About the Authors

George Buckbee, P.E. is a process control industry veteran. George holds a B.S. in Chemical Engineering from Washington University in St. Louis, and an M.S. in Chemical Engineering from the University of California at Santa Barbara. George has 17 years of direct industry experience, at Procter & Gamble and sanofi-pasteur, as well as several years' experience developing control performance solutions with ExperTune. George is a Senior member of ISA and the author of several articles. He also wrote chapters in *The Instrument Engineer's Handbook*. George resides in Pennsylvania, where he is active in community sports, scholarship activities, and as an adult leader in the Boy Scouts.

Joseph Alford, Ph.D, P.E., CAP, retired in 2006 as an Engineering Advisor at Eli Lilly and Co. after a 35-year career in bioprocess automation. Specific areas of expertise include process control, applications of Process Analytical Technology, use of artificial intelligence, computer validation, alarm management, and process modeling. Joe holds a B.S. in Chemical Engineering from Purdue University and M.S. and Ph.D. degrees in Chemical Engineering from the University of Cincinnati. He has received Distinguished Alumni Awards from both these universities. Joe has authored or co-authored over 30 articles and book chapters and has received national awards from both AIChE and ISA for his contributions to bioprocess automation. He has also been elected as an ISA Fellow. Joe remains very active professionally in retirement—authoring papers, consulting, presenting invited lectures, reviewing papers for technical journals, serving on university Industrial Advisory Boards, and serving on Technical Society Publications Committees, Editorial Advisory Boards, and Standards Committees. Joe resides in Indianapolis, where he is active in sailing, competitive swimming, MathCounts, and visiting with family.