

Reviews and Notices of Books.

A Systematic Handbook of Volumetric Analysis. By FRANCIS SUTTON, F.C.S. London: Churchill & Sons.

THIS is a particularly well-timed and useful little work, written by a thoroughly practical chemist.

Volumetric analysis, on account of the great saving of time effected, is for many purposes rapidly superseding the older gravimetric method. For the medical man engaged in the incessant duties of practice, the volumetric method possesses a particular value.

The work in question not only treats generally of analysis by volume, but contains a special chapter on the analysis of the urine, whereby its value to the physician is greatly enhanced. In this we notice a description of Mohr's method of determining chlorine, nitrate of silver being used as the precipitant and chromate of potassa as the indicator. This process has not hitherto been employed in the analysis of the urine, and is very simple. We also find a new and valuable process, devised by Mr. Sutton and M. Neubauer about the same time, for the determination of phosphoric acid. This consists in the employment of a standard solution of nitrate of uranium, with ferrocyanide of potassium as indicator. It has this great advantage over the ordinary iron process, that the precipitate of phosphoric acid and uranium is of definite composition.

The work likewise contains a full description of a method for the volumetric analysis of water, devised by Mr. Nicholson, late of the Army Medical School, Fort Pitt, and now an assistant-surgeon in the army. By this plan a complete and rapid estimation of the ordinary constituents of spring or river water may be effected; it is therefore one which will prove of great service to the medical practitioner, and especially to army surgeons on foreign stations.

The chief difficulty connected with volumetric analysis consists in the preparation of the standard solutions, and in the possession of the requisite apparatus; but since these are now regularly supplied and made, this need not stand in the way of the adoption of this simple system of analysis by the disciple of Medicine, although his acquaintance with Chemistry may be of but an elementary character.

When the method of analysis by the employment of standard solutions comes to be more generally adopted, we do not doubt that our knowledge of the composition of the urine in disease, and indeed of general pathology, will be much extended. We cordially recommend this volume to the profession.

Ganot's Elementary Treatise on Physics. Edited by E. ATKINSON, Ph.D., F.C.S., Lecturer on Chemistry and Physics, Royal Military College, Sandhurst. London: Baillière.

THE fact that no less than nine editions of this work have been disposed of, and that it has been translated into the German and Spanish and now into the English languages, affords ample testimony to its intrinsic and great merits. But, judged of apart from these circumstances, it is evident that the book is in every way very superior—first, as regards its style and matter; secondly, as respects the simplicity of its arrangement; and thirdly, from the number and excellence of the engravings by which it is illustrated.

The importance of a knowledge of Physics and of the principles upon which so many important practical inventions connected therewith are based is unquestionable. This knowledge is of the highest and most fundamental character, and no man can pretend to a thorough or comprehensive education who has not some acquaintance with the science. The laws of Physics should be taught in all our public schools and colleges, and they should form part of the education of every professional man, and especially the medical man. No better class-book on the subject has hitherto been published than the work in question, and which therefore we strongly recommend. It is as

remarkable for its cheapness as for its excellence in other respects: the paper and type are good; it contains 800 pages of letterpress, and is illustrated by nearly 600 engravings on copper, the price being 12s. 6d. This work is creditable alike to the editor and the publisher.

A Dictionary of Chemistry. By HENRY WATTS, B.A., F.C.S. Part I. Longman and Co.

THERE is no work connected with chemistry so much needed at the present time as a really good dictionary. Upwards of thirty years have elapsed since the publication of Ure's well-known work; and since then chemistry, especially analytical and applied chemistry, has made great and rapid strides.

Few men are to be found better qualified for the task of producing a chemical dictionary than Mr. Watts; and judging from the character of the part before us, which, although copious, is yet concise, and in which the information is brought down to the most recent date, the work will be executed in a manner leaving little to be desired.

It was originally intended that the work should be a new edition of Ure's "Dictionary of Chemistry and Mineralogy;" but such has been the advance of science that it was found impossible to adapt matter written so long ago to the existing requirements of science. This dictionary must, therefore, be regarded as essentially a new work, it being intended to form a companion to the new edition of Ure's "Dictionary of Arts, Mines, and Manufactures."

We shall not fail to chronicle the progress of this important work from time to time.

Transactions of the Obstetrical Society of London. Vol. IV. 8vo, pp. 338. London.

