

Power Electronics For Fuel Cells Workshop

Speakers' Biographies

Dr. Issa Batarseh

Dr. Issa Batarseh, P.E. is a Professor in the School of Electrical Engineering and Computer Science at the University of Central Florida (UCF). He received the Ph.D., M.S. and B.S. degrees in Electrical Engineering from the University of Illinois, Chicago in 1983, '85 and '90, respectively. Dr. Batarseh was a visiting Assistant Professor at Purdue University from 1989 to 1990 before joining UCF in 1991. His research interest is in the area of power electronics, focusing on dc-to-dc power supply design, power factor correction, and dynamic modeling of converters. He has seven US patents in the area of dc-dc converters and power factor corrections. He has published his work in international journals such as *IEEE Transactions on Power Electronics*, *on Aerospace and Electronic Systems*, *on Circuits and Systems* and *IEE Electronics Letters* and *IEE Proceedings*. He has more than 120 conference publications in APEC, PESC, IECON, ISCAS and other related conferences. Dr. Batarseh's research work has been sponsored by NSF NASA, Florida Space Grand Consortium, Allied Signals Corp., and the Industry Application Society of IEEE. He received several research and teaching awards over the last few years. He has served as a Chairman of the Power Engineering Chapter of the Orlando IEEE Section; Chairman of the Orlando IEEE Section, and served as IEEE student Chapter Advisor at UCF. . He is a registered professional engineer in Florida and a Senior Member of IEEE.

Address: College of Engineering and Computer Science
University of Central Florida
Orlando, FL 32816

Tel: 407 -823-2455

Fax: 407- 823-6334

Email: Batarseh@mail.ucf.edu

Dr. Jack Brouwer

Dr. Jack Brouwer is the Associate Director of the National Fuel Cell Research Center (NFCRC) located at the University of California, Irvine (UCI). Dr. Brouwer holds the Ph.D. degree in Mechanical Engineering and Chemical Engineering from the Massachusetts Institute of Technology. His expertise encompasses energy systems, fuel cells, combustion, turbulent reacting flows, computational fluid dynamics, detailed chemical kinetics, and the design and operation of advanced experimental facilities for emerging energy technologies. Prior to joining the NFCRC, Dr. Brouwer was on the faculty at the University of Utah, a Senior Engineer at Reaction Engineering International, and a Staff Scientist at Sandia National Laboratories. At the NFCRC, Dr. Brouwer has overall responsibility of the management and operations of the center as well as the challenges associated with the development of this unique concept. The NFCRC is breaking new ground in the design and conduct of both a university center and a National Center. This, coupled with the extraordinary changes that are occurring with regard to electric restructuring and global climate requirements, is bringing focused attention of the world's community to high-efficiency, environmental-preferred energy generation options with fuel cell technology serving as the principal target.

Address: University of California, Irvine
National Fuel Cell Research Center
221 Engineering Lab Facility
Irvine, CA 92697-3550

Tel: 949-824-1999 x 221

Fax: 949-824-7423

Email: jb@nfcrc.uci.edu

Dr. Guozhu Chen

Dr. Guozhu Chen, a visiting scholar at University of California Irvine since Jan. 2002, is an associate Prof. in Power Electronics at Zhejiang University, China since 2000. His main research interests & experiences are power electronic equipment & digital control, such as: Active Power Filter, SVC/SVG, Motor drivers, Electrical Vehicle, Battery Charger, UPS, Communication Supply, DC/DC, DC/AC and Software Products etc. Dr. Chen is also the author of over 30 publications in Power Electronics

Address: University of California, Irvine, and Engineering Tower 652
Irvine, CA 92697-2625
Tel: 949-824-6198
Email: egchen@ece.uci.edu

Mr. Don Collins

Don joins us from the National Energy Technology Laboratory where he manages projects in solid-oxide fuel research and development. His key responsibilities include managing two SECA Industrial Team projects and leading the Core Technology Program.

