

The Frank M. Booth Award



The Frank M. Booth Award, established in 1970, is named after the founder of these International Symposia. It is presented in recognition of outstanding contributions to the advancement of Power Sources both technically and in furthering the effectiveness of the Symposia.

For the 20th Power Sources Symposium, the Board of Trustees is delighted to announce that they have given the 1997 Award to Dr Paul M. Skarstad of the United States.

Dr Skarstad is Director of Power Sources, Research and Development, at Medtronic, Inc. , of Minneapolis, USA.

Batteries developed by his group are used to power a broad range of implantable medical products, including cardiac pacemakers, cardioverter-defibrillators, neurological stimulators, drug delivery systems, hæmodynamic monitors and other implantable devices. He has worked in the area of lithium batteries for implantable medical applications since joining Medtronic in 1976 from the National Bureau of Standards.

His work over twenty years with Medtronic has focussed on developing basic understanding of the battery chemistries used to power implantable medical devices to ensure optimal device reliability and longevity. He has made contributions to under-

standing the chemistry of several lithium battery systems, including iodine, thionyl chloride, manganese dioxide and silver vanadium oxide types, and of the corrosion of glass by lithium. Based on this understanding, he and his colleagues have developed mathematical models which accurately predict the long-term performance of batteries that are implanted in people for many years. These models are used both in the design of batteries and in the design of devices using the batteries.

Paul Skarstad has participated regularly to these Symposia since 1984, and has contributed seven papers, dealing with the chemistry of each of four battery systems, seal corrosion and some on the mathematical modelling of batteries.

He holds a Ph.D. in Physical Chemistry from Cornell University and a B.A. in Chemistry from the University of Minnesota. He is author of more than fifty technical publications and holds thirteen patents related to power sources. In 1992 he was made a Fellow of the Bakken Society, Medtronic's highest honour for technical contributions.

Previous recipients of the Award have been:

Dr M. Barak	}	1960/70
Dr P. Reasbeck		
Mr A.L. Taylor		
Mrs Jeanne Burbank		1970
Dr J.F. Laurent		1972
Dr M.I. Gillibrand		1974
Mr D.H. Collins		1976
Prof H.R. Thirsk		1978
Dr P. Ruetschi		1980
Mr M.H.J. Lemmon		1982
Dr J.P. Gabano	}	1986
Prof F.L. Tye		
Mr N.E. Bagshaw		1988
Prof K. Kordesch		1991
Mrs S.M. Bourner		1993
Dr G.J. Donaldson		1995