THE NATIONAL GALLERY

REPORT FOR 1955-56

A YEAR ago the Trustees of the National Gallery published a report describing its activities between 1938 and 1954. It has now published a report* covering the period January 1955-June 1956 which will be warmly approved by all friends of the Gallery.

Although considerable reconstruction is taking place the Trustees are finding it increasingly difficult to provide enough space to display the growing collection of pictures; it is disconcerting to learn that, since 1911, only one room has been added to the Gallery at the expense of public funds. A long-term policy is recommended which would make provision for the erection of further galleries on a site north of the present building, but immediate prospects are not encouraging. The lack of air-conditioning in some of the existing galleries is leading to serious damage of some pictures, and the Trustees hope that this deficiency will be remedied.

The difficulty of obtaining enough money to purchase outstanding pictures was clearly shown during the period under review. Although extraordinary grants were available for the purchase of El Greco's "Adoration of the Name of Jesus" and Velasquez's "St. John on the Isle of Patmos", the sums required made grave inroads into the funds available. It is heartening, therefore, to learn of the assurance given to the House of Commons by the Financial Secretary to the Treasury that a general review of museums and galleries is shortly to be undertaken. Such a review is long overdue. In 1888 the purchase grant for pictures was £10,000; by 1955 it had risen to £12,500. The request of the Trustees for an annual sum of £80,000 seems to err only in being too modest.

The work of the Conservation Department is remarkably illustrated in the restoration of Van der Weyden's "The Magdalen reading". Acquired in 1860 and examined by X-ray photography in 1927, attempts at restoration had proved unsatisfactory. In 1952 more X-ray photographs taken with modern techniques were used and, under the care of the restorer, have led to the emergence of a painting superb in its colour and detail.

The successful activities of the Conservation Department are paralleled by the growth of the Scientific Department. Although scientific research into varnishes has only just begun, there is already enough evidence to suggest that synthetic resins will eventually replace natural resins. Time alone can show the relative permanence of new varnishes, but the Ministry of Supply has undertaken an experiment by which a wide variety of varnish samples are exposed to the strong sunlight of Northern Nigeria where humidity conditions are appropriate. Tests under both fluorescent tubes and daylight are yielding data on the stability of varnishes against yellowing.

The Scientific Department has also done valuable research into the preservation of pictures. The use of electrostatic precipitators to remove dust from the atmosphere had been considered. These involve the high-potential discharge of electricity through the air with the consequent release of ozone in sufficient quantities to act upon the resins used in varnishes and the oils used in both varnishes and paint media.

For this and other reasons it was decided that electrostatic precipitators should not be installed in connexion with the future extension of air-conditioning in the Gallery.

The report also contains accounts of recent acquisitions and of the work of the Publications Department, as well as a description of the arrangements for lending pictures to other galleries in the United Kingdom. The whole report, with its accompanying reproductions, has been produced with the dignity and taste which one associates with the National Gallery; it is to be hoped that the Trustees, despite financial embarrassment, will never allow their proposed annual reports to fall short of this most attractive format.

T. H. HAWKINS

THE ROYAL COLLEGE OF SCIENCE
AND TECHNOLOGY, GLASGOW

REPORT FOR 1955-56

THE annual report on the one hundred and sixtieth session of the Royal College of Science and Technology, Glasgow*, besides noting the change of name, after forty-four years, from the Royal Technical College, lists the titles of theses approved for the award of the associateship of the College and for the twenty-two higher degrees of the Universities of Glasgow and of London awarded during the session 1955-56, as well as recent publications by members of the College. There are the usual reports from departments and the Glasgow School of Architecture, but a brief record of research work in progress is provided in a separate report which also includes annotated departmental lists of the more important publications during the year. Research on jets in the Department of Mathematics included investigations of the mixing of streams moving at velocities at which the effects of compressibility cannot be ignored, and an apparatus was designed for the experimental study of jet flows by means of the analogy between surface waves on shallow water and waves in a gas. The Department of Natural Philosophy continued its photoelastic examination of adhesive lap joints, and the concept of change of stress distribution due to deformation was extended to an attempt to design joints free from the undesirable stress concentrations at which failures commence. The fine structure of airborne coal-dusts is being examined with the combined techniques of electron microscopy, X-ray and electron diffraction, and a new method of measuring the absorption coefficients of highly reflecting films has been developed.

The Department of Chemistry has devoted its main effort to a study of natural products, particularly to the triterpenoid components of plants, seeds and barks. A new method was evolved for the direct micro-alkalimetric determination of sulphur in organic compounds containing nitrogen and chlorine, and photochemical studies involving ferric iron solutions are being extended. An electrochemical study of metallic silver during catalysis of hydrogen peroxide solutions has yielded important information on the nature of the surface processes, and a new method of

* The National Gallery, January 1955-June 1956. Pp. 105+12 plates. (London: National Gallery, 1956.) 10s

* Royal College of Science and Technology, Glasgow. Annual Report on the One Hundred and Sixtieth Session, 1955-1956. Pp. 60. Report on Research. Pp. 40. (Glasgow: Royal College of Science and Technology, 1956.)