IEE Reviews are commissioned by the Honorary Editor and are published in the IEE Proceedings. A typical paper constitutes a broad and critical review of some particular area of advance in electrical, electronic or control engineering. It covers, as appropriate, brief aspects of the history of the subject under review, the present state of the art and possible developments in the future. Such a paper forms a definitive, up-to-date and interpretative text on the subject for qualified professional electrical, electronics and control engineers, and is of the order of 12000 to 15000 words long. It is hoped that authors can make their reviews interesting and informative to specialists and non-specialists alike. On occasions, shorter, specialist reviews may be commissioned, at the discretion of the Honorary Editor of IEE Reviews, where a subject area calls for this sort of paper rather than a widely based text as described above.

For ten years, from 1970, review papers appeared in a series of annual special issues of the IEE Proceedings. During this time 53 reviews written by 90 authors were published on a wide variety of topics, which included television broadcasting, satellite communication, radar, biomedical engineering, superconductivity, surface-acoustic waves, electricity in agriculture and horticulture, microwave holography, generation of electricity from the wind, marine electrical installations, charge-coupled devices, large AC motors, turbogenerators, overhead-line practice, batteries, fuel cells, electron microscopes, fuses, displays, permanent magnets, electrical standards, arcs, safety, and death by lightning.

Following the introduction of the new Parts of the Proceedings in 1980 the review papers have been published as they become available rather than in an annual issue. They usually appear in Part A, but may be moved to another Part if this is thought to be more appropriate. Since four papers were awaiting publication it was decided to put them together in this IEE Reviews Special Issue.

Projects are now generally regarded as forming an essential part of degree education for electronic and electrical engineers, but many problems can arise in their assessment. Following the collection of information from about sixty institutions Dr. Allison and Professor Benson have reported their findings in a paper which states some principles of learning and attractions of the project method, discusses the aims and objectives of project work and gives a critical evaluation of project assessment.

Two recent IEE Review papers* dealt with high- and low-pressure sodium lamps. It is now planned to have a number of papers on lighting, and in this issue there is one on road lighting and another on lighting of cathedrals and churches. In the first, Mr. Hargroves presents a brief historical survey of road lighting and then discusses the effects of public lighting on accidents and crime prevention as well as the visual task of the night driver. Sections of this paper are devoted to road-lighting design, light sources, lanterns, installation performance, road-lighting codes of practice and economics, and the lighting of tunnels.

Mr. Tate points out that there has been considerable interest in the lighting of cathedrals and churches during the last thirty years because of the need to renew installations, safety, the advent of new and more efficient light sources and the rearrangement of many church interiors. He begins his paper with a useful section for engineers on architectural and ecclesiastical considerations before describing the specific lighting problems involved.

The paper by Drs. M.A. and S.S. Stuchly reviews the numerous industrial, scientific, medical and domestic applications of microwave power and instrumentation, and highlights the most interesting and successful uses. Some basic principles of electromagnetic properties of, and energy dissipation in, materials, instrumentation and measurement, and power sources are also included, and there is a discussion of the health and safety aspects.

The Honorary Editor will be delighted to receive offers of, or suggestions for, IEE Reviews. In the first instance, a prospective author is asked to provide a synopsis of about 1000 words showing the scope and form of the review he would be able to write. On acceptance of the synopsis, the author (or group of co-authors) is commissioned to complete the full manuscript. Usually it is possible to allow at least six months for the completion of this part of the work. An honorarium is paid to the author, or to co-authors jointly, on acceptance of the review. Most IEE Reviews contain a section on the history of the subject. The IEE Professional Group S7 Committee (History of Technology) has offered to help authors in writing historical material.

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