Prior to joining the NETL, Don worked for 16 years with the Navy on submarine research, design, construction and operation programs. Don has 6 years experience working in private industry supporting the Office of Naval Research, the Oceanographer of the Navy, and NAVSEA on research and design of stealth, survivability and power technologies for submarines. Projects include studies of fuel cell power systems technology for unmanned under water vehicles.

As a mechanical engineer, Don was responsible for mechanical systems to purify and control the submarine atmosphere to safe and habitable conditions. He spent six years at Portsmouth Naval Shipyard (Kittery, ME) designing new systems and supporting shipyard installation and test activities. From there Don joined NAVSEA in Arlington, VA to manage research, design, and construction aspects for the SEAWOLF class of submarines. Responsibilities included managing the SBIR program and management of research and engineering tasks to Navy laboratories and prime contractors.

Address: U.S. Department of Energy
National Energy Technology Laboratory
PO Box 880
Morgantown, WV 26507-0880
Tel: 304- 285-4156
Email: Donald.Collins@netl.doe.gov

Mr. Richard W. Corey

Richard Corey is the Chief of the California Air Resources Board's (ARB) Research and Economic Studies Branch. As part of his responsibilities, he oversees the ARB's Innovative Clean Air Technology (ICAT) grant program, which focuses on facilitating the commercialization of technologies that have the potential to reduce air pollutants. Richard's team is also responsible for a broad range of programs focused on identifying strategies for reducing emissions and exposure to air pollutants in the most effective manner possible. Richard received his B.S. in Environmental Toxicology as well as an MBA from U.C. Davis.

Address: Chief, Research and Economic Studies Branch
CA Air Resources Board, Research Division
1001 I Street, Sacramento, CA 95812
Tel: 916- 322-7077
Email: rcorey@arb.ca.gov

Dr. Mariesa Louise Crow

Mariesa Louise Crow (Associate Dean for Graduate Studies and Research and Professor of Electrical and Computer Engineering) received her BSE in Electrical Engineering from the University of Michigan and her Ph.D. in Electrical Engineering from the University of Illinois – Urbana/Champaign in 1989. Her area of interest is bulk power transmission systems analysis and security. She is the Vice President for Education/Industry Relations of the IEEE Power Engineering Society (a 25,000+ member professional society). She has authored over 60 articles and has participated in research projects totaling over \$6 million in the past 10 years. Research sponsors include NSF, EPRI, Ameren UE, Illinois Power, Ford Motor Co., Sandia National Laboratories, and the Naval Surface Warfare Center. She is currently the Project Director of an NSF Integrative Graduate Education and Research Training program on variable speed electromechanical drive systems. She has received several Faculty Excellence Awards at UM-Rolla for excellence in teaching, research, and service, the IEEE Power Engineering Society Outstanding Young Engineer award in 1997, the ASEE Outstanding New Faculty Award, and an IEEE Third Millennium Medal in 2000. She is the Chair of the UM-Rolla Admissions and Academic Standards committee. She is a Registered Professional Engineer in Missouri.

Address: 233 Emerson Electric Company Hall
University of Missouri-Rolla
Rolla, MO 65409-0040

