

## Guest Editorial

OVER 500 people from 43 countries attended the 1998 CPEM held in the Washington Renaissance Hotel, Washington, DC, July 6–10, 1998. The technical program included 344 papers given in 32 lecture sessions and 33 poster sessions held during three-and-a-half days. Many of these papers were submitted as candidates for publication in this CPEM'98 Special Issue (or "Proceedings") of the IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT. Out of 210 submissions, 125 manuscripts were ultimately selected for publication (about a 60% acceptance rate).

The process of reviewing, editing, and selecting these Proceedings took place over about six months. The deadline for returning reviewed papers was the end of July 1998. By September 10, 116 of the 125 accepted papers had received the required two reviews. With the very capable assistance of Associate Guest Editor Brian Ricketts, who handled the editing of 70 of the 210 papers, the difficult task was begun of having to select and edit those submissions that were accepted. Believe me, this was not a simple job. We are indebted to the many people who were asked to review these papers and did an admirable and thorough job. Unfortunately, they are far too numerous to name individually. With the deadline for returning the manuscript reviews to the session chairs/editors set for well after the conference, it appears that a more comprehensive set of reviews was obtained, thus taking much of the burden off the editors. When there was a consensus by the reviewers (three where necessary) that the candidate paper was considered to be only fair or poor, or required extensive changes, it was rejected. Again, papers were automatically rejected for the reasons of an author not attending the conference to present the paper or if the paper had been previously published, according to CPEM and IEEE publication policy.

Accepted papers were then returned to the authors for revisions. Most of these revised papers were received by the end of October, although a few were still arriving in November. Logging information on the status of each paper in terms of a satisfactory abstract, IEEE copyright form, keywords, editorial changes/corrections, figures/captions, biographies and photos, as well as the original manuscript and three copies (without losing or damaging any of this precious material) is great fun—ha! By December 1, we were around 75% completed. With the holidays and related distractions, it was not until January 1999 that the fabulous 125 papers were finally sent in three big shipping containers to the IEEE.

For those authors whose papers were not accepted as a result of the above process, I hope that you will consider revising your manuscripts as needed and resubmitting them for a regular issue of the IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT (or possibly some other more appropriate journal). For those authors whose papers were ultimately accepted, I would like to thank you for producing your revised

manuscripts in a timely manner to meet the IEEE deadline. Thanks go especially to Brian Ricketts, who had the challenge of dealing with the papers going to and coming from Australia. This exercise proved that with e-mail, faxes, and air express, halfway around the world is no real barrier to performing an editor's job. Brian is certainly ready now to be the Guest Editor for CPEM 2000. Thanks also to Katherine Green (nee Magruder) who, besides serving as the CPEM'98 Secretary, also provided secretarial support services for me before and during the conference as well as in the data logging and processing of all the manuscripts in the months that followed.

I would like to thank the session Presiders, whose assistance in rounding up reviewers, doing some of the reviews themselves, chasing after tardy papers, and offering their comments about the relative merits of the papers given in their session was indispensable. Otherwise, the quality of the manuscripts contained in this Special Issue would not be as good.

The Presiders were:

Norman Belecki, NIST, USA  
 Donald Sullivan, NIST, USA  
 Barry Taylor, NIST, USA  
 Chris Ekstrom, USNO, USA  
 Karl Erik Rydler, SP, Sweden  
 Anne-Marie Jeffery, NIST, USA  
 Erich Braun, PTB, Germany  
 John Hall, NIST, USA  
 Luc Erard, BNM-LCIE, France  
 Peter Mohr, NIST, USA  
 GianCarlo M. Reetz, IEN, Italy  
 Kenichi Fuji, NRLM, Japan  
 Greig Small, NML, Australia  
 Andrea De Marchi, P di T, Italy  
 Alan Clark, NIST, USA  
 Terry Quinn, BIPM, France  
 Alan Madej, NRC, Canada  
 Rand Elmquist, NIST, USA  
 Manfred Klonz, PTB, Germany  
 Steven Jefferts, NIST, USA  
 Takayuki Kurosu, NRLM, Japan  
 William Anderson, NIST, USA  
 Heikki Seppa, VTT Auto., Finland  
 Alexander Titov, INMETRO, Brazil  
 Juan Figueroa, CENAM, Mexico  
 Patrick Gill, NPL, U.K.  
 Kurt Weyland, PTB, Germany  
 Daniel Slomovitz, UTE, Uruguay  
 Harald Simonsen, DFM, Denmark  
 Edwin Williams, NIST, USA  
 Kurt Gible, Yale University, USA  
 Gerard Geneves, BNM-LCIE, France  
 Brent Young, NIST, USA  
 Leslie Pendrill, SP, Sweden  
 Francois Piquemal, BNM-LCIE, France

