EDITORIAL PREFACE

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With this issue I complete my tenure as Editorin-Chief of the International Journal of Nanotechnology and Molecular Computation. It has been a long journey from the preparations in 2007 leading to our inaugural issue in 2009, and there have been many challenges along the way. Therefore, I think the time is ripe to convey the editorship to other hands with more energy than I have, and with fresh ideas about how to fulfill the journal's important mission.

The topics of nanotechnology and molecular computation, separately and in combination, continue to grow in importance. The potential of nanotechnology goes without saying, but techniques for assembling complex, hierarchical structures are limited, and algorithmic assembly, implemented through molecular computation, is a promising solution. Conversely, CMOS semiconductor technology is reaching its inevitable limits, and post-Moore's Law computing will need to exploit new nanoscale technologies and unconventional computing paradigms, such as molecular computation. IJNMC can be an important contributor to this progress.

I am grateful to the authors whose papers constitute the value of this journal and to the Associate Editors and members of the Editorial Review Board whose behind-the-scenes volunteer work has been essential to its success. I look forward to following the progress of *IJNMC* and to enjoying its important articles.

Bruce MacLennan Editor-in-Chief *IJNMC*

Bruce J. MacLennan has a BS in mathematics (with honors, 1972) from Florida State University, and an MS (1974) and PhD (1975) in computer science from Purdue University. He was a Senior Software Engineer with Intel Corporation (1975–9), after which he joined the Computer Science faculty of the Naval Postgraduate School (Monterey, CA) as Assistant Professor (1979–83), Associate Professor (1983-7), and Acting Chair (1984-5). Since 1987 he has been a member of the Electrical Engineering and Computer Science faculty of the University of Tennessee, Knoxville. MacLennan's research includes the application of molecular computing to nanostructure synthesis and control and the development of novel models of computation intended to better exploit physical processes for computation. Prof. MacLennan has more than 75 refereed journal articles and book chapters and has published two books. He has made more than 70 invited or refereed presentations.