Tel: 573- 341-6305
Fax: 573- 341-6671
Email: crow@ece.UMR.edu

Mr. Richard DeBlasio

Mr. Richard DeBlasio is currently the Technology Manager for the NREL/DOE Distributed Energy Resources Program, which includes distributed power electric system integration, thermal systems integration, thermal storage systems, and communications programs at NREL in support of the DOE DEER. He has held various senior level technical positions at NREL for nearly 25 years which included establishing and managing the NREL/DOE Distributed Power Program and Systems Integration activities from 1998 to the 2002, and the Photovoltaics Module and System Performance and Engineering Project from 1978 to 1998 at the U. S. National Renewable Energy Laboratory (NREL). Before joining NREL (SERI) in 1978, he was a senior engineer with the U.S. Atomic Energy Commission in Washington, D.C. (1974 to 1978), a project manager with Underwriters Laboratories (1972-1974), and a member of the technical staff at Stanford University (1965-1972). Mr. DeBlasio is an electrical engineer, a senior member of the IEEE (Institute of Electrical and Electronics Engineers) and member of the IEEE Standards Board, chairs the IEEE Standards Board Coordinating Committee on Fuel Cells, Photovoltaics, Distributed Power, and Energy Storage, chairs the IEC TC82 and JCG for international standards development for Renewable Energy systems and Decentralized Power Systems, and a member of the Board of Directors for the Global Accreditation Program and PowerMark Corporation.

Address: Technology Manager, Distributed Energy Resources Program
National Renewable Energy Laboratory
1617 Cole Boulevard, Golden, Colorado 80401-3393

Tel: 303-275-4333
Fax: 303-275-3835
E-mail: deblasid@tcplink.nrel.gov

Mr. Roch Ducey

Mr. Ducey is one of the Army's experts in renewable energy technologies that can be used as distributed electrical power resources, including geothermal, photovoltaic and wind energy systems. He is the Army representative to the Tri-Service Renewable Energy Committee and the DoD Photovoltaic Review Committee, and serves on the IEEE Standards Committee for Grid Interconnection. Mr. Ducey is also the Project Leader for the Integrated Strategic Energy Planning capability package, which includes the integration of advanced distributed generation technologies, including fuel cells, micro-turbines, advanced reciprocating engines, and the renewable energy technologies previously mentioned.

Address: Engineer Research & Development Center
Construction Engineering Research Laboratory
2902 Newmark Drive
Champaign, IL 61822-1076
Tel: 800-USACERL, x7444.
Fax: 217-373-6740
Email: Roch.A.Ducey@erdc.usace.army.mil

Dr. Parviz Famouri

Parviz Famouri received the B.S. degree in Applied Mathematics from Kentucky State University in 1981. He received the B.S., M.S., and Ph.D. degrees all in Electrical Engineering at the University of Kentucky. He joined West Virginia University in 1990 where he is now a professor. He worked for Emerson Motor Company as an Engineering Scientist in 1994. Dr. Famouri's primary research and teaching interests include design, analysis, modeling and control of electric machines, electric and hybrid electric vehicles, and power electronics. He has served as principal investigator on projects for NSF, DoD and NASA and has been involved with projects funded by Energy Research Corporation, Electric Power Research Institute and electric utilities.

Address: ElectroMechanical Systems Lab
Lane Dept. of Computer Sc. & Electrical Engineering
West Virginia University, Engineering Sciences Bldg. 747
Morgantown, WV 26506-6109
Tel: 304-293-6371 ext. 2530
Fax: 304-293-8602
Email: pfamouri@wvu.edu

Dr. Randall S. Gemmen

Dr. Randy Gemmen has been employed with the DOE for about ten years. During this time Dr. Gemmen has performed research in the following areas: combustion testing for gas turbine power systems, fuel cell testing and evaluation, and hybrid (fuel cell + gas turbine) systems dynamic analysis. Dr. Gemmen is currently the Team Leader for Fuel Cell Research in the Gas Energy Systems Division of the Office of Science and Technology. Present work is focused on the development of validation and material property data for detailed models that are also under development at NETL. Dr. Gemmen holds several patents, and has published over 23 journal and conference papers. Dr. Gemmen received a Masters of Science in Aerospace Engineering from the department of Aerospace at the University of Michigan, and a Ph.D. in Mechanical Engineering and Applied Mechanics from the Mechanical Engineering Department at the University of Michigan.

