

### Fluorescent Lighting in Museums

AN important article in the April issue of the *Museums Journal* (reprinted from *Museum*, 5, No. 1, March 1952, by permission of Unesco) by M. J. Genard, of the University of Liège, on "Extreme Ultra-Violet Radiation from Tubular Fluorescent Lamps and its Effect on Museum Lighting", deals with a subject of great interest to all those concerned with the preservation of objects exposed to artificial light. The paper opens with an admirable survey of the principles involved in fluorescent lighting. Details are then given of the research work of the author and other investigators, from which it appears that radiation from tubular fluorescent lamps in the ultra-violet zone of the spectrum between 310 and 400 m $\mu$  is not more injurious than the corresponding radiation from incandescent lamps or sunlight, as long as the conditions of illumination and atmosphere are identical. On the other hand, it is known that the 254-m $\mu$  ultra-violet radiation of mercury causes intense photo-chemical reaction in many materials. It would therefore seem probable that there is a region of the spectrum in this vicinity which is to be regarded as particularly dangerous. Tubular fluorescent lamps emit an ultra-violet radiation extending as far as 280-290 m $\mu$  in the short wave-lengths. It is feared that these radiations may accelerate photo-chemical deterioration in view of the very marked deleterious action of the neighbouring zone of the spectrum. Neither sunlight nor the light of incandescent lamps contains ultra-violet elements of such short wave-lengths as those found in the light of fluorescent lamps. It is also established that the continuous radiation, due to the fluorescent powders used in certain types of tube, sometimes extends into these extreme wave-lengths. It is to be feared that these types may be more harmful than the others. The transmission curves of the glass in existing varieties of fluorescent tube differ little one from another. It should, however, be possible to use glass which absorbs all rays below 320 m $\mu$ . After a tube has been in use for a thousand or so hours, the extreme ultra-violet radiation is approximately 25 per cent less.

### National Central Library : Annual Report for 1950

THE thirty-fifth annual report of the executive committee of the National Central Library covers the year ended February 28, 1951 (pp. 35; from the Library, Malet Place, London, W.C.1; 1951). Building operations for the reconstruction of the building in Malet Place commenced in October 1950, and it was expected that the west wing and much of the east wing would be ready for occupation in June 1951. The Treasury grant for the year was increased from £22,500 to £25,000, of which £1,000 was to compensate for the third stage in the discontinuance of the contributions from the Carnegie United Kingdom Trust. These, since 1916, have totalled £293,786, including £84,500 to outlier libraries and £41,499 to regional library systems for the compilation of union catalogues, and the report includes a warm acknowledgment of the value of this generous support. There has been a good response from all types of libraries to the trustees' appeal for increased financial contributions, and such contributions were 39.5 per cent higher than those from similar sources during 1948-49. Issues of books from or through the Library during the year decreased by 2,332 to 94,220; but applications increased to 92,740 from 87,931 during 1949-50, the percentage of applications

successfully handled being 65.3 as against 71.49 during 1949-50. Issues to university libraries again increased, by 5.42 per cent, to 13,479, while the calls on university libraries for the more specialized books and periodicals also continue to increase. Issues to outlier libraries increased by 20,271, and other special libraries lent a total of 1,810 books to meet special needs: fourteen further libraries were added to the list of outlier libraries during the year. Issues from the Scottish and Irish Central Libraries, however, decreased to 12,616 and 11,959 respectively, as compared with 15,397 and 12,493 in 1949-50. A total of 609 libraries co-operating in the regional system and the London Borough libraries inter-lending system lent 170,979 volumes to other libraries within their own system and 24,865 books to libraries in other regional systems or to non-regional libraries through the National Central Library, as compared with 164,152 and 21,423 in the previous year. Books lent through the international lending service rose from 994 (twenty-three countries) during 1949-50 to 1,587 (thirty-eight countries), and books borrowed from 420 (nineteen countries) to 584 (nineteen countries). Less time was spent on cataloguing Russian books and periodicals; but 4,699,620 entries have now been supplied for the national Union Catalogue.

### Science in Latin America

FOUR publications have appeared of late which chronicle contemporary scientific activities in Latin America. Three of them, which form part of the very comprehensive series of lists published by the Unesco Science Co-operation Office for Latin America, are entitled as follows: "Venezuela, Vol. 1" (pp. 131) and "Brazil, Vol. 3" (pp. 230) of the list of "Scientific Institutions and Scientists in Latin America", and "Latin American Contribution to Scientific Progress: Chemistry, 1948-49" (pp. 50). The fourth volume, published by the Ministry of Education of the Argentine, is a "Compilation of the Bibliographies in the Library of the Faculty of Agronomy and Veterinary Science of the University of Buenos Aires" (pp. 30). The two publications dealing with Brazil and Venezuela follow the familiar pattern adopted for other Latin American countries (see *Nature*, 165, 589 (1950); 166, 1059 (1950); 167, 972 (1951)), and their scope is indicated by their titles. The volume on chemistry is one of a number of reports which it is intended to publish every two years, for the purpose of making known the Latin American contributions to the progress of science; the text, in English, gives abstracts of the work, grouped under topics, and a bibliography of papers. The fourth work, though theoretically restricted to papers and books in the field of agriculture and veterinary science, liberally interprets this restriction to mean any publication in science and engineering with a bearing on the field in question; it is sub-divided by subjects, and within each subject the contents are listed alphabetically by author.

### National Institute of Economic and Social Research : Report for 1951

THE National Institute of Economic and Social Research, which was founded in 1938 as an independent non-profit-making body, has as its object the propagation of knowledge of the social and economic conditions of contemporary society. In its report for 1951 (pp. 32; from the Institute, 2 Dean Trench Street, Westminster, London, S.W.1; 1951), it is explained that the activities of the Institute are