophys. Acta* 28, 204-5(1958)(in English).—The hormonal activity of a hot, dil. acid ext. of bovine parathyroid tissue was concd. by a method involving step-wise pptn. with (NH₄)₂SO₄. A considerable portion of protein with low activity could be removed from the ext., resulting in material whose specific activity was increased 3-4 fold. (The fractions were tested for biol. activity by detn. of the serum Ca 6 hrs. after subcutaneous injection into acutely parathyroidectomized rats.) The fraction pptg. at 0.3-0.4 satn. was significantly more potent than others obtained at different satns. Gradual addn. of alkali to a soln. of this fraction resulted in a ppt. which started to form at pH 5 and remained largely undissolved to pH 10. At pH 6.5, the specific activity of the ppt. was significantly greater than that of the sol. portion. The fraction was also studied by paper electrophoresis and sedimentation techniques. Morton Pader

Two-dimensional paper chromatography of higher fatty acids. Č. Michalec (Karlova Univ., Prague). *Biochim. et Biophys. Acta* 28, 212-13(1958)(in English).—In the 1st run, ascending chromatography is carried out with 93% AcOH as mobile phase, developing 5 hrs. at 20°. The chromatogram is dried at 80-90°. The 2nd chromatog-

raphy is run 13-20 hrs. at -8° with 85% HCO₂H/AcOH/H₂O (50/50/5, by vol.) as solvent. The sepd. compds. are identified with Cu(OAc)₂ and K₄Fe(CN)₆, or with Hg(OAc)₂ and diphenylcarbazone. Application of the method to the isolation of the higher fatty acids of blood serum is described. Morton Pader

Isolation and identification of 18-hydroxysterone from the urine of pregnant women. K. H. Loke, G. F. Marrian, W. S. Johnson, W. L. Meyer, and D. D. Cameron (Univ. Edinburgh, Scot.). *Biochim. et Biophys. Acta* 28, 214(1958)(in English); cf. C.A. 52, 2220c.—The identification of the Kober chromogen KC-6A as 18-hydroxysterone was confirmed by chem. comparison with synthetically prepd. material. Morton Pader

Description of a dialyzer. René J. Girerd (Frank W. Horner Ltd., Montreal, Can.). *Rev. can. biol.* 16, 418-20(1957)(in English).—The unit is composed essentially of a coiled cellophane tube through which water flows and which, in turn, is immersed in the liquid to be dialyzed. The latter is stirred with an elec. motor and stirrer placed in the axis of the coils. Though completely stainless, the unit is best stored by rinsing, inverting, and allowing to dry. It was used mainly for protein preps. and was found to be very fast in operation due to the combination of a large membrane surface and const. movement of the 2 liquids always presenting max. difference in ionic strength.

A. Papineau-Couture
Urinary osmolar concentration in the hydropenic state as a measure of renal tubular function: a test for early renal impairment. Martin N. Frank, Leonard S. Dreifus, Fred Rarick, and Samuel Bellet (Univ. of Pennsylvania, Philadelphia). *Am. J. Med. Sci.* 233, 121-5(1957).—The max. urinary total solute concn., detd. during the hydropenic state by the method of f.p. depression, showed no correlation with urinary sp. gr. The lack of correlation was attributed to the fact that various solutes, protein, sugar, temp., pH, and other factors contribute differently to the sp. gr. and the osmotic pressure. Among 32 normal subjects, 27 patients with essential hypertension, 13 with diabetes mellitus, and 7 with compensated rheumatic heart disease, those capable of elaborating urinary concns. of 800 milliosmols/l. or more were considered to have adequate renal function, those with 600-800 good function, those with 400-600 fair function, and those with 400 or less, severe renal disease. Patients with essential hypertension and diabetes mellitus showed a decrease in concentrating function, as measured by this method, before alteration of other urinary function tests or clinical suspicion of urinary disease. The test may serve as a graded quant. method of evaluating renal tubular function, and in following the course of renal disease, especially in patients with minimal tubular impairment. Marion Horn Peskin

Sulfonamide blood-level determination in diabetics. Arno Hanusch and Dietfried Jorke (Univ., Jena, Ger.). *Ärztl. Forsch.* 11, 451-61(1957).—Measurements of sulfonamide and sugar blood levels in diabetics after oral administration of 1-sulfanilyl-3-butylurea (I) indicate that a sulfonamide threshold blood level exists, at which level the diabetic metabolism is kept in balance. This threshold varies according to renal function. The oral maintenance dose of I is the dose needed to hold the sulfonamide blood level within the threshold limits. The relation between oral dose of I and blood sulfonamide level does not appear to be a function of age. L. A. Pursglove

Trichloroacetic acid and tolylsulfonic acids in deproteinization of human blood serum. Dimitrie A. Isăcescu, Petra Ionescu, and Maria Macavei. *Comun. acad. rep. populare Romne* 7, 845-51(1957).—Cl₃CCO₂H (I) and tolylsulfonic acid (II) can vary the degree of the H₂SO₄ digestion of protein-free filtrate thus changing the analysis of the nonprotein N. II, Se, CuSO₄, and H₃PO₄ enhance the digestion, yielding high values of nonprotein N. I and K₂SO₄ hinder the digestion especially at 20% concn., thus yielding low values of nonprotein N. Krikor L. Reizian

Trichloroacetic acid, metaphosphoric acid, and phosphotungstic acid influence on digestion after deproteinization of human blood serum. Dimitrie A. Isăcescu and Maria Macavei. *Comun. acad. rep. populare Romne* 7, 941-7(1957).—The chem. nature and the quantities used of the deproteinization agents in soln. influence the H₂SO₄ digestion of the deproteinized serum, thus changing the analysis of the total N level. Cl₃CCO₂H and phosphotungstic acid hinder the digestion, leading to low N values, while