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Curriculum Vitae

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PERSONAL

Date of Birth: August 7, 1955
Place of Birth: Semipalatinsk, USSR (Kazakhstan)
Marital Status: Married, one son

EDUCATION

- 1983, Tomsk Polytechnic (ranked a National Research University in 2009), Russia; Ph.D., Dissertation: "Development of Techniques for the Determination of Lightning Peak Current Statistical Distributions"
- 1977, Tomsk Polytechnic, Russia; MS (with High Honors), Masters thesis: "Multi-criteria optimization of the parameters of the Nurek-Regar 500-kV power transmission line"
- 1972, High School # 29; Semipalatinsk, USSR; Graduation with Honors

EMPLOYMENT

8/98 – present	Professor, Department of Electrical and Computer Engineering, University of Florida, Gainesville, Florida
6/91 - 8/98	Associate Professor, Department of Electrical Engineering, University of Florida, Gainesville, Florida
9/88 - 7/89	10-month Sabbatical funded by the US-USSR Research Exchange Program, Department of Electrical Engineering, University of Florida, Gainesville, Florida
10/79 - 1/94	Director of Lightning Research Laboratory (1984-1994), Senior Scientist (1983-1984), Scientist (1979-1983), High Voltage Research Institute at Tomsk Polytechnic, Russia
9/77 - 10/79	Assistant Professor of Electrical Engineering, Tomsk Polytechnic Institute, Russia

GUEST PROFESSORSHIPS

- The Hong Kong Polytechnic University, October-November 2012
- Osaka University, Japan, December 2011
- Doshisha University, Japan, June-July 2009
- Uppsala University, Sweden, September 2005
- Swiss Federal Institute of Technology Lausanne (EPFL), February-March 2001
- Technical University of Vienna, Austria, September 1998

AREAS OF INTEREST

Lightning Physics and Effects, Atmospheric Electricity, Lightning Protection, Lightning Detection

PROFESSIONAL ORGANIZATIONS

Fellowships and Memberships

- The Institution of Engineering and Technology (IET), Fellow, 2005-present
- American Geophysical Union (AGU), Member, 1989-2011, Fellow, 2012-present
- IEEE, Senior Member, 1996-2002; Fellow, 2003-present
- American Meteorological Society (AMS), Member, 1996-2003; Fellow, 2004-present
- Society of Automotive Engineers (SAE Aerospace), Member, 1999-2008
- IEEE Power Engineering Society, Member, 2001-present
- IEEE EMC Society, Member, 2001-present
- American Society for Engineering Education, Member, 2003-2008

Committee Chairmanships and Memberships

- AGU Committee on Atmospheric and Space Electricity (CASE), Member, 1996-2000 (two terms); Chairman, 2000-2002
- Technical Program Committee on Lightning for the biennial International Zurich Symposium on Electromagnetic Compatibility, Chairman, 1997-2009
- Ad Hoc Committee to revise topics for the International Conference on Lightning Protection, Chairman, 1996-1998
- CIGRE (International Council on Large Electric Systems) Working Group 33.01 (C4.401) "Lightning", Member, 1991-2007
- CIGRE Working Group C4-407 “Lightning Parameters for Engineering Applications”, Convener, 2008-2013
- CIGRE Working Group C4-410 “Lightning Striking Characteristics for Very High Structures”, Member, 2010-2013
- CIGRE Working Group C4.26 “Evaluation of Lightning Shielding Analysis Methods for EHV and UHV DC and AC Overhead Transmission Lines”, Member, 2012-present
- Steering Committee of the International Symposium on Lightning Protection (SIPDA), Member, 1998-present
- IEEE Working Group on the Lightning Performance of Distribution Lines, Member, 1999-present
- International Commission on Atmospheric Electricity, Member, 1999-present
- Scientific Committee of the International Conference on Lightning Protection (ICLP), Member, 2000-present
- ICLP Awards Committee, Member, 2005-2012
- Fall AGU Meeting Program Committee, Member, 2001
- AMS Science and Technology Committee on Atmospheric Electricity, Member, 2001-2007 (two terms)
- Underwriters Laboratories Standards Technical Panel for Lightning Protection Components (STP 96), Member, 2001-present
- International Advisory Committee for the PowerTech Conference, Member, 2002-2003, 2006-2007
- Steering Committee of the International Project on Electromagnetic Radiation from Tall Structure Lightning, Member (U.S. Represenatative), 2002-present
- National Lightning Safety Institute, Board of Advisors, Member, 2002-present
- Program Committee of the International Conference on Nonlinear Phenomena in Environmental Research, Member, 2003
- Scientific Committee of the International Symposium on Power Quality (SICEL), Member, 2003-present
- Underwriters Laboratories Standards Technical Panel for Surge Protective Devices (STP 1449), Member, 2003-present
- National Fire Protection Association Committee on the Standard for the Installation of Lightning Protection Systems (NFPA 780), Member, 2004 – 2010
- Technical Committee of the 6th International Workshop on Physics of Lightning, Member, 2004

- Program Committee of the VI International Suzdal URSI Symposium, Member, 2004
- Scientific Committee of the International Conference on Lightning Physics and Effects (LPE) and GROUND, Member, 2004-present
- STP 96/UL 96A Grounding Task Force, Member, 2004-present
- Technical Program Committee on Lightning for EMC Zurich in Singapore, Chairman, 2005-2006, 2007-2008
- Scientific/Technical Committee of the 2005 International Symposium on EMC (ISEMC 2005), Member, 2005
- Program Committee of the 2nd Conference on Meteorological Applications of Lightning, Atlanta, Georgia (part of the 2006 AMS Annual Meeting), Member, 2005-2006
- NFPA 780 Modeling Task Group, Member, 2005-2010
- URSI Commission E, Co-Chair of the Working Group on Lightning, 2005-present
- IEEE EMC Society, Technical Committee on High Power Electromagnetics (TC-5), Lightning Subcommittee, Member, 2005-present
- Technical Program Committee of the 2005 International Lightning Conference in Shanghai, China, Member, 2005
- Technical Program Committee of the Fourth International China Symposium on EMC, Qingdao, China (EMC'2007/Qingdao), Member, 2007
- Technical Committee on Lightning of the 1st Asia-Pacific Symposium on EMC, Singapore, May 19-23, 2008, and 2010 Asia-Pacific EMC Symposium in Beijing, April 12-16, 2010, Chair
- International Scientific Committee of the International Conference on Gas Discharges and Their Applications, GD 2008, Cardiff, UK, September 7-12, 2008, GD 2010, Greifswald, Germany, September, 5-10, 2010, GD 2012, Beijing, China, September 2-7, 2012, GD 2014, Orleans, France, Member
- Scientific Committee of the International Conference on High Voltage Engineering and Application (ICHVE), Chongqing, China, November 9-12, 2008, New Orleans, USA, October 11-14, 2010, Shanghai, China, September 17-20, 2012, Member
- Technical Committee of the Lightning Protection Symposium (in conjunction with 2nd IEEE ICAST), Accra, Ghana, December 14-16, 2009, Member
- Technical Program Committee of the Fifth Asia-Pacific Conference on Environmental Electromagnetics, CEEM'2009, Xi'an, China, September 16-20, 2009, CEEM'2012, Shanghai, China, Nov.6-9, 2012, Member
- Technical Program Committee of the 2010 APEMC in Beijing, China, Panelist, 2009-2010
- Advisory Committee of the Centre of Excellence on Lightning Protection (CELP), Life Member, since 2009
- Academic Committee for the China International Forum on Lightning Protection and Disaster Mitigation (CLPDM), September 8-10, 2009, Chongqing, China, Member, 2009
- Technical Program Committee (HPEM) for the American Electromagnetics Conference (AMEREM 2010) to be held jointly with the 14th International Symposium on Antenna Technology & Applied Electromagnetics in Ottawa, Canada, July 5 – 9, 2010, Member
- Atmospheric and Space Electricity Focus Group, Franklin Lecture Committee, 2010, 2012, Member
- Technical Program Committee of the APEMC in Jeju Island, Korea, 2011; Singapore, 2012, Member
- International Advisory Committee for the International Symposium on Winter Lightning, Tokyo, Japan, April 4-6, 2011, Member
- Scientific Committee of the International Conference on Applied Electromagnetics (PES 2011 and 2013), Nis, Serbia, 2011-present, Member
- Technical Program Committee of the 7th Asia-Pacific International Conference on Lightning, Chengdu, China, November 2-5, 2011, Chair
- Best Student Paper Evaluation Committee of the 7th Asia-Pacific International Conference on Lightning, Chengdu, China, November 2-5, 2011, Chair
- International Program Committee of the Thunderstorms and Elementary Particle Acceleration (TEPA-2012) Conference, Moscow, Russia, July 9-11, 2012, Member, 2011-2012
- Scientific Committee of the III Russian Conference on Lightning Protection, St. Petersburg, Russia, May 22-23, 2012, Member, 2011-2012
- Technical Program Committee of the Asia-Pacific International Conference on Lightning (APL), Seoul, Korea, 2013; Nagoya, Japan, 2015, Member