Address: U.S. Department of Energy
National Energy Technology Laboratory
PO Box 880, Morgantown, WV 26507-0880
Tel: 304- 285-4536
Email: RANDALL.GEMMEN@netl.doe.gov

Dr. Faryar Jabbari

F. Jabbari's research interests are control theory and its application. Current projects include control design for systems with actuator saturation constraints, as well as applications to flight controls, earthquake engineering, and fluid/spray control. His involvement with NFCRC concerns developing high fidelity dynamic models for fuel cells. The main goal is to develop appropriate techniques for control of fuel cell power generation systems, in response to changes in demand or other operating conditions. He is on the editorial board of several prestigious journals and conferences, and has written about a hundred journal and conference papers. He obtained his Ph.D. from UCLA in 1986, and has been with the Mechanical and Aerospace Engineering Department of UCI since then.

Address: Department of Mechanical and Aerospace Engineering
University of California (UCI), Irvine, Ca 92697
Tel: 949- 824 -6433
Fax: 949 -824 -8585
Email: fjabbari@uci.edu

Dr. Ali Keyhani

Dr. Keyhani is a fellow of IEEE and recipient of the Ohio State University College of Engineering Research Award for 1989 and 1999. From 1967 to 1972, he worked for Hewlett-Packard Co. and TRW Control. Currently, he is a Professor of Electrical Engineering at the Ohio State University, Columbus, Ohio. He was the past Chairman of Electric Machinery Committee of IEEE Power Engineering Society and the past editor of IEEE Transaction on Energy Conversion. He is the director OSU Electromechanical and Mechatronic Systems laboratory. He has supervised 45 graduate student theses at OSU. Dr. Keyhani's research activities focus on control of power systems, power electronics, digital signal processing systems for control of power electronics, application of leader-follower game theory to power systems planning and operation, distributed energy systems, control and design of power electronic systems, DSP-based virtual test bed for design and control of power electronic systems, electro-mechanical systems, automotive systems and modeling, parameter estimation and failure detection systems. These activities have involved a substantial amount of experimental research on modeling and parameter estimation of electric machine and the development of DSP based virtual test-bed for control of power converters in distributed energy systems funded by NSF and Federal Research Laboratories and industrial members of OSU Mechatronics Center.

Address: The Ohio State University
Department of Electrical Engineering
2015 Neil Avenue, Columbus, OH 43210-1272
Tel: 614- 292-4430
Fax: 614- 292-7596
Email: keyhani.1@osu.edu

Brian Kuhn

Brian Kuhn received the B.S. and M.S. degrees in electrical engineering from the University of Missouri-Rolla in 1996 and 1997 respectively. He is presently employed as a Research Engineer in the Electrical and Computer Engineering Department at Purdue University, West Lafayette, IN. His research interests include modeling of electrical machinery and power electronics-based distribution systems.

Address: Purdue University
Electrical & Computer Engineering
Tel: 765-494-3434 (EE 147)
Fax: 765-494-0676
Email: briankuh@purdue.edu

Dr. Jih-Sheng (Jason) Lai

Jih-Sheng (Jason) Lai received his M. S. and Ph.D. degrees in electrical engineering from the University of Tennessee, Knoxville, in 1985 and 1989 respectively. In 1989, he joined the Electric Power Research Institute (EPRI) Power Electronics Applications Center (PEAC). From 1993, he worked with the Oak Ridge National Laboratory as the Power Electronics Lead Scientist. Since August 1996, he has been with Virginia Polytechnic Institute and State University as an Associate Professor. His main research areas are high power electronics converter topologies, motor drives, and utility power electronics interface and application issues. He has published more than 100 technical papers and 2 books and 8 U.S. patents awarded. Dr. Lai is the Chair of the 2000-2001 IEEE/DOE Fuel Energy Challenge and the Chair of IEEE Power Electronics Society Standards Committee.