Lesley Henderson, NPL, U.K.  
 S. Avramov-Zamurovic, NIST, USA  
 Peter Filipski, NRC, Canada  
 H. Steffen Peiser, NIST, USA  
 Christopher Oates, NIST, USA  
 Tadashi Endo, ETL, Japan  
 Eric Bergeault, ENST, France  
 Clark Hamilton, NIST, USA  
 Barry Wood, NRC, Canada  
 Paul De Bievre, IRMM, Belgium  
 Juergen Helmke, PTB, Germany  
 Marvin Cage, NIST, USA  
 Roger Marks, NIST, USA  
 Richard Clark, NRC, Canada  
 Keith Jones, IRL, New Zealand  
 Cees J. Van Mullem, VSL, The Netherlands  
 Jonathan Williams, NPL, U.K.  
 Claude Weil, NIST, USA  
 Tom Nelson, NIST, USA  
 Dominique Reyman, BIPM, France  
 Stuart Kupferman, SNL, USA  
 Michael Hall, NPL, U.K.  
 Jochen Glimm, PTB, Germany

Bryan Waltrip, NIST, USA  
 Jan De Vreede, VSL, The Netherlands  
 Ian Robinson, NPL, U.K.  
 Vladlin Shifrin, VNIM, Russia  
 Dieter Janik, PTB, Germany  
 Sam Benz, NIST, USA  
 Ismael Castelazo, CENAM, Mexico

Special thanks go to David Newell for co-chairing session TUPA4 with Alexander Titov, to Ronald Ginley, who chaired session WEPB4 when Eric Bergeault could not travel, to Jan De Vreede, for chairing session THPA2 for Cees J. Van Mullem, whose wife was ill, and to Bernd Schumacher for chairing session THPB3 for Michael Hall, who could not travel. I am further indebted to Carla Battle and the other staff from Courtesy Associates who were so helpful in providing the Publishing Office during the Conference and the well-used copy machine. I would also like to acknowledge Bill Anderson, Alan Cookson, and the other management staff at NIST who provided their support and facilities for carrying out this task.

BARRY A. BELL  
*Guest Editor*



**Barry A. Bell** (S'59-M'61-SM'87-F'97) was born in Des Moines, IA, in 1937. He received the B.S.E.E. degree in June 1961 from Stanford University, Palo Alto, CA, and the M.E.E. degree from Yale University, New Haven, CT, in June 1962.

During college, he worked as a student engineer for the Hewlett-Packard Company and for the Martin Marietta Company. After serving as an Officer Instructor, U.S. Naval Nuclear Power School, Bainbridge, MD, he was an R&D Engineer, Leeds and Northrup Company, North Wales, PA. In 1976, he joined the Electricity Division, National Bureau of Standards (NBS), now the National Institute of Standards and Technology (NIST), as Chief of the Electrical Instruments Section. In 1978, he became Leader of the Electronic Instrumentation and Metrology Group, where he has supervised engineers, physicists, and technicians in research and development projects and associated calibration services for supporting the metrology needs of the electronic instrumentation and test equipment industry. His principal technical contributions have been in the design and development of precision measurement devices and instrumentation, and related physical standards. He holds two patents and has authored and

co-authored over 30 conference and archival papers and NBS/NIST reports.

Mr. Bell was the recipient of a U.S. Department of Commerce Silver Medal award in 1981. He is the Instrumentation and Measurement (I&M) Society's contributing member of the IEEE New Technical Directions Committee, is serving a four-year term on the I&M Society Administrative Committee, and is the I&M Society Liaison to the Executive Committee of the Conference on Precision Electromagnetic Measurements.