

Robert Barker Memorial Session: Leadership in Plasma Science and Applications

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Abstract—This paper summarizes the Dr. Robert J. Barker memorial session at the IEEE International Conference on Plasma Science 2014. Each section summarizes progress in a plasma research area strongly influenced by Dr. Barker's leadership: 1) plasma medicine; 2) atmospheric-pressure plasmas; 3) high-power microwaves; 4) pulsed power; and 5) numerical simulation of plasmas. He had a profound influence on these and other plasma science applications, as well as on numerous individual researchers. He will be missed greatly.

Index Terms—Atmospheric-pressure plasmas, high-power microwaves (HPMs), plasma medicine, plasma simulation, pulsed power.