Address: Virginia Polytechnic Institute and State University
668 Whittemore Hall
Blacksburg, VA 24061-0111
Tel: 540-231-4741
Fax: 540-231-6390
Email: laijs@vt.edu

Dr. Franco Maddaleno

Franco Maddaleno, Born in Turin (Italy) in 1955. Graduated cum laude from Polytechnic of Turin in 1980 in Electronic Engineering. Then moved to Federal Polytechnic of Lausanne (Switzerland). In 1982, assistant professor, in 1992 tenure as an associate professor both at Polytechnic of Turin. Since 1998 worked part time with UCI, dept. Electrical and Computer Engineering. Main interests are electromagnetic compatibility and power electronics.

Address: University of California at Irvine, ET 644A
Irvine - CA - 92697-2625
Tel: 949-824 -6198
Email: maddaleno@polito.it

A. P. Sakis Meliopoulos

A. P. Sakis Meliopoulos (M '76, SM '83, F '93) was born in Katerini, Greece, in 1949. He received the M.E. and EE diploma from the National Technical University of Athens, Greece, in 1972 and the M.S.E.E. and PH.D. degrees from the Georgia Institute of Technology in 1974 and 1976, respectively. In 1971, he worked for Western Electric in Atlanta, Georgia. In 1976 he joined the Faculty of Electrical Engineering, Georgia Institute of Technology, where he is presently a professor. He is active in teaching and research in the general modeling, analysis, and control of power systems. He has made significant contributions to power system grounding, harmonics, and reliability assessment of power systems. He is the author of the books, Power Systems Grounding and Transients, Marcel Dekker, June 1988, Lightning and Overvoltage Protection, Section 27, Standard Handbook for Electrical Engineers, McGraw Hill, 1993, and the monograph, Numerical Solution Methods of Algebraic Equations, EPRI monograph series. Dr. Meliopoulos is a member of the Hellenic Society of Professional Engineering and the Sigma Xi.

Address: School of Electrical & Computer Engineering
Georgia Institute of Technology
Atlanta, GA 30332-0250
Tel: 404-894-2901
Fax: 404-894-4641
Email: sakis@attbi.com

Dr. Ned Mohan

Ned Mohan is Oscar A. Schott Professor of Power Electronics and Systems at the University of Minnesota where he has been teaching since 1976. He has recently written two books on Electric Drives and has co-authored (with Profs. Tore Undeland and Bill Robbins) a book on Power Electronics. Ned Mohan is a Fellow of the IEEE.

Address: Dept of ECE
University of Minnesota
200 Union Street, SE
Minneapolis, MN 55455
Tel: 612-625-3362
Fax: 612-625-4583
Email: mohan@ece.umn.edu

Dr. M.A.Pai

Professor M.A. Pai received his B.S. degree in Electrical Engineering from the University of Madras, India in 1953 and his M.S. and PhD degrees from U.C. Berkeley in 1958 and 1961 respectively. After teaching for a year at U.C. Berkeley and U.C.L.A., he was on the faculty of I.I.T. Kanpur, India from 1963-1981, serving as Dean of R&D from 1976-78. He has been on the faculty of University of Illinois at Urbana-Champaign in the department of Electrical and Computer Engineering since 1981. His research interests are in power systems, control and computation.

Address: Department of Electrical and Computer Engineering
University of Illinois at Urbana-Champaign
1406 West Green Street
Urbana, IL 61801
Tel: 217-333-6790 (O)
217-344-0977 (R)
Fax: 217-333-1162
Email: m-pai@ux1.cso.uiuc.edu

Dr. Fang Z. Peng

Fang Z. Peng received the B.S. degree in electrical engineering from Wuhan University, China, in 1983 and the M.S. and Ph.D. Degrees in electrical engineering from Nagaoka University of Technology, Japan, in 1987 and 1990, respectively. He joined Toyo Electric Manufacturing Company, Ltd., from 1990 to 1992 as a research scientist. From 1992 to 1994, he worked with Tokyo Institute of Technology as a Research Assistant Professor. From 1994 to 2000, he worked for Oak Ridge National Laboratory (ORNL), as a senior staff member, Lead (principal) Scientist of the Power Electronics and Electric Machinery Research Center at ORNL from 1997 to 2000. Since 2000, he joined Michigan State University as an Associate Professor at the Department of Electrical and Computer Engineering.