So long as the Obstetrical Society of London can issue an annual volume of "Transactions" equal to the present there is no fear of its prosperity diminishing. The essays before us give ample proof that the Society is supported by the most industrious and most esteemed obstetric physicians and surgeons of the day. Dr. Tyler Smith, Dr. Barnes, Dr. Tanner, Dr. Matthews Duncan (of Edinburgh), Dr. McClintock (of Dublin), Dr. Archibald Hall (of Canada), Dr. Graily Hewitt, Dr. Tilbury Fox, Mr. Baker Brown, Dr. Braxton Hicks, and many others, have contributed very valuable papers. Perhaps there is not a page in the volume from which the busy practitioner may not glean something which will be of use to him in the daily exercise of his profession. Abstruse physiological questions are not discussed; we find no superficial and ill-natured criticisms of the labours of other men; but each writer seems to have honestly endeavoured to add something, however small, to the existing stock of obstetrical knowledge. It is not necessary to give any abstracts of these papers, because such have, as the essays were read, appeared in these columns. We need only, therefore, strongly recommend the volume to our readers; and, at the same time, express the hope that under the guidance of the new president, Dr. Oldham, the Society may maintain its present high position.

The Intellectual Observer. March and April.

THESE two numbers contain several papers of interest to the general reader. The new British snake, *Coronella laevis*, is described by Mr. Bartlett, and a coloured illustration is given of it. "Pumping Sovereigns at the Mint" is the subject of another article.

The contents of this journal fully sustain the accuracy of its name.

SULPHUR RENDERED SOFT.—A young German chemist has discovered that, by the addition of a small quantity of iodine, pure sulphur is rendered perfectly soft, and may be formed into thin leaves as flexible as wax.

Chemistry, therefore, is included in all school curriculums today as a matter of course. By exposing young people to multiple points of contact with this important science and introducing them to its very fluid reasoning, Waldorf schools aim to empower their students to deal with the subject of chemistry as self-reliant, discriminating personalities. Over the years, I have thoroughly researched and tested this interpretation and written it up in a dissertation. The brief excerpt in the Reader is intended to give a quick first impression of this work. (8) (For practical purposes, these references are listed in the order of their appearance in the introduction to this Reader, rather than in alphabetical order.)

A Text -Book of Practical Organic Chemistry Including Qualitative Organic Analysis 1948 [Leather Bound]. Arthur I. Vogel. 5.0 out of 5 stars 2. If you need a standard well-written procedure for making a molecule (like those in Organic Syntheses), this is the place to turn. The technique section is good, although quite dated and presents a British view. Outdated techniques like gravity chromatography, etc., are still included. Verified Purchase. Great book that thoroughly yet concisely explains the topic in a readable manner. ESSENTIAL REFERENCE MATERIAL - no organic chemist's bookshelf should be without it! Read more. The Practical Endorsement is directly assessed by teachers. The assessment is certificated as Pass or Not-classified. In order to achieve a Pass, candidates will need to have met the expectations set out in the Common Practical Assessment Criteria (CPAC) (see Table 2 in the specification, Appendix 5) including demonstrating competence in all the skills, apparatus and techniques in sections 1.2.1 and 1.2.2 of each specification. © OCR 2018 Version 1.6 AS and A Level Chemistry. 21. Note that a much wider range of practical work can be carried out than is suggested by the learning outcomes specifically related to practical techniques and procedures.

(6) PRACTICAL ORGANIC CHEMISTRY , watched atp videos on youtube and solved it from HIMANSHU PANDEY and MS CHOUHAN.

(7) POLYMERS and CHEMISTRY IN EVERYDAY LIFE , read from ncert and remembered all the structures , aspirin paracetamol and many structures are not in ncert but you need to remember them, I studied from CENGAGE KS VERMA SIR S book . Both these books are written by great foreign authors and edited by Indian authors specially for JEE ADV aspirants . Very easy to understand and cover most of the topics in sufficient detail . It is not the most difficult part but problems in organic chemistry look difficult if theory portion is not done thoroughly. Once you are done with complete theory, the problems become a cakewalk. The purpose of this booklet is to guide A-level chemistry students through the questions that are likely to appear on NECTA Paper 3, the practical paper. This booklet is not a replacement for the actual practical; it is very important that students are able to perform the practical on their own, and have lots of practice with experimental procedures and data collection. Instead, this booklet is meant to help students with the calculations and questions that come after the data has been collected. How to use this booklet. The first part of this booklet contains 15 practical questions, all of th...