The role of the editor of scientific publications is more complicated in developing countries than in the more-developed world. Sri Lanka is regarded today as one of the less-developed countries. Although the physical quality of life is high and the literacy rate of 89% is one of the highest in Asia, the gross domestic product (GDP) per capita is US$750. Furthermore, the investment in scientific and technological research and development is only 0.13% of the GDP.

Although Sri Lanka’s scientific infrastructure has been reasonably good, research capacity in terms of qualified and trained scientific personnel has been sharply declining over the years. Studies of impediments to scientific research in the country have revealed that the lack of access to current scientific literature is a major constraint. The effects of the dearth of scientific publications journals, books, magazines, and so on are felt both by scientists and by students and the highly literate general population.

Some History
The first scientific journal in Sri Lanka was published in the 19th century, although scientific research began in the second half of the 18th century. Scientific publishing in Sri Lanka today concentrates mainly on school textbooks followed by magazines, newspaper articles, and journals. Over the last 40 years, scientific publishing has increased but has not kept pace with the growth in population and in interest in scientific and technical topics.

During the last 30 years, the number of scientific journals has increased considerably. The main publishers of primary research results are the universities and the research institutes. Many of the medical associations publish periodicals in their specialities (such as the Ceylon Journal of Surgery, the Sri Lanka Journal of Obstetrics and Gynaecology, and the Sri Lanka Dental Journal). The Sri Lanka Association for the Advancement of Science has published its Proceedings, in abstract form, since 1945. The Natural Resources, Energy and Science Authority (now the National Science Foundation) has published a biannual primary research journal covering all fields of science and technology since 1973. Several of the local journals, however, are irregular and have ceased publication after a short time.

Principal Problems
The major problems facing scientific publishing in Sri Lanka are the lack of professionally trained editors and the lack of adherence to internationally accepted standards, norms, units, and the like. Both problems are due to the lack of training facilities for scientific editors.

Editors and publishers of scientific books and journals in Sri Lanka share many difficulties with those in other developing countries. Scientific journals are edited on a part-time basis by honorary editors. The editor of a local journal often constitutes the entire staff, and his or her functions include soliciting for contributions, editing, graphic presentation, publishing, and distribution.

An Editorial Survey
The Natural Resources, Energy and Science Authority recently surveyed 38 local scientific and technical journals to study the editorial structure qualifications, training, experience, and so on. Of the scientific editors included in the survey, 94.7% received no remuneration for editing. Only 2 editors practiced full-time editing; the others were generally professional scientists who had to find time for editorial duties in already overcrowded schedules.

Only 8 editors had any professional training, and these were mainly in the agricultural and combined-science journals. The survey revealed the total lack of training of editors in medical, engineering, and physical-science journals. Nearly one-third of the editors had little or no experience; this is due to the frequency of change of editors of most journals, which is obviously detrimental to continuity of standards.

Other Problems and Some Solutions
Because the Sri Lanka scientific community is small, refereeing of articles poses a problem. It is difficult for editors to find appropriately qualified referees, locally in some specialized fields of science and technology. Articles must therefore be sent abroad for refereeing, and this incurs additional expenditure and adds to the high cost of producing scientific periodicals.

Editors also have difficulty in attracting sufficient contributions of good quality. Most scientists prefer to publish their research findings in internationally accepted foreign journals whose wider circulation and prestige ensure greater visibility.

Recognizing the need for more-stringent editorial controls and standards for scientific publishing, the council of the Sri Lanka Standards Institute has, since 1994, authorized for adoption and publication 3 standards published by the International Organization for Standardization: ISO 215 (presentation of contributions to periodicals and other serials), ISO 5966 (presentation of scientific and technical reports), and ISO 8 (presentation of periodicals).

Clearly established editorial standards would help to improve the acceptance of local scientific publications and would induce more scientists to submit their best papers to national journals. Journal requirements should be streamlined; that is, there should be more uniformity of editorial policies among journals.

The problems discussed here are common to many countries in Asia, so the establishment of regional training centers for scientific editors that could provide facilities for short-term and long-term training would meet a long-recognized and immediate need in the field of scientific communication.