eudesmin, published in collaboration with J H Maiden, the botanist, heralded a long series of original contributions to the chemistry of Australian essential oils, exudations and other indigenous plant-products. In 1899 Smith became assistant curator and economic chemist in the Museum, and most of his work on the chemistry of the Australian flora was carried out in collaboration with R. T. Baker, curator and economic botanist in the Museum. Their *magnum opus*, "A Research on the Eucalypts, especially in regard to their Essential Oils", was published first in 1902 and again, in an extended form, in 1920.

Upon his official retirement in 1921, Smith became associated with the then recently founded Department of Organic Chemistry in the University of Sydney, where he pursued further work, partly in collaboration with Prof. John Read, on the chemistry of some of the substances, notably the eucalyptus ketone, piperitone, that he had isolated in earlier researches. Smith and Read had previously collaborated in an investigation of the so-called 'marine fibre' of *Posidonia australis*; the results of this lengthy research were issued in 1919 as one of the early publications of the Institute of Science and Industry of the Commonwealth of Australia. One of Smith's last investigations dealt with the possibilities of utilizing Australian wood fibres in paper-making. Altogether, Smith published more than a hundred original contributions to chemical science; sixty-two appeared in the *Proceedings of the Royal Society of New South Wales*, of which Smith was a modest but much-esteemed member. A meeting of the Sydney University Chemical Society held last August was devoted to terpene chemistry, with special tributes to Smith's life and work. Many of his original isolations, papers and photographs were displayed, and addresses were given by Prof. A. J. Birch, of the University of Sydney, and Mr. W. J. Dunstan, of the New South Wales University of Technology.

J. N. Langley, F.R.S. (1852–1925)

JOHN NEWPORT LANGLEY, whose signature is writ large in the history of the sympathetic nervous system, was born at Newbury a century ago, on November 2, 1852. In his second year at Cambridge, his interest in biology and physiology was aroused by Michael Foster, and he obtained a first class in the Natural Sciences Tripos in 1874 and three years later an open fellowship at Trinity College. His early research on the action of pilocarpine on the frog's heart was followed by a meticulous study, taking fifteen years, of the process of secretion in the mammalian salivary gland, in the course of which he distinguished between the 'loaded' and the 'exhausted' states of the gland. Foster had been made professor of physiology in 1883, and Langley, on being appointed in the following year as university lecturer in histology, became his assistant, succeeding him in the chair in 1903. During 1890–1906, helped by Hugh Anderson and W. H. Gaskell, Langley threw a flood of light on the sympathetic nervous system, his researches being a landmark in the history of physiology. He defined the autonomic system as an efferent system in 1903, and in 1921 published a book on the subject. He was working on the mechanism of excitation of cells when the outbreak of the First World War caused him and his depleted staff to pursue investigations of greater national urgency, such as the trophic changes in muscle and nerve following injury. In 1894 Langley paid off the debt which had long burdened the *Journal of Physiology*, and continued as owner and editor until his death. He was elected to the Royal Society in 1883 and vice-president in 1904. He died of pneumonia on November 5, 1925.

Regional Scientific Advisers for Civil Defence

THE organization of regional scientific advisers for civil defence in Great Britain, which has been set up by the Home Office, is now virtually complete. Many of the leading scientific men of the country have responded to the appeal of the Home Secretary and the Secretary of State for Scotland, and are giving their advice and assistance in this vital department of the country's defence organization. In each of the eleven regions into which England and Wales are divided for civil defence purposes, a group of these scientific men has been appointed, and similar appointments have been made in Scotland by the Scottish Home Department. It is understood that the Government of Northern Ireland will also shortly appoint scientific advisers. These scientific advisers serve in an honorary capacity in time of peace, and are accredited to the staff of the Chief Scientific Adviser of the Home Office, Whitehall, London, S.W.1. They also give their advice and assistance independently to the civil defence authorities in their own regions. An important step has thus been completed. In effect, a panel of scientific consultants has been formed so that the best scientific thought and experience can be applied both nationally and regionally to the problems of civil defence. At the present time the regional scientific groups are giving valuable assistance in the formation and training of the technical reconnaissance units of the Civil Defence Corps, the officers of which are required to have university qualifications or be members of the professional scientific institutions. The regional scientific advisers are arranging and supervising courses of scientific instruction for them at the universities in the regions, particularly in the physics of atom warfare and the chemistry of the war gases. The contacts between the advisers and the professional institutions are most advantageous; and the institutions themselves have already volunteered their help in directing the attention of their members in the regions to the need for qualified men and to the importance of offering their services.

The several regions, with their centres and senior and other scientific advisers, are as follows: *Northern Region (Newcastle upon Tyne)*: Prof. W. E. Curtis, Prof. G. R. Clemo, Dr. G. H. Christie; *North Eastern Region (Leeds)*: Prof. F. W. Spiers, Prof. W. Bradley, Prof. W. Sucksmith; *North Midland Region (Nottingham)*: Prof. L. F. Bates, Dr. D. O. Jordan, Prof. L. Hunter; *Eastern Region (Cambridge)*: Dr. B. C. Saunders, Mr. E. S. Shire, Dr. E. N. Fox; *London Region*: Sir Charles Ellis, Prof. W. V. Mayneord; *South Eastern Region (Tunbridge Wells)*: Brigadier R. A. Bagnold, Prof. D. H. Hey, Dr. F. C. Champion; *Southern Region (Reading)*: Dr. H. W. Thompson, Prof. R. W. Ditchburn, Prof. A. N. Black; *South Western Region (Bristol)*: Prof. W. E. Garner, Prof. S. H. Piper; *Wales (Cardiff)*: Prof. W. N. Thomas, Prof. F. Llewellyn Jones, Dr. S. T. Bowden; *Midland Region (Birmingham)*: Prof. H. W. Melville, Prof. P. B. Moon, Prof. J. R. Squire; *North Western Region (Manchester)*: Prof. E. R. H. Jones, Dr. G. D. Rochester, Prof. C. E. H. Bawn; *Scotland*: Sir Edward Appleton, Prof. N. Feather, Prof. J. W. Cook, Prof. R. V. Jones, Prof. D. H. Everett.