Address: Michigan State University
2120 Engineering Building
East Lansing, MI 48824-1226
Tel: 517-432-3331
Fax: 517-353-1980
Email: fzpeng@egr.msu.edu

Dr. Scott Samuelson

Professor Scott Samuelson is the Director of the Advanced Power and Energy Program at the University of California Irvine, and Professor of Mechanical, Aerospace, and Environmental Engineering. He supervises the programs of the National Fuel Cell Research Center (NFCRC) and the UCI Combustion Laboratory, and hosts the Secretariats of both the Pacific Rim Consortium on Energy, Combustion, and the Environment (PARCON) and the Institute for Liquid Atomization and Spray Systems (ILASS-Americas). His research is directed to energy systems and the associated environmental impacts with activity ranging from combustion (gas turbines, boilers, and furnaces) to advanced energy systems (fuel cells, hybrids, distributed and dispersed power). His current research encompasses the development and application to practical propulsion and burner systems of laser diagnostics, model combustors and burners with clean boundary conditions and optical access, model gaseous and liquid fuels, fuel cell systems and hybrids, distributed and dispersed power, and grid connectivity and dynamics. He holds the PhD degree from the University of California Berkeley.

Address: University of California, Irvine
National Fuel Cell Research Center
221 Engineering Lab Facility
Irvine, CA 92697-3550
Tel: 949-824-7302 x 120
Fax: 949-824-7423
Email: gss@nfcrc.uci.edu

Dr. Enrico Santi

Enrico Santi received the Dr. Eng. degree in electrical engineering from the University of Padua, Italy in 1988 and the M.S. and Ph.D. degree from Caltech in 1989 and 1994, respectively. He worked as a senior design engineer at TESLAcO from 1993 to 1998, where he was responsible for the development of various switching power supplies for commercial applications. Since 1998 he has been an Assistant Professor in the electrical engineering department of the University of South Carolina. He has published several papers in power electronics and modeling and simulation and holds two patents. His research interests include switched-mode power converters, advanced modeling and simulation of power systems, modeling and simulation of semiconductor power devices, control of power electronics systems.

Address: University of South Carolina
ECE Dept Swearingen Center
Columbia, SC 29208
Tel: 803-749-4317
Fax: 803-777-8045
Email: santi@engr.sc.edu

Dr. Marcelo Godoy Simoes

Marcelo Godoy Simoes received the *B.E.* degree from University of Sao Paulo, Brazil, the *M.S.* degree from University of Sao Paulo, Brazil, and the *Ph.D.* degree from The University of Tennessee, USA, in 1985, 1990 and 1995, respectively and his *D. Sc.* degree (*Livre-Docencia*) from the University of Sao Paulo in 1998. He is IEEE Senior Member. He was a faculty member at The University of Sao Paulo, Brazil, from 1989 to 2000 where he was involved in organizing undergraduate courses in the Department of Mechatronics, teaching graduate courses in Power Electronics and Drives and also conducting research in applications of Intelligent Systems. Marcelo Simoes joined Colorado School of Mines in Fall 2000. He is working to establish research and education activities in CSM. His interests are in development of intelligent applications, neural network, fuzzy logic and genetic algorithms for industrial systems.

He has been working in the research of fuzzy logic and neural networks applications to power electronics, drives and machines control. He has published the first book on Fuzzy Modeling and Control in Portuguese language. He delivered mini-courses and tutorials about Fuzzy Logic Control with Applications to Mechatronics and Power Electronics during EPE-PEM in Kosice, Slovak in September/2000 and recently in Netherlands in TU/e (Technische Universiteit Eindhoven), Group Electromechanics and Power Electronics, during June/2001.