Editorship

- Atmospheric Research, Special Issue for APL 2011, Guest Editor. 2011-present
- Journal of Lightning Research, Special Issue for the 30th ICLP, Guest Editor, 2010-2012
- IEEE Transactions on Electromagnetic Compatibility, Special Issue on Lightning, Guest Editor, 2008-2009
- Journal of Atmospheric Electricity, Editor, 2007-present
- Journal of Lightning Research, Editor, 2004-present
- Advisory Board for the Elsevier Series in Lightning Research, Member, 2004-present
- IEEE Transactions on Electromagnetic Compatibility, Associate Editor, 2003-present
- Editor's Choice - Atmospheric and Space Electricity (AGU electronic journal) Advisory Panel, Member, 2001-2006; Chief Editor, 2006-2009

Reviewer or Adjudicator for McGraw-Hill, Wiley Publishers, Addison Wesley, Public Affairs, Oxford University Press, CRC Press, and various journals:

IEEE: IEEE Transactions on EMC, IEEE Transactions on Plasma Science, IEEE Antennas and Propagation Magazine, IEEE Transactions on Power Delivery, IEEE Transactions on Dielectrics and Electrical Insulation, Power Engineering Letters, IEEE Transactions on Energy Conversion

American Geophysical Union (AGU): Journal of Geophysical Research – Atmospheres, Journal of Geophysical Research – Space Physics, Geophysical Research Letters, Radio Science

American Meteorological Society (AMS): Journal of Atmospheric and Oceanic Technology, Journal of Applied Meteorology, Journal of Applied Meteorology and Climatology

Institute of Physics (IoP): Plasma Sources Science and Technology, Measurement Science and Technology, Journal of Physics A: Mathematical and General, Journal of Physics D: Applied Physics, Reports on Progress in Physics

The Institution of Engineering and Technology (IET): IEE Proc. Science, Measurement & Technology, IEE Proc. Generation, Transmission & Distribution

Elsevier: Journal of Atmospheric and Solar-Terrestrial Physics, Journal of Electrostatics, Atmospheric Research, Electric Power System Research (EPSR), Advances in Space Research, Physics Letters A, Applied Mathematical Modelling, International Journal of Electrical Power and Energy Systems

Miscellaneous: AIAA Journal of Spacecraft and Rockets, The Royal Society Proceedings, Annales Geophysicae (Copernicus), European Physical Journal - Applied Physics (EPJAP), Review of Radio Science, International Journal of Climatology, Phisica A, , IJECE, Acta Geophysica Polonica, International Journal for Computation and Mathematics in Electrical and Electronic Engineering (COMPEL), Icarus, Indian Journal of Radio and Space Physics, Journal of Lightning Research, Advances in Science and Research, Physics of Fluids, The HKIE Transactions, The Open Atmospheric Science Journal, European Transactions on Electrical Power, Journal of Natural & Physical Sciences, The ScientificWorld Journal, International Journal of Modelling and Simulation, PIER & JEMWA, Natural Hazards, Pis'ma v ZhETF, Surveys in Geophysics (Springer), Advances in Atmospheric Sciences, Solid Earth, Aerospace Lab Journal, Physical Review & Research International

INVITED TALKS

- Plenary Lecture "CIGRE Technical Brochure on Lightning Parameters for Engineering Applications" at the XII International Symposium on Lightning Protection (XII SIPDA), Belo Horizonte, Brazil, October 7-11, 2013
- Invited Lecture "Energy and Transmission System Applications of Lightning Data", Vaisala's Lightning Webinar Series, August 27, 2013
- Presentation "Recent Progress and Problems in Lightning Research", IPFRAN, Nizhny Novgorod, Russia, July 24, 2013

- Keynote Speaker at the 8th Asia-Pacific International Conference on Lightning, Seoul, Korea, June 26-28, 2013
- Invited Lecture "Fundamentals of Lightning" at the African Regional Training Programme on Lightning Protection, Entebbe, Uganda, February 4-8, 2013
- Lecture "Introduction to the Physics of Lightning" at the University of Santiago, Chile, December 3, 2012
- Keynote Lecture at the Opening Ceremony of the 5th International Conference on Lightning Physics and Effects (LPE) and GROUND' 2012, Bonito, Brazil, November 25-30, 2012
- Two Lectures on Lightning Parameters of Engineering Interest at the Universiti Putra Malaysia (UPM), Kuala Lumpur, Malaysia, November 5, 2012 and at EGAT, Bangkok, Thailand, November 7, 2012
- Two Invited Lectures at the Hong Kong Polytechnic University, October 31 – November 2, 2012
- Invited Lecture "Recent Topics in Lightning Research" at the Russian State Hydrometeorological University, St. Petersburg, Russia, September 28, 2012
- Plenary Talk "A review of recent progress in studying physics of lightning" at the VII All-Russia Conference on Atmospheric Electricity, St. Petersburg, Russia, September 24-28, 2012
- Two Tutorial Lectures at the EMC Europe, Rome, Italy, September 17-21, 2012
- Invited Presentation "New Insights into X-ray Emissions from First and Subsequent Strokes in Natural Cloud-to-Ground Lightning" at the Thunderstorms and Elementary Particle Acceleration (TEPA-2012) conference, Moscow, Russia, July 9-11, 2012
- Invited Tutorial Talk "Introduction to the physics of lightning" at the Summer School on Thunderstorm Effects on the Atmosphere-Ionosphere System (TEA-IS), Torremolinos, Malaga, Spain, 17-22 June, 2012
- Invited Lecture "Lightning parameters of engineering interest" at the III All-Russia Conference on Lightning Protection, St. Petersburg, Russia, May 22-23, 2012
- Keynote Presentation "Applications of lightning detection network data for lightning research and protection" at the 2012 International Lightning Detection Conference/Lightning Meteorology Conference (ILDC/ILMC), Broomfield, Colorado, April 2-5, 2012
- Invited Lecture "Lightning Electromagnetic Environment: From Continuing Current Fields to X-Rays"at the Int. Workshop on Lightning Physiscs, Osaka, Japan, December 6, 2011
- Invited Talk "Upward Lightning Discharges: An Update" at the 7th Asia-Pacific International Conference on Lightning, Chengdu, China, November 2-5, 2011
- Invited Speaker (two lectures) at the International Symposium on Lightning Protection, Kathmandu, Nepal, October 12-14, 2011
- Plenary Lecture "Lightning Parameters for Engineering Applications - an Update on CIGRE WG C4.407 Activities" at the XI International Symposium on Lightning Protection (XI SIPDA), Fortaleza, Brazil, October 3-7, 2011
- Invited Presentation "Overview of Lightning Physics: Artificially Initiated (Triggered) Lightning" at the XIV Int. Conf. on Atmospheric Electricity, Rio de Janeiro, Brazil, August 8-12, 2011
- Invited Presentation "Upward Lightning Discharges" at the CIGRE WG C4.410 Meeting in Sapporo, Japan, June 17, 2011
- Invited Lecture "Positive Lightning: Review and Update" at the International Symposium on Winter Lightning, Sapporo, Japan, June 15-16, 2011
- Invited Lecture "A Review of Triggered Lightning Experiments", HKN Honorary Society Meeting, University of Florida, Gainesville, Florida, December 1, 2010
- Keynote Presentation "Recent Topics in Lightning Research" at the Opening Ceremony of the 4th International Conference on Lightning Physics and Effects (LPE) and GROUND' 2010, Salvador, Brazil, November 7-11, 2010
- Plenary Lecture "A Review of Triggered Lightning Experiments" at the 30th International Conference on Lightning Protection (ICLP), Cagliari, Italy, September 13-17, 2010
- Invited Presentation on Lightning Initiation and Compact Intracloud Lightning Discharges at the Workshop "Spontaneous Energy Focusing Phenomena and Multiscale Physics", Singapore, August 29 - September 5, 2010
- Plenary Lecture "Lightning Protection Topics as Applied to High-Voltage Transmission Lines" at the 3rd Brazilian Symposium on Electrical Power Systems – SBSE/2010, Belem, Brazil, May 18-21, 2010
- Invited Speaker at the 2010 International Lightning Detection Conference (ILDC), Orlando, Florida, April 19 – 20, 2010

- Keynote Presentation “Lightning Parameters for Engineering Applications” at the 2010 Asia-Pacific Symposium on Electromagnetic Compatibility, Beijing, China, April 12-16, 2010
- Invited Lecture “Lightning Discharge and Fundamentals of Lightning Protection” at the X International Symposium on Lightning Protection (X SIPDA), Curitiba, Brazil, November 9-13, 2009
- Invited Lecture at the Nanjing Engineering Institute, Nanjing, China, September 15, 2009
- Invited Lecture at the Chinese Academy of Meteorological Sciences Workshop, Beijing, China, September 12-13, 2009
- Invited Lecture “Review of rocket-triggered lightning experiments in USA” at the China International Forum on Lightning Protection and Disaster Mitigation (CLPDM), Chongqing, China, September 8-10, 2009
- Invited Presentation “Parameters of Rocket-Triggered Lightning” at the 4th International Workshop on Electromagnetic Radiation from Lightning to Tall Structures, Montreal, Canada, July 29, 2009
- Invited Talk “Lightning Protection as Applied to Overhead High-Voltage Transmission Lines” at the China Southern Power Grid (CSG) International Seminar on the Technology of Lightning Protection and Ground Connection, Guangzhou, China, July 7-8, 2009
- Invited Short Course on Infrastructure and Lightning Research, Doshisha University, Japan, June 30 – July 1, 2009
- Invited Lecture “Lightning Electromagnetic Environment: From Continuing Current Fields to X-Rays” at the Opening Ceremony of the 3rd International Conference on Lightning Physics and Effects (LPE) and GROUND’ 2008, Florianopolis, Brazil, November 16-20, 2008
- Invited Lecture “Lightning parameters of engineering interest”, Lightning Protection Course, Uppsala, Sweden, June 27-28, 2008
- Invited Lecture “Characterization of lightning electromagnetic fields and their modeling”, 6th Int. Conf. on Electrical Engineering (ICEENG), Cairo, Egypt, May 29, 2008
- Invited Presentation “An Experimental Study of Electric Field Pulses Produced by Cloud and Ground Lightning Discharges” at the Asia-Pacific EMC-Week and 19th Int. Zurich Symp. on EMC, Singapore, May 19-22, 2008
- Keynote Presentation “Less Common Types of Lightning Discharges” at the 2008 ILDC/ILMC, Tucson, Arizona, April 21-25, 2008
- Keynote Presentation “Recent Progress in Lightning Research: University of Florida Contribution” at the Engineer's Week Reception, Gainesville, Florida, February 19, 2008
- Invited Lecture “Lightning Fundamentals and Lightning Research at the University of Florida”, Institute of Electrotechnics and Energy of the University of São Paulo (IEE/USP), Sao Paulo, Brazil, December 3, 2007
- Invited Lecture “Lightning Phenomenology and Parameters Important for Lightning Protection” at the IX International Symposium on Lightning Protection (IX SIPDA), Foz do Iguaçu, Brazil, November 26-30, 2007
- Invited Lecture “Lightning Physics” at the European COST Action P18 Training School on Lightning Physics and Effects, Kiten, Bulgaria, September 4-6, 2007
- Invited Lectures “Lightning Research at the University of Florida” and “Lightning Effects on Various Objects and Systems: Triggered-Lightning Experiments”, North China Electric Power University, China, August 5 and 6, 2007
- Invited Lectures “Lightning Currents for Engineering Applications” and “Lightning Electric and Magnetic Fields”, Tutorial on EMC Aspects of Lightning, Honolulu, Hawaii, July 8-13, 2007
- Invited Keynote Presentation “ Lightning Phenomenology and Fundamentals of Lightning Protection” at the International Symposium on Trees and Lightning, Fort Lauderdale, Florida, March 7-8, 2007
- Invited Lecture “Phenomenology and Parameters of the Lightning Discharge” at the Opening Ceremony of the 2nd International Conference on Lightning Physics and Effects (LPE) and GROUND’ 2006, Maceio, Brazil, November 26-29, 2006
- Invited Talk “Triggered Lightning Research at the University of Florida”, High Voltage Research Institute at Tomsk Polytechnic, Tomsk, Russia, August 18, 2006
- Invited Talk “Triggered Lightning Research at the University of Florida”, Tsinghua University, Beijing, China, August 5, 2006
- Invited Talk "Lightning: Phenomenology and Parameters Important for EMC" at the Fourth Asia-Pacific Conference on Environmental Electromagnetics (CEEM’2006), Dalian, China, August 1-4, 2006
- Invited Presentations “What We Need to Know About Lightning and How Rocket-Triggered Lightning Experiments Can Help” at the Brazilian IEEE Chapter Meeting, Recife, Brazil, July 21, 2006

- Invited Lectures “Lightning Phenomenology and Parameters Important for Lightning Protection” and “Lightning Effects on Various Objects and Systems: Triggered-Lightning Experiments” at the 2006 Brazilian Symposium on Electric Networks (SBSE 2006), Campina Grande, Paraiba, Brazil, July 17-19, 2006
- Featured Speaker at Luncheon organized for Members and Staff of the US Congress by the Coalition for Plasma Science, Washington, DC, May 8, 2006
- Invited Keynote Presentation “NLDN Responses to Lightning Initiated Using the Rocket-and-Wire Technique” at the 2006 ILDC/ILMC, Tucson, Arizona, April 24-27, 2006
- Invited Lecture “Lightning Research at the University of Florida”, Science Seminar Series 2005-2006, Daytona Beach Community College, April 21, 2006
- Invited Lectures “Lightning Currents for Engineering Applications: Triggered Lightning in Florida” and “Lightning Electric and Magnetic Fields”, Tutorial on EMC Aspects of Lightning, Singapore, February 27-March 3, 2006
- Invited Talk “Lightning Protection: History and Modern Approaches”, UF ECE Graduate Seminar, February 16, 2006
- Invited Talk “Lightning Protection: History and Modern Approaches” at the 2nd Conference on Meteorological Applications of Lightning, Atlanta, Georgia (part of the 2006 AMS Annual Meeting), January 29-February 2, 2006
- Invited Talk “Lightning Initiation Mechanisms: A Review and New Data on Submicrosecond “Lightning Initiation Pulses”” at the “Cloud Physics and Thunderstorm Electrification: from Generator to Discharge” Session of the 2005 Fall American Geophysical Union Meeting, December 5-9, 2005, San Francisco, California
- Invited Talk “Lightning interaction with power distribution lines: Triggered-lightning experiments” at the 2005 International Symposium on Electromagnetic Compatibility (ISEMC’2005), Petropolis, Rio de Janeiro, Brazil, November 26-30, 2005
- Invited Lecture “Evaluation of the performance characteristics of lightning locating systems using rocket-triggered lightning” at the VIII International Symposium on Lightning Protection (VIII SIPDA), Sao Paulo, Brazil, November 21-25, 2005
- Invited Talk “What We Need to Know About Lightning and How Rocket-Triggered Lightning Experiments Can Help” at the Management Meeting of COST Action P18 “Physics of Lightning Flash and Its Effects”, Lausanne, Switzerland, November 14, 2005
- Invited Lecture “Lightning Research at the University of Florida”, Department of Physics, University of Florida, November 3, 2005
- Invited Lectures “Triggered-Lightning Experiments at Camp Blanding, Florida” and “Lightning Effects on Various Objects and Systems: Triggered-Lightning Experiments”, Uppsala University, Sweden, September 6 and 8, 2005
- Invited Plenary Talk “Initiation of Lightning in Thunderclouds” at the Int. Conference on Nonlinear Phenomena in Environmental Research, St. Petersburg - Nizhny Novgorod, Russia, August 2-9, 2005
- Whitney Laboratory Public Lecture “Lightning Artificially Initiated from Natural Thunderclouds in Florida”, St Augustine, Florida, May 19, 2005
- Keynote Speaker at ICEE 2005, Zanjan University, May 11, 2005
- Invited Lecture “Triggered-Lightning Experiments at Camp Blanding, Florida”, Amirkabir University of Technology, May 9, 2005
- Invited Speaker at the 2005 ULPA/LPI Conference, Las Vegas, Nevada, February 24-26, 2005
- Invited Lecture “Review of Triggered-Lightning Experiments at Camp Blanding, Florida”, University of Belgrade, Serbia and Montenegro, February 18, 2005
- Invited Plenary Talk “Lightning Physics and Effects” at the 1st International Conference on Lightning Physics and Effects (LPE) and GROUND’ 2004, Belo Horizonte, Brazil, November 7-11, 2004
- Invited Plenary Talk “What We Need to Know About Lightning and How Rocket-Triggered Lightning Experiments Can Help” at the 18th International Lightning Detection Conference, Helsinki, Finland, June 7-9, 2004
- Invited Talk “What Can We Learn from Triggered-Lightning Experiments?” at the Darwin Observatory Workshop, Osaka, Japan, March 8-10, 2004
- Invited Speaker at the 2004 ULPA/LPI Conference, St. Augustine, Florida, March 10-13, 2004
- Invited Speaker at the Physics of Lightning and Storm Electrification Session of the 2003 Fall AGU Meeting, San Francisco, California, December 8-12, 2003

- Invited Lecture “Engineering Models of the Lightning Return Stroke” at the VII International Symposium on Lightning Protection (VII SIPDA), Curitiba, Brazil, November 17-21, 2003
- Invited Talk “A Review of Ten Years of Triggered-Lightning Experiments at Camp Blanding, Florida,” at the Int. Conference on Nonlinear Phenomena in Environmental Research, Nizhny Novgorod – Moscow, Russia, Sept. 6-12, 2003
- Invited Lecture “Review of Triggered-Lightning Experiments at the ICLRT at Camp Blanding, Florida” at the 2nd Int. Seminar on Lightning Physics and Protection in the South of Brazil, Porto Alegre, Brazil, May 9-10, 2003
- Invited Lecturer at the "Lightning and Its Effects" Session of the 15th International Zurich Symposium on EMC, February 18-20, 2003, Zurich, Switzerland
- Invited Lecture “Lightning Return Stroke Modeling: Recent Developments” at the International Conference on Grounding and Earthing (GROUND 2002) and 3rd Brazilian Workshop on Atmospheric Electricity, Rio de Janeiro, Brazil, November 4-7, 2002
- Invited Talk “Lightning Artificially Initiated from Natural Thunderclouds in Florida” at the Retired Faculty of the University of Florida (RFUF) meeting, Gainesville, Florida, October 29, 2002
- Invited Talk “Lightning and Tall Structures” at the 17th International Lightning Detection Conference, Tucson, Arizona, October 16-18, 2002
- Invited Talk "Division of Lighting Current and Charge Among MOV Arresters and Grounds of a Power Distribution Line: Triggered Lightning Experiments" at the IEEE Surge Protective Devices Committee Spring Meeting, St. Petersburg, Florida, May 16, 2002
- Invited Talk "Rocket-Triggered Lightning Experiments: Some Recent Results" at the Department of Engineering Physics, Air Force Institute of Technology, Wright-Patterson AFB, Ohio, February 13, 2002
- Invited Speaker at the VI International Symposium on Lightning Protection (VI SIPDA), November 19 - 23, 2001, Santos, Brazil
- Invited Talk "Rocket-Triggered Lightning Experiments: Some Recent Results" at the Brown Bag Seminars in Electronics, University of Florida, Gainesville, May 29, 2001
- Invited Talk "Recent Experiments at the International Center for Lightning Research and Testing at Camp Blanding, Florida" at the Swiss Federal Institute of Technology Lausanne (EPFL), February 27, 2001
- Tutorial Lecture "Characterization of Lightning Electromagnetic Fields and Their Modeling" at the 14th International Zurich Symposium on Electromagnetic Compatibility, February 19, 2001, Zurich, Switzerland
- Invited Lecture "Lightning Protection of Structures and Personal Safety" at the 2000 International Lightning Detection Conference, November 6 - 8, 2000, Tucson, Arizona
- Invited Lecture "Lightning Characteristics Relevant to Power Quality and EMC Problems", EES - UETP Course "Solving EMC/Power Quality Problems due to Lightning", September 27 - 29, 2000, University of Bologna, Italy
- Invited Lecture "Lightning Location System Techniques", EES - UETP Course "Solving EMC/Power Quality Problems due to Lightning", September 27 - 29, 2000, University of Bologna, Italy
- Invited Speaker at the IEEE Surge Protective Devices Committee Meeting, May 13-19, 2000, St. Petersburg, Florida
- Keynote Speaker at the 10th Annual Meeting of the Society for Technology in Anesthesia, January 12-15, 2000, Lake Buena Vista, Florida
- Invited Speaker at the Lightning and Thunderstorm Electrification Session of the 1999 Fall American Geophysical Union Meeting, December 13- 17, 1999, San Francisco, California
- Frederic Labino Lecture "Lightning Makes Glass" at the 29th Annual Glass Art Society Conference, April 29 - May 2, 1999, Tampa, Florida
- Invited Speaker at the V International Symposium on Lightning Protection (V SIPDA), May 17- 21, 1999, Sao Paulo, Brazil
- Invited Lecturer at the "Lightning Physics and Effects" Session of the 13th International Zurich Symposium on EMC, February 16-18, 1999, Zurich, Switzerland
- Invited Lecture "Comparison of Positive and Negative Lightning" at the 1998 International Lightning Detection Conference, November 17 - 18, 1998, Tucson, Arizona
- Invited Speaker at Austrian Lightning Protection Committee Meeting, September, 1998, Vienna, Austria
- Invited Speaker at the 5th International Congress of the Brazilian Geophysical Society, September 28 - October 2, 1997, Sao Paulo, Brazil

- Invited Lecturer at the "Lightning and Its Effects" Session of the 12th International Zurich Symposium on EMC, February, 18-20, 1997, Zurich, Switzerland
- Invited Lecture "Modeling of Lightning Processes as Sources of Electromagnetic Fields" at the International Symposium on Winter Lightning in Hokuriku, June 17-18, 1996, Kanazawa, Japan
- Invited Speaker at the EPRI Conference on Triggered Lightning and Surge Protection, March 6, 1996, Jacksonville, Florida
- Invited Speaker at the International Symposium on Electromagnetic Compatibility (EMC'94 ROMA), September 13-16, 1994, Rome, Italy
- Invited Speaker at the 2nd US/Japan Symposium on Lightning, December 2, 1993, Toyama, Japan
- Invited Speaker at the UF Department of Aerospace Engineering, Mechanics and Engineering Science Seminar, October 15, 1993, Gainesville, Florida
- Speaker at the Florida Power Affiliates Seminar "Lightning Protection of Power Systems with Emphasis on Effects of Multiple Impulses on Electrical and Electronic Equipment", July 15, 1993, Tampa, Florida
- Speaker at the 4th Florida Power Affiliates Conference for Electric Power Engineering Research and Education, December 1, 1992, Gainesville, Florida

OTHER PROFESSIONAL ACTIVITIES

- Chairman or Moderator of sessions at the International Conference on Lightning Protection (ICLP), 1994 (Budapest, Hungary), 1996 (Florence, Italy), 1998 (Birmingham, UK), 2000 (Rhodes, Greece), 2002 (Cracow, Poland), 2004 (Avignon, France), 2006 (Kanazawa, Japan), 2008 (Uppsala, Sweden), 2010 (Cagliari, Italy), 2012 (Vienna, Austria)
- Convener and/or Chairman of sessions at the AGU Fall Meeting, San Francisco, California, 1995, 1996, 2001, 2009
- Chairman of sessions at the International Conference on Atmospheric Electricity (ICAE), 1996 (Osaka, Japan), 1999 (Guntersville, Alabama), 2003 (Versailles, France), 2007 (Beijing, China)
- Invited Organizer and/or Chairman of sessions at the International Zurich Symposium on Electromagnetic Compatibility, 1997, 1999, 2003, 2005, 2006, 2007, 2008, 2009
- Invited Chairman of sessions at the International Symposium on Lightning Protection (SIPDA), 1999 (Sao Paulo, Brazil), 2001 (Santos, Brazil), 2003 (Curitiba, Brazil), 2005 (Sao Paulo, Brazil), 2007 (Foz do Iguaçu, Brazil), 2009 (Curitiba, Brazil), 2011 (Fortaleza, Brazil)
- United States Organizer and Co-Chairman for Session "Lightning and Atmospheric Environment" at the 1999 International Conference on Lightning and Static Electricity (ICOLSE), June 22-24, 1999, Toulouse, France
- Chairman of Session “Lightning Protection” at the PowerTech Conference, June 23-26, 2003, Bologna, Italy
- Chairman of Sessions at Int. Workshops on Electromagnetic Radiation from Lightning to Tall Structures, June 27, 2003, Bologna, Italy; July 29, 2009, Montreal, Canada
- Panelist at the 2nd International Symposium on Winter Lightning in Hokuriku, September 17-18, 2001, Toyama, Japan
- Moderator of round-table discussion “Lightning Attachment Process” at the 17th International Lightning Detection Conference, Tucson, Arizona, October 16-18, 2002
- Moderator of session “Lightning Phenomenology” at the 6th International Workshop on Physics of Lightning, Sainte-Anne, Guadeloupe, France, May 3-9, 2004
- Moderator of discussion forum “Lightning Attachment and Parameters” at the 18th International Lightning Detection Conference, Helsinki, Finland, June 7-9, 2004
- Chairman of Session “Electrodynamic Processes in Geophysics” at the Int. Conference on Nonlinear Phenomena in Environmental Research, St. Petersburg - Nizhny Novgorod, Russia, August 2-9, 2005
- Convener or Co-Convener of sessions at the General Assembly of URSI (International Union of Radio Science), 2005 (New Delhi, India), 2008 (Chicago, USA), 2011 (Istanbul, Turkey), 2014 (Beijing, China)
- Lead Convener of Symposium M16 "Lightning: Characteristics, Physics, and Hazard Mitigation" at IAMAS Assembly (MOCA-09) in Montreal, Canada, July 20-29, 2009

- Chairman of Session “Advances in Technology and Operational Utility of Lightning Data” at the 2nd Conference on Meteorological Applications of Lightning, Atlanta, Georgia (part of the 2006 AMS Annual Meeting), January 29 – February 2, 2006
- Invited Chairman of Sessions at the ILDC/ILMC, 2006 (Tucson, Arizona), 2008 (Tucson, Arizona), 2012 (Broomfield, Colorado)
- Chairman of Session “3A1, Lightning, ESD, and EMP (II)” at the Fourth Asia-Pacific Conference on Environmental Electromagnetics (CEEM’2006), Dalian, China, August 1-4, 2006
- Co-Organizer of the Tutorial on EMC Aspects of Lightning at the IEEE International Symposium on EMC, Honolulu, Hawaii, July 9-13, 2007
- Faculty Advisor for the Student Chapter of the American Meteorological Society at the University of Florida, 2002-present
- Reviewer for the National Science Foundation and other research funding organizations, including FCT (Portugal), NSERC (Canada), NWO (The Netherlands), ISF (Israel), SER (Switzerland), Research Grants Council (Hong Kong), Dutch Technology Foundation STW (The Netherlands), Japan Society for the Promotion of Science (JSPS), Qatar National Research Fund (QNRF), WMO, Croatian Science Foundation, Czech Science Foundation, Nazarbayev University Research Council in Astana, Kazakhstan, Skolkovo Foundation, and the U.S. Civilian Research and Development Foundation (CRDF)
- Designated opponent (external examiner) for Ph.D. dissertations, Tomsk Polytechnic, Russia (3) and Uppsala University, Sweden (2); reviewer of dissertations, Tomsk Polytechnic, Russia (D.Sc.), Ss. Cyril and Methodius University, Skopje, Macedonia (Ph.D.), M.Z. Nodiya Institute of Geophysics, Georgia (D.Sc.), Indian Institute of Science Bangalore (Ph.D., 2), and Indian Institute of Technology Roorkee (Ph.D., 2)
- Collaborator (Foreign Technical Advisor) for International Science and Technology Center (ISTC) Project #1822 “Development and Investigation of the Single-Point System for Lightning Location in the Range of Super-Long Waves”, funded by the U.S. Government
- Member of the Management Committee of the International Project COST (European Cooperation in the Field of Scientific and Technical Research) Action P18 on 'Physics of Lightning Flash and its Effects', funded by the European Union
- Reviewer for the International Conference on Power System Transients (IPST), Kyoto, Japan, June 3-6, 2009
- Judge for Outstanding Student Paper Awards at the 2009 Fall AGU Meeting
- Chairman of the Topical Meeting on Lightning Protection at the 2010 Asia-Pacific Symposium on Electromagnetic Compatibility, Beijing, China, April 12-16, 2010
- Member of the Group appointed by the National Athletic Trainers’ Association (NATA) to re-evaluate its Position Statement on Lightning Safety, 2009-present
- Chairman of Session “Lightning Detection and Applications” at the 4th International Conference on Lightning Physics and Effects (LPE) and GROUND’ 2010, Salvador, Brazil, November 7-11, 2010
- Tenure Track Program at the Frontier Research Base for Global Young Researchers, Osaka University, Japan, Mentor, 2011
- Chairman of Session at the Thunderstorms and Elementary Particle Acceleration (TEPA-2012) Conference, Moscow, Russia, July 9-11, 2012
- Chairman of Session “Lightning Detection and Protection: Safety Issues” at the VII All-Russia Conference on Atmospheric Electricity, St. Petersburg, Russia, September 24-28, 2012

HONORS

- Atmospheric Research’s Best Reviewers Award, 2013
- Karl Berger Award for distinguished achievements in lightning research, developing new fields in theory and practice, modeling and measurements, International Conference on Lightning Protection (ICLP), 2012
- Fellow of the American Geophysical Union (AGU) "for fundamental work on lightning modeling and for identification of the mechanisms of a number of basic lightning processes", 2012.
- Best Conference Paper Award, 7th Asia-Pacific International Conference on Lightning, Chengdu, China, November 1-4, 2011

- International Symposium on Lightning Protection, Kathmandu, Nepal, October 12-14, 2011, Letter of Appreciation for participation as a resource person
- 2010 Asia-Pacific Symposium on Electromagnetic Compatibility, Beijing, China, April 12-16, 2010, Plaque "For Outstanding Contributions to APEMC 2010 in Beijing"
- Life Member of the Advisory Committee of the Centre of Excellence on Lightning Protection (CELP), since 2009
- Editor's Citations for Excellence in Refereeing for outstanding service to the authors and readers of Geophysical Research Letters, American Geophysical Union, 2006, 2007, and 2008
- University of Florida Special Pay Plan for Senior Faculty, salary adjustment in recognition of highly productive performance in the areas of teaching, scholarship, and service, 2006, 2012
- 17th International Zurich Symposium on EMC, Singapore, February 27-March 3, 2006, Plaque "In Appreciation of Contribution to the Symposium Workshops & Tutorials"
- Fellow of The Institution of Engineering and Technology (IET), in recognition of "significant individual responsibility, sustained achievement and professionalism in areas relevant to the interests of the Institution of Engineering and Technology", 2005
- Annual National Lightning Safety Institute Recognition Award "for consistent excellence in advancing the understanding of lightning electromagnetics/energy systems through research and in many reviewed journals and for personal contributions as committees' chairman and membership in international scientific organizations", 2004
- Fellow of AMS "for outstanding contributions to the atmospheric or related oceanic or hydrologic sciences, or their applications, during a substantial period of years", 2004
- Fellow of IEEE "for contributions to the understanding of lightning discharge phenomena," January 1, 2003
- IEEE Power Engineering Society Surge Protective Devices Committee, Prize Paper Award, 2001
- IEEE PES Surge Protective Devices Committee, Certificate of Appreciation for Services Rendered as Guest Speaker at the IEEE SPDC Lightning Forum, 2001
- University of Florida Research Foundation (UFRF) Professorship award (recognizes faculty members who have a distinguished current record of research and a strong research agenda that is likely to lead to continuing distinction in their field), 2001-2003 and 2007-2009
- "Who'sWho in America", 55th , 56th, 57th, 58th, 60th, and 61st Editions; "Who'sWho in Science and Engineering", 6th, 8th, 9th, and 10th Editions; "Who'sWho in the World", 23rd and 24th Editions, "Who'sWho in American Education", 7th and 8th Editions, "Who'sWho in Finance and Business", 35th Edition
- American Society for Engineering Education (ASEE) Southeastern Section Medallion Certificate, Research Unit Award for Outstanding Contribution in Research, April 12, 1999
- Florida Foundation for Future Scientists, Certificate of Appreciation in Recognition of Dedicated Service to the 36th Annual Student Science Program, June 12 - August 6, 1994
- Florida Foundation for Future Scientists, Certificate of Appreciation in Recognition of Dedicated Service to the 31st Annual Junior Science, Engineering and Humanities Symposium, January 30 - February 1, 1994
- College of Engineering, University of Florida, Meritorious Service Award in Appreciation for Significant Contributions to the Lightning Research Laboratory and for Exemplary Guidance of Graduate and Undergraduate Students, 1988-1989
- Main Committee of the USSR Exhibition of Technological Achievements, Silver Medal, 1987
- USSR State Committee for Inventions and Discoveries, Medal "Inventor of the USSR", 1986
- Tomsk Polytechnic Institute, 1985, Rank of Senior Scientist
- Tomsk Polytechnic 1985 Best Young Scientist
- Best Young Inventor within Educational and Research Institutions in Tomsk; 1981, 1985, 1988
- Tomsk Polytechnic and High Voltage Research Institute; Several Outstanding Service Awards and Prizes for Significant Scientific Results, 1977-1991

PATENTS AND USSR CERTIFICATES OF INVENTIONS (published in the USSR Bulletin of Inventions)

32. Lightning Strike-Point Determination Via Correlated X-Ray and Electromagnetic Field Measurement, U.S. Patent 7,809,507, October 5, 2010, M.A. Uman, D.M. Jordan, J.R. Dwyer, K.J. Rambo, J. Jerauld, V.A. Rakov, H.K. Rassoul.
31. A Technique for Determination of the Ground Flash Density Spatial Distribution, No. 1812537, October 10, 1992.

30. A Technique for Determination of the Areas with Increased Lightning Incidence, No. 1753437, August 7, 1992, with O.N. Sokolovsky, V.M. Sapozhnikov and S.R. Mastov.
29. A Device for Determination of the Pulse Amplitude Statistical Distribution, No. 1654845, June 7, 1991, with D.V. Shelukhin and V.D. Dudkin.
28. A Lightning Detector, No. 1606951, November 15, 1990, with R.F. Esipenko and R.M. Gavrilova.
27. A Device for Lightning Registration, No. 1592824, September 15, 1990, with Y.R. Shoivanov and S.A. Proshutinskaya.
26. A Device for Lightning Registration, No. 1536337, January 15, 1990, with V.A. Zapryagaev
25. A Device for Lightning Registration, No. 1525648, November 30, 1989, with V.M. Krasik and D.V. Shelukhin.
24. A Device for Lightning Registration, No. 1462218, February 28, 1989, with Y.R. Shoivanov and A.O. Lutz.
23. A Device for Lightning Registration, No. 1439515, November 23, 1988, with V.A. Zapryagaev.
22. A Device for Registration of Lightning Activity, No. 1348762, October 30, 1987, with Y.R. Shoivanov, A.Y. Kravchenko.
21. A Circuit Model of Lightning, No. 1327151, July 30, 1987, with V.A. Zapryagaev.
20. A Device for Determining the Statistical Distributions of Random Process Parameters, No. 1325530, July 23, 1987, with Y.R. Shoivanov, A.O. Lutz.
19. A Device for Determination of Lightning EMP Maximum Amplitude Statistical Distribution, No. 1309053, May 7, 1987, with A.A. Dulzon, E.P. Djenikhov.
18. A Device for Lightning Registration, No. 1267332, October 30, 1986.
17. A Device for Determination of Statistical Distributions of Pulse Parameters, No. 1246119, July 23, 1986.
16. A Device for Determination of Statistical Distributions of Pulse Parameters, No. 1241267, June 30, 1986.
15. A Device for Lightning Registration, No. 1233085, May 23, 1986, with V.I. Potapkin.
14. A Device for Determination of Pulse Amplitude Statistical Distribution, No. 1191924, November 15, 1985.
13. A Device for Determination of Statistical Distributions of Random Process Parameters, No. 1138811, February 7, 1985, with V.I. Potapkin.
12. A Device for Determination of Statistical Distributions of Pulse Parameters, No. 1111183, August 30, 1984, with V.I. Potapkin.
11. A Device for Determination of Pulse Amplitude Statistical Distribution, No. 1078445, March 7, 1984.
10. A Device for Determination of Pulse Amplitude Statistical Distribution, No. 1078444, March 7, 1984, with V.I. Potapkin.
9. A Device for Determination of Pulse Amplitude Distributions, No. 1067514, January 15, 1984, with V.I. Potapkin.
8. A Device for Determination of Pulse Maximum Amplitude Statistical Distributions, No. 1057968, November 30, 1983, with V.I. Potapkin.
7. A Device for Determination of Statistical Distributions of Random Process Parameters, No. 1043685, September 23, 1983, with V.I. Potapkin.
6. A Device for Determination of Pulse Amplitude Distribution, No. 1019469, May 23, 1983, with V.I. Potapkin.
5. A Device for Determination of Pulse Amplitude Statistical Distributions, No. 987637, January 7, 1983, with V.I. Potapkin.
4. A Device for Determination of Statistical Distributions of Random Process Parameters, No. 968826, October 23, 1982, with V.I. Potapkin.
3. A Device for Determination of Lightning EMP Amplitude Statistical Distribution, No. 942063, July 7, 1982, with V.I. Potapkin.
2. A Device for Measurement of Pulse Amplitude Statistical Distribution, No. 926687, May 7, 1982, with V.I. Potapkin.
1. A Device for Measurement of Pulse Maximum Amplitude Statistical Distribution, No. 922805, April 23, 1982.

RESEARCH GRANTS AND CONTRACTS

53. Co-Principal Investigator, Lightning Initiation, Propagation, Attachment and Ionospheric Effects, 2010-2014, DARPA, $6,317,714
52. Co-Principal Investigator, Lightning Research and Testing at Camp Blanding, Florida, 2011-2012, NASA, $38,155
51. Co-Principal Investigator, Lightning Research and Testing at Camp Blanding, 2010-2011, NASA, $62,000
50. Co-Principal Investigator, Lightning Research and Testing at Camp Blanding, 2009-2010, NASA, $40,000

49. Principal Investigator, Lightning: Electromagnetic Environment and Source Parameters, 2009-2014, NSF, $1,279,792
48. Co-Principal Investigator, Shuttle Lightning Instrumentation Triggered-Lightning Experiment, 2008-2009, UCF, $40,000
47. Principal Investigator, Further Studies of the Phenomenology and Physics of the Lightning Discharge, Supplement, 2008-2009, NSF, $15,700.40
46. Co-Principal Investigator, The Role of X-Rays, Gamma Rays, and Cosmic Rays in Lightning Initiation and Propagation, 2008-2009, DARPA, $970,681; 2009-2010 Supplement, $249,500
45. Co-Principal Investigator, Benchtop Energetics and Ball Lightning, 2007-2009, US Air Force Research Lab EGLIN, $157,838
44. Co-Principal Investigator, Update Direct-Strike Lightning Environment for Stockpile-to-Target Sequence, 2007-2009, University of California/Lawrence Livermore National Laboratory, $100,000
43. Co-Principal Investigator, Development of the Thunderstorm Energetic Radiation Array (TERA), 2004-2009, NSF, $187,473
42. Principal Investigator, Engineering Analysis of Airfield Lighting System Lightning Protection, 2005, Department of Navy, $38,000.
41. Principal Investigator, Further Studies of the Phenomenology and Physics of the Lightning Discharge (Accomplishment-Based Award), 2004-2009, NSF, $1,125,000.
40. Principal Investigator, Triggered-Lightning Testing of the Performance of Grounding Systems in Florida Sandy Soil, 2004-2005, Lightning Safety Alliance Corporation, $80,000
39. Principal Investigator, Rocket Triggered Lightning Experiment University of Florida, 2004-2006, University of California/Los Alamos, $70,000
38. Co-Principal Investigator, Florida Power and Light R&D Project at Camp Blanding, 2004, FPL, $110,000
37. Principal Investigator, Continued Study of Various Properties of Natural and Triggered Lightning Discharges, Supplement, 2003, NSF, $11,204
36. Co-Principal Investigator, Florida Power and Light R&D Project at Camp Blanding, 2003, FPL, $200,000
35. Principal Investigator, Continued Study of Various Properties of Natural and Triggered Lightning Discharges, 2001-2004, NSF, $557,443.
34. Principal Investigator, Close Lightning Electromagnetic Environment, 2001, Florida Space Grant Consortium, $3,200.
33. Co-Principal Investigator, Triggered Lightning Testing of a Section of Florida Gas Transmission Pipeline Connectors, 2001, Florida Gas Transmission, $20,000
32. Principal Investigator, Close Lightning Electromagnetic Environment, 2000, Florida Space Grant Consortium, $3,200.
31. Co-Principal Investigator, Lightning Protection Standards for Aircraft, 1999-2010, FAA, $790,058.
30. Co-Principal Investigator, Florida Power and Light R&D Project at Camp Blanding, 1999-2002, FPL, $704,000.
29. Co-Principal Investigator, Building a Test House at the ICLRT to Set Standards for the Lightning Structural and Surge Protection of Residential Buildings, 1999, Florida Department of Community Affairs, $50,000.
28. Principal Investigator, Study of Various Properties of Natural and Triggered Lightning Discharges (Accomplishment-Based Award), 1998-2001, NSF, $554,870.
27. Principal Investigator, Continued Triggered-Lightning on the Test Power Distribution System at Camp Blanding, 1997-1998, EPRI, $26,000.
26. Principal Investigator, Testing of Distribution Arresters Using Triggered Lightning at Camp Blanding, Florida, 1997-1998, EPRI, $140,000.
25. Co-Principal Investigator, Testing of MOV Arresters for Georgia Power Company, 1997-1998, Georgia Power, $12,000.
24. Principal Investigator, Continued Triggered-Lightning on the Test Power Distribution System at Camp Blanding, 1997, EPRI, $80,000.
23. Co-Principal Investigator, 1997 Triggered Lightning Test KOMO42296 Continued, 1997, Sandia National Laboratories, $310,000.
22. Principal Investigator, Using Lightning to Test Airport Lighting System, 1996-1998, Florida Department of Transportation, $110,000.
21. Principal Investigator, Continued Triggered-Lightning on the Test Power Distribution System at Camp Blanding, 1996, EPRI, $88,000.

20. Co-Principal Investigator, 1996 Triggered Lightning Test KOMO42296, 1996-1997, Sandia National Laboratories, $86,745.
19. Principal Investigator, Supplement to NSF Grant ATM-9415507, 1996, NSF, $13,500.
18. Principal Investigator, Study of Various Properties of Natural and Triggered Lightning Discharges, 1995-1998, NSF, $506,675.
17. Co-Principal Investigator, U.S.-Switzerland Cooperative Research in the Modeling of Lightning, 1992-1995, NSF, $13,500.
16. Co-Principal Investigator, Rocket Triggered Lightning Research for Duquesne Light Company at Camp Blanding by the University of Florida, 1995-1996, EPRI, $25,200.
15. Co-Principal Investigator, Performance of Storm Test No. 7, 1995-1996, EPRI, $20,000.
14. Co-Principal Investigator, Continued Testing of the Galileo Lightning and Radio Emission Detector, 1995-2000, NASA, $167,450.
13. Principal Investigator, Testing of the Galileo Lightning and Radio Emission Detector on Earth Lightning, 1994, Florida Space Grant Consortium, $5,000.
12. Co-Principal Investigator, Continued Testing of the Galileo Lightning and Radio Emission Detector, 1994, NASA, $45,180.
11. Co-Principal Investigator, Determination of Lightning Properties from Single Station Wideband Electric Field Measurements, 1991-1993, NSF Grant ATM-9014085, $311,714.
10. Co-Principal Investigator, Continued Testing of the Galileo Lightning and Radio Emission Detector, 1990-1993, NASA Grant NAG 2-667, $73,086.
9. Principal Investigator, Investigation of Patterns in Territorial Inhomogeneity of Thunderstorm Activity, Russian State Committee for Science and Education, 1991-1993, 171,180 rubles.
8. Principal Investigator, Investigation of Properties of Natural and Triggered Lightning Flashes as Derived from Electric Field Records, Russian State Committee for Science and Education, 1991-1993, 114,120 rubles.
7. Co-Principal Investigator, Lightning Properties Determined from Single Station Wideband Electric Field Measurements, 1988-1990, NSF Grant ATM-8807449, $120,000.
6. Principal Investigator, Study of Regional Features of Thunderstorm Activity, Lightning Parameters, and Lightning Incidence to Various Structures, Russian Ministry for Public Education, 1986-1990, 231,000 rubles.
5. Principal Investigator, Development of Technique and Device for Remote Lightning Peak Current Measurements, High Mountain Geophysical Institute, Nalchik, 1987-1988, 200,000 rubles.
4. Principal Investigator, Study of Lightning Activity in Tomsk Region Using Lightning Flash Counters, Forestry Research Institute, Leningrad, 1987-1988, 35,000 rubles.
3. Principal Investigator, Development and Field Evaluation of a Device for Lightning EMP Peak Distribution Measurements, High Mountain Geophysical Institute, Nalchik, 1986, 89,000 rubles.
2. Principal Investigator, Development of Effective Lightning Protection of Power Lines in Tropical and Temperate Regions, State Power Engineering Research Institute (ENIN), Moscow, 1984-1987, 230,000 rubles.
1. Principal Investigator, Development of Lightning Detection Device, USSR Academy of Sciences (Siberian Department) Forestry Institute, Krasnoyarsk, 1984, 30,000 rubles.

CONSULTING

Consulting relative to lightning properties, detection, and protection: Lightning Location and Protection, Inc., Insight Electronics, Electric Research and Management, Inc., CSX Transportation, LEC, Global Atmospherics, Inc., National Arborist Association, Inc., Vaisala, Coastal Technical Services, NASA, Siemens, NorthwesTel, Lockheed Martin, QINETIQ, and a number of Law Offices

PUBLICATIONS

Books

3. “Electromagnetic Computation Methods for Lightning Surge Protection Studies”, Wiley, under contract, Y. Baba and V.A. Rakov

2. “How Dangerous Is Lightning?”, Dover, 144 p., 2011, ISBN-13: 9780486477046 - ISBN-10: 0486477045, C. Bouquegneau and V.A. Rakov.
1. "Lightning: Physics and Effects", Cambridge University Press, 687 p., 2003, HB ISBN 0521583276, PB ISBN 0521035414, V.A. Rakov and M.A. Uman.

Book Chapters

19. “Rocket-triggered lightning and new insights into lightning protection gained from triggered-lightning experiments”, in “The Lightning Flash”, ed. V. Cooray, IEE, London, 2013, V.A. Rakov.
18. “Atmospheric Electricity”, in Encyclopedia of Life Support Systems, 2013, UNESCO-EOLSS Publishers, V.A. Rakov
17. “On the NOx production by laboratory electrical discharges and lightning”, Ch. 22 in “Lightning Electromagnetics”, ed. V. Cooray, IET, London, 2012, pp. 799-829, V. Cooray, M. Rahman, and V. Rakov.
16. “Electromagnetic Models of Lightning Return Strokes”, Ch. 8 in “Lightning Electromagnetics”, ed. V. Cooray, IET, London, 2012, pp. 263-313, Y. Baba and V.A. Rakov.
15. "Lightning", in World Book Encyclopedia, 2010, V.A. Rakov
14. “Lightning”, in “Encyclopedia of Energy”, John Wiley & Sons Publishers, 2011, V.A. Rakov
13. “Triggered Lightning”, in “Lightning: Principles, Instruments and Applications”, eds. H.D. Betz, U. Schumann, and P. Laroche, Springer, 691 p. 2009, ISBN 978-1-4020-9078-3, pp. 23-56, V.A. Rakov.
12. “Present Understanding of the Lightning Return Stroke“, in “Lightning: Principles, Instruments and Applications”, eds. H.D. Betz, U. Schumann, and P. Laroche, Springer, 691 p. 2009, ISBN 978-1-4020-9078-3, pp. 1-21, Y. Baba and V.A. Rakov.
11. “Rocket-triggered lightning and new insights into lightning protection gained from triggered-lightning experiments”, in “Lightning Protection”, ed. V. Cooray, IEE, London, 1036 p., 2010, ISBN 978-0-86341-744-3, pp. 97-164, V.A. Rakov.
10. “Testing of Russian image-converter cameras K004M and K008 in recording triggered (artificially initiated) and natural lightning in Florida”, in “Photoelectronic Measurements”, Universitetskaya Kniga, Moscow, Russia, 2005, pp. 479-510, V.B. Lebedev, G.G. Feldman, B.N. Gorin, V.A. Rakov, M.A. Uman, and R.C. Olsen.
9. “Lightning Flashes Transporting Both Negative and Positive Charges to Ground”, Recent Progresses in Lightning Physics, ed. C. Pontikis, Research Signpost, 2005, pp. 9-21, V.A. Rakov.
8. “Initiation of Lightning in Thunderclouds”, Recent Res. Devel. Geophysics, 6, 2004, pp. 1-35, Research Signpost, India, V.A. Rakov.
7. “A Review of the Interaction of Lightning with Tall Objects”, Recent Res. Devel. Geophysics, 5, 2003, pp. 57-71, Research Signpost, India, V.A. Rakov.
6. "Positive Blitzentladungen", Jahrbuch Elektrotechnik 2003, pp. 315-324, VDE VERLAG GMBH, Offenbach, V.A. Rakov
5. "Review of 'Non-Conventional' Approaches to Triggering Lightning Discharges", Recent Res. Devel. Geophysics, 4, 2002, pp. 1-8, Research Signpost, India, V.A. Rakov.
4. "Lightning Discharges Triggered Using Rocket-and-Wire Techniques", Recent Res. Devel. Geophysics, 2, 1999, pp. 141-171, Research Signpost, India, V.A. Rakov.
3. "Experience in Estimating of the Lightning Flash Counter Characteristics" (in Russian), Characteristics of Thunderstorm Impact and Lightning Protection, published by the State Power Engineering Research Institute (ENIN), Moscow (1989), pp. 35-44, V.A. Rakov, V.A. Zapryagaev, and R.F. Esipenko.
2. "On Estimating of Ground Flash Density Territorial Distribution Using Lightning Flash Counters" (in Russian), Characteristics of Thunderstorm Impact and Lightning Protection, published by the State Power Engineering Research Institute (ENIN), Moscow (1989), pp. 26-35, V.A. Rakov, Y.R. Shoivanov, D.V. Shelukhin, and S.A. Proshutinskaya.
1. "Thunderstorms Causing Forest Fires" (in Russian), Forest Fires and Fighting Them, published by Leningrad Forestry Research Institute, Leningrad (1989), pp. 18-24, L.V. Stolyarchuk, V.A. Rakov, and A.Y. Belaya.

Articles in Reviewed Journals

2013

234. “Lightning Parameters for Engineering Applications”, Electra, No. 269, August 2013, pp. 58-65, V.A. Rakov, A. Borghetti, C. Bouquegneau, W.A. Chisholm, V. Cooray, K. Cummins, G. Diendorfer, F. Heidler, A. Hussein, M. Ishii, C.A. Nucci, A. Piantini, O. Pinto, Jr., X. Qie, F. Rachidi, M.M.F. Saba, T. Shindo, W. Schulz, R. Thottappillil, S. Visacro, W. Zischank
233. “Lightning Attachment Processes of an “Anomalous” Triggered Lightning Discharge”, J. Geophys. Res.,submitted, D. Wang, W.R. Gamerota, M.A. Uman, N. Takagi, J.D. Hill, J. Pilkey, T. Ngin, D.M. Jordan, S. Mallick, and V.A. Rakov
232. “Connection of a downward negative leader to an upward connecting leader below its tip”, Geophys. Res. Lett., submitted, W. Lu, L. Chen, Y. Ma, V.A. Rakov, Y. Gao, Y. Zhang, Q. Yin, and Y. Zhang
231. “What everyone needs to know about lightning”, Journal of Lightning Awareness, August 2013, pp. 7-9 and 11, V.A. Rakov.
230. “Lightning physics and effects” (Editorial), Atmos. Res., Vols. 129-130, 2013, pp. 33-34, J. He , V. Rakov , D. Wang, and P.K. Wang
229. “Parameters of electric field waveforms produced by positive lightning return strokes”, IEEE Trans. on EMC, submitted, A. Nag and V.A. Rakov
228. “Positive lightning peak currents reported by the U.S. National Lightning Detection Network”, IEEE Trans. on EMC, submitted, A. Nag, V.A. Rakov, and K.L. Cummins
227. “FDTD Simulations of Corona Effect on Lightning-Induced Voltages”, IEEE Trans. on EMC, in press, T.H. Thang, Y. Baba, N. Nagaoka, A. Ametani, N. Itamoto, and V.A. Rakov
226. “Numerical Simulations of Compact Intracloud Discharges as the Relativistic Runaway Electron Avalanche - Extensive Air Shower Process”, J. Geophys. Res., submitted, S. Arabshahi, J.R. Dwyer, A. Nag, V.A. Rakov, and H.K. Rassoul
225. “Characteristics of lightning flashes observed in tropical regions of America”, J. Geophys. Res., submitted, H. Torres, E. Pérez, C. Younes, E. Williams, V. Rakov, F. De la Rosa, O. Pinto, C. Blanco, and C. Vasquez
224. “Positive Lightning Flashes Recorded on the Säntis Tower from May 2010 to January 2012”, J. Geophys. Res., submitted, C. Romero, F. Rachidi, M. Rubinstein, M. Paolone, V.A. Rakov, and D. Pavanello
223. “Mixed mode of charge transfer to ground in upward lightning”, J. Geophys. Res., submitted, H. Zhou, V.A. Rakov, G. Diendorfer, R. Thottappillil, H. Pichler, and M. Mair
222. “Electromagnetic Methods of Lightning Detection”, Surveys in Geophysics (Springer), in press, DOI 10.1007/s10712-013-9251-1, V.A. Rakov
221. “A Comparison Between Analytical Solutions for Lightning-Induced Voltage Calculation”, Elektronika ir Elektrotechnika, submitted, A. Andreotti, D. Assante, A. Pierno, V.A. Rakov, R. Rizzo
220. “An Analytical Approach to Calculation of Lightning Induced Voltages on Overhead Lines in Case of Lossy Ground - Part I: Model Development”, IEEE Trans. on Power Delivery, Vol. 28, No. 2, April 2013, pp. 1213-1223, A. Andreotti, A. Pierno, and V.A. Rakov
219. “An Analytical Approach to Calculation of Lightning Induced Voltages on Overhead Lines in Case of Lossy Ground - Part II: Comparison With Other Models”, IEEE Trans. on Power Delivery, Vol. 28, No. 2, April 2013, pp. 1224-1230, A. Andreotti, A. Pierno, and V.A. Rakov
218. “The Physics of Lightning”, Surveys in Geophysics (Springer), 2013, vol. 34, No. 3, May 2013, DOI: 10.1007/s10712-013-9230-6, V.A. Rakov
217. “Observations of compact intracloud lightning discharges in northernmost region (51° N) of China”, J. Geophys. Res. Atmos., 118, 4458–4465, doi:10.1002/jgrd.50295, F. Lü, B. Zhu, H. Zhou, V.A. Rakov, W. Xu, and Z. Qin
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DEPARTMENT COMMITTEES

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COURSES TAUGHT

- Basic Electrical Energy Engineering, EEL 3211
- Electromagnetic Fields and Applications II, EEL 3473
- Electromagnetic Fields and Applications I, EEL 3472
- Surge Overvoltages in Power Systems, EEL 4272
- Lightning, EEL 5490/4495
- Electric Energy Systems 1, EEL 4213
- Transient Electromechanical Phenomena in Power Systems (Power System Stability)
- Electromagnetic Transient Processes in Power Systems (Fault Calculations)
- Electric Power Networks (Load-Flow Studies)

THESES SUPERVISED

94. Manh Tran, Ph.D. (UF, Chair)
93. Yanan Zhu, Ph.D. (UF, Chair)
92. Vijaya Bhaskar Somu, (UF, Chair)
91. Michael Mitchell, Ph.D. (UF, Member)
90. Daniel Kotovsky, Ph.D. (UF, Member)
89. Terry Ngin, Ph.D. (UF, Co-Chair)
88. John Pilkey, Ph.D. (UF, Co-Chair)
87. William Gamerota, Ph.D. (UF, Co-Chair)
86. Shuji Fujimaru, 2013, Optimization of Beam Painting for ELF/VLF Wave Generation at HAARP Using Time-of-Arrival Analysis, Ph.D. (UF, Member)
85. Nikoloz Skhirtladze, Searching for Supersymmetry signature in Same-sign Dilepton Events at CMS at the Large Hadron Collider, Ph.D. (UF Department of Physics, Member)
84. Matthew I. Fisher, Search for the Standard Model Higgs Boson in the Channel $Z + H \rightarrow \mu\mu + b^{-}$, Ph.D. (UF Department of Physics, Member)
83. Bharat Kunduri, 2010, Modeling ELF Radio Atmospheric Propagation - Generated by Rocket Triggered Lightning, Masters (UF, Member)
82. Wei Feng, Charge Transport Analysis in Lightning, Ph.D. (UF Department of Math, Member)
81. Shreeharsh Mallick, Observations of natural and rocket-triggered lightning at three research stations in Florida and with large-scale locating networks, Ph.D. (UF, Chair)
80. Cindy Zhang, Ph.D. (UF, Member)
79. Dustin Hill, 2012, The mechanisms of lightning leader propagation and ground attachment, Ph.D. (UF, Co-Chair)
78. Chris Biagi, 2011, Observations and Modeling of Processes in Artificially Initiated (Triggered) Lightning, Ph.D. (UF, Co-Chair)
77. Dimitrios Tsalikis, Lightning Initial Breakdown Pulses, Masters/Ph.D. (UF, Chair)
76. Amitabh Nag, 2010, Characterization and Modeling of Lightning Processes with Emphasis on Compact Intracloud Discharges, Ph.D. (UF, Chair)
75. Joseph S. Howard, 2009, Lightning Propagation and Ground Attachment Processes from Multiple-Station Electric Field and X-