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Message from the President

The Publishing of the Nuclear Journal of Canada is a major, yet a logical step in the progress of the Canadian Nuclear Society. After achieving world class status in all facets of nuclear related activities including the superior performance of the CANDU System, the Canadian Nuclear Society decided to publish a technical journal. The Nuclear Journal of Canada is yet another forum for sharing the research results and new applications of nuclear-related science, with your fellow men who are working in the nuclear field.

In the spirit of open communication, the successes and failures need to be analysed and told. This is your forum – your chance to participate.

Responsibility and technical excellence are necessary bed fellows in the nuclear field.

This is one major opportunity to demonstrate our strengths.

A handwritten signature in black ink, appearing to read 'N. Yousef'. The signature is fluid and cursive, with a long, sweeping line extending from the end.

N. Yousef

President

Canadian Nuclear Society

Editorial

Alan Wyatt
Editor

The Canadian Nuclear Society is proud to launch the *Nuclear Journal of Canada*. This is a major undertaking and the culmination of several years of effort. The *Nuclear Journal of Canada* is a quarterly publication of international standard. It is being produced for the Canadian Nuclear Society by the University of Toronto Press, a leading publisher of scholarly journals.

The primary objective of the *Nuclear Journal of Canada* is to present papers on all aspects of nuclear science, engineering, and technology. Although many papers will naturally have a Canadian context, relevant papers from non-Canadian authors about overseas developments are encouraged. Papers published in the *Journal* will be grouped according to the eight areas of interest as defined by members of the Canadian Nuclear Society, namely:

- 1 nuclear science
- 2 design and materials
- 3 mining and manufacturing
- 4 environment
- 5 health and public affairs
- 6 waste management
- 7 nuclear plant operations
- 8 fusion

The language policy of the *Nuclear Journal of Canada* is to publish articles in either of Canada's official languages, as submitted by the author. Abstracts will normally be published in both English and French.

Many scientific and professional journals deal with a relatively narrow area of specialization. The general background to all the papers in those journals is understood by the great majority of those who receive them. In view of the breadth of coverage for the *Nuclear Journal of Canada*, a number of overview, or review papers is appropriate for each issue, averaging about 20 per cent of the papers published. In this issue the opening paper gives the historical background to the formation of the Canadian Nuclear Society.

After publication in the *Journal*, discussion of the published papers will be actively encouraged. Closing date for receipt of letters (maximum length 1000 words) is approximately six weeks after the relevant number's date of issue. For this first issue the closing date for communications concerning the papers is 5 May 1987. All such communications are to be addressed, in duplicate, to the editor, who will forward them to the author for his/her response. The letters and author's response will normally be published in the second issue following publication of the article; letters on this first issue will be published in the third. The editor reserves the right to edit letters and responses to fit available space.

Manuscripts of papers to be considered for publication in the *Nuclear Journal of Canada* should be sent to the editor at the address shown on page i. Instructions for authors are on pages 92 and 93 and, for the first few issues, will be included (in alternate issues) in English and French. No page charges are levied on authors. At time of acceptance of papers for publication, authors are advised of the standard optional charges for offprints and reprints, which are produced to the identical quality standard of the *Journal* itself.

Since its inception, the Canadian Nuclear Society has itself sponsored, or co-sponsored with sister societies, a number of conferences and seminars covering a wide range of topics. A summary of these meetings, a list of papers presented and their authors, and where copies of the proceedings may be obtained, will be published in the *Journal*. The proceedings of some conferences will be published as a supplement to the *Nuclear Journal of Canada*. Subscribers interested in acquiring these supplements will be advised of their cost and provided with an order form before the date of issue.

A key factor in establishing and maintaining the high standards of any journal is the review process for papers submitted. Peer-review, prior to publication, is essential, and all papers considered for publication, whether submitted individually or presented at Canadian Nuclear Society conferences, must follow the review procedures of the *Journal*. The members of the editorial board are the vital link in the review process,

acting in both the roles of selector of reviewers and reviewer themselves. In order to provide for uninhibited review, reviewers are selected from organizations other than those of the authors, and are guaranteed anonymity.

The *Nuclear Journal of Canada* will carry advertisements for technical and scientific books, conference notices, complementary journals, educational courses, employment opportunities, personnel availability, and educational materials. Advertisements from commercial organizations will only be accepted where the copy is primarily to inform of new developments, processes, and applications, and not for purely commercial promotional purposes. Advertising copy

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The success of the *Nuclear Journal of Canada* depends on a steady flow of high quality original papers. The *Journal* is produced for the benefit of its readers. You can help all of them by stimulating the submission of papers, which will be promptly acknowledged and processed expeditiously. With your support I am confident that the *Nuclear Journal of Canada* will be of great value to the scientific and engineering community, both in Canada and internationally. Any comments or suggestions that any of our readers may have will be welcome.