



S. Mark Halpin (F'05) was born in 1965 in Sandersville, GA, USA. He received his PhD degree from Auburn University in 1993. He has been actively involved in teaching, research, and service for his entire career. He presently holds the position of Alabama Power Company Distinguished Professor at Auburn University. He is active in IEEE and IEC standards development and has been involved in numerous standards-making bodies in both leadership and technical contributor roles. He has been responsible for over US\$25M in funded

research and has authored or co-authored over 110 technical papers, articles, and book chapters which have been published in leading journals or by major scientific publishing companies, or presented at conferences and symposia focusing on power and energy.

A significant portion of Dr. Halpin's accomplishments are related to development and application of standards in areas related to power and energy systems. He has been instrumental in many aspects of the IEEE Color Book series of standards, IEEE Standard 519 (harmonic control in power systems) where he serves as Chair, and IEEE Standard 1453 (voltage flicker in power systems). His widespread involvement in IEEE standards has led to numerous invitations to participate in both technical and leadership positions in non IEEE standards-making and technical organizations such as IEC, CIGRE, and CIRED where he is a member of the following groups focusing on power quality: IEC TC77/SC77A WG1 ("harmonics"), WG2 ("voltage fluctuations"), and WG8 ("electromagnetic compatibility"); United States National Committee (of the IEC) Technical Advisory Group for IEC TC77/77A ("power quality"); CIGRE/CIRED JWGs C4.103 "Emission Limits for Disturbing Installations," C4.108 "Flicker Objectives," C4.109 "Power Quality Assessment," and C4.111 "Voltage Fluctuations." Dr. Halpin was Convener of WG C4.108 and is presently Convener of C4.111 and IEC TC77/SC77A/WG2.

He has created application training programs based on IEEE and IEC standards which have been delivered around the globe including the countries of China, India, Italy, Spain, Germany, Czech Republic, and Canada. The core of these programs has been incorporated in his Expert Now educational module on power quality developed for the IEEE Educational Activities Board. He has authored, co-authored, or contributed to over 150 standards and technical papers related to electric power quality in utility and industrial electric energy systems and he has been a member of over 40 standards development Working Groups. His accomplishments in areas related to IEEE and IEC standards were recognized by his receipt of the 2006 IEEE Charles Proteus Steinmetz Award presented by the IEEE Standards Association and his elevation to IEEE Fellow in 2005. Dr. Halpin is a past-President of the IEEE-IAS and, through his support of IAS Chapters in his role as President, is completely comfortable and familiar with issues associated with and faced by Chapters as they strive to offer valuable technical content for their local membership.

Dr. Halpin has delivered numerous technical lectures in areas related to the following topics and would offer these types of topics for presentation as a part of the IAS Distinguished Lecturer program:

- (a) Myths and Realities of Alternative Energy;
- (b) Impacts of Smart Grid Technology on Existing Systems and Practices
- (c) Power Quality Implications of Distributed/Alternative Energy Options;
- (d) Electrical safety: Arc flash evaluation based on IEEE Std. 1584;
- (e) Facility design Considerations for Improved Power Quality;
- (f) Industrial Power System Analysis (short circuit, load flow, stability, etc.);
- (g) The IEEE Color Books as a Complete Industrial System Design Guide.