

students. Further, while it is proposed that the technical State scholarships should disappear, the Government proposes to retain the mature State scholarships, mainly in their present form. He agreed with Mr. Irvine White that there are real advantages in British students following courses at colleges in other parts of the Commonwealth, and said it is hoped before long to announce a successful outcome to discussions with local authorities on Commonwealth scholarships and the tenure of awards in Commonwealth universities.

Service to Teachers

FROM time to time there has appeared in the columns of *The Schoolmaster*, the journal of the National Union of Teachers, a feature article entitled "Treasure Chest for Teachers". The purpose of this feature has been to offer information about associations of an educational nature, various embassies, consulates, and industrial organizations which are willing to supply certain services and teaching material free or at reduced rates for the use of schools and training colleges. From the number of inquiries about this material received at the headquarters of the National Union of Teachers and the organizations concerned, it became apparent that teachers and school librarians, in primary and secondary schools as well as in training colleges, were finding the feature sufficiently useful for it to be re-issued in permanent form. The National Union of Teachers has now issued the material as a booklet to all engaged in education who may find it useful (Pp. 94. London: Schoolmasters Publishing Co. 1960. 3s.).

Endorsed Certificates in Biology

RESULTS of examinations for endorsed certificates in biology are reported in the *Institute of Biology Journal* (7, No. 4; October 1960). In 1960, 106 candidates sat for examinations for the endorsed certificates at Ordinary Level. The examinations were taken in eleven colleges and 63 people were successful. The higher endorsed certificate papers were taken in seven colleges by 25 candidates, of whom 23 were awarded certificates. The technical colleges participating were Acton, Belfast, Bristol, Brunel, Cambridge, Ewell, Guildford, Heriot-Watt (Edinburgh), High Wycombe, Nottingham and Paisley (West of Scotland). Courses are now established at Stockport and Norwich City College.

Teaching Mathematics in the Junior School

MANY primary school teachers and lecturers who teach mathematical methods in training colleges and university education departments will welcome a recent publication by the National Union of Teachers (*Mathematics in the Junior School*. By J. S. Flavell. Pp. 28. London: National Union of Teachers, 1960). With the primary aim of making work understandable and so enabling the child to think, the booklet examines in detail the following fundamentals of a course outlined by Flavell: understanding of basic mathematical ideas, particularly number, quantity, size, notation and positional value; understanding of the meaning and significance of the fundamental operations of mathematics—addition and subtraction, etc.; the significance of zero; translation: this includes the ability to record in suitable form numerical relationships, the ability to translate from figure to word and *vice versa*, simple mathematical facts, statements and complete sentences (equations);

generalization in mathematics; background, cultural studies of the growth through history of number ideas and practices, and of evolution of units of all kinds.

Journal of the International Union of Pure and Applied Chemistry

FOR many years now, decisions and recommendations made by the International Union of Pure and Applied Chemistry, particularly those on nomenclature, have been disseminated in the journals of participant countries. While this procedure has been reasonably satisfactory, the need for a more suitable medium of publication of these and other less-widely appreciated commission reports has become increasingly felt. At Paris in 1957 a Publications Committee was appointed to investigate the situation, and in 1959, at Munich, the Council decided to bring all its publications together in its own *Journal* under the guidance of an editorial advisory board. Because of the inevitable heterogeneity of the subject-matter to appear between the covers of this one journal, an arrangement was made whereby separate papers could be made available in pamphlet or book form. This first issue is largely concerned with publication of the proceedings of the symposium on "Radio-activation Analysis" held in Vienna during 1959, but also contains notes on the organization and functions of the International Union of Pure and Applied Chemistry and several reports. These reports describe: recommended standards for the micro-determination of carbon and hydrogen; the calibration of wave-length and photometric scales for non-recording spectrophotometers; the standardization of pH and related terminology; terminology of scales of working in microanalysis; terminology for use in relation to precision balances; preliminary recommendations on nomenclature and presentation of data in gas chromatography. Further issues are to deal *inter alia* with: dissociation constants for organic acids in aqueous solution; proceedings of the symposium on "Thermodynamics" (Firtzens-Wattens, 1959); proceedings of the symposium on "Tolerated Limits of Toxic Substances in Industry" (Prague, 1959). While one cannot but deplore the ever-increasing spate of scientific journals, the decision of the International Union to produce its own official journal should receive wide approval. It should be of great value to all chemists, and this first issue reveals that the *Journal* will indeed attract serious attention. It is understood that the *Journal* will be published at irregular intervals but will comprise four issues per volume. The subscription-rate is £6 per volume. While no decision is announced, it would appear that the usual trilingual presentation in English, French or German is to be observed.

Bernice P. Bishop Museum, Hawaii

THE annual reports of many museums have recently been entirely re-cast, and in many instances are highly attractive and form interesting reading. The report for 1959 of the Bernice P. Bishop Museum, Honolulu, Hawaii, is entitled "Prelude to a Plan" and is an excellent example of the 'new look' in such statements (Pp. 32. Honolulu, Hawaii: Bernice P. Bishop Museum, 1960). The year was a prelude to a five-year plan for the whole Museum and covered such diverse aspects as the construction of a planetarium observatory, the inauguration of the Pacific Science Information Centre, and a retirement and annuity