Address: Colorado School of Mines
Golden, CO 80401-1887
Tel: 303- 384-2350
Fax: 303-273-3602
Email: msimoes@Mines.EDU

Dr. Keyue Ma Smedley

Keyue Ma Smedley, received her BS. and MS. degrees in EE from Zhejiang University, China and Ph.D. degrees in EE from the California Institute of Technology, USA. Dr. Smedley was an engineer at the Superconducting Super Collider from 1990 to 1992 where she was responsible for the design and specification of ac-dc conversion systems for all accelerator rings. Dr. Smedley joined the faculty of Electrical and Computer Engineering at the University of California, Irvine, in 1992 where she has established a state-of-the-art Power Electronics Laboratory. Her research interest includes control, topologies, and integration of dc-dc converters, high fidelity class-D power amplifiers, active and passive soft switching techniques, single-phase and three-phase power factor corrected rectifiers, active power filters, and grid-connected inverters for alternative energy sources, etc.

Dr. Smedley is an At-Large AdCom member of the IEEE Power Electronics Society, the Chair of IEEE Power Electronics Society Constitution and Bylaws Committee, an Associate Editor of IEEE Transactions on Power Electronics, a Co-Chair of Industry/Education Committee of the Power Sources Manufacturer's Association. She was the Chair of IASTED and IEEE Power Electronics Society cosponsored International Symposium on Power Generation and Renewable Energy Sources 2002.

Address: University of California, Irvine
Electrical & Computer Engineering
644 D Engineering Tower
Irvine, CA 92697-2625
Tel: 949-824-6710
Fax: 949-824-3203
Email: smedley@uci.edu

Dr. Giri Venkataramanan

Giri Venkataramanan studied electrical engineering at the Government College of Technology, Coimbatore, India, California Institute of Technology, Pasadena, and the University of Wisconsin, Madison. After teaching electrical engineering at Montana State University, Bozeman, he returned to the University of Wisconsin, Madison, as a faculty member in 1999, where he continues to direct research in various areas of electronic power conversion as an Associate Director of the Wisconsin Electric Machines and Power Electronics Consortium (WEMPEC). He is the holder of four U.S. patents and has authored a number of published technical papers.

Address: University of Wisconsin
2559C Engineering Hall
1415 Engineering Drive
Madison, WI 53706-1691
Tel: 608-262-4479
Fax: 608-262-5559
Email: evrim@engr.wisc.edu

Dr. Longya Xu

Longya Xu received his M.S. and Ph.D. degrees from the University of Wisconsin, Madison, in 1986 and 1990 both are in Electrical Engineering. He joined the Department of Electrical Engineering at the Ohio State University in 1990, where he is presently a Professor. He has served as a consultant to many industry companies including Raytheon Co., US Wind Power Co., General Motor, Ford and Unique Mobility Inc. for various industrial concerns.

Dr. Xu received the 1990 First Prize Paper Award in the Industry Drive Committee, IEEE/IAS. In 1991, Dr. Xu won a Research Initiation Award from National Science Foundation. Dr. Xu is also a recipient of 1995 and 1999 Lumley Research Award for his understanding research accomplishments from College of Engineering, The Ohio State University.

Dr. Xu's research and teaching interests include dynamic modeling and optimized design of electrical machines and power converters for variable speed generating and drive system, application of advanced control theory and digital signal processor for controlling of motion and distributed power systems in super-high speed operation.

Dr. Xu is a senior member of IEEE, currently serving as the chairman of Electric Machine Committee of IEEE/IAS and an Associate Editor of IEEE Transactions on Power Electronics.

Address: Department of Electrical Engineering
The Ohio State University
2015 Neil Ave.
Columbus, OH 43210
Tel: 614- 292-6119
Fax: 614- 292-7596
Email: xu.12@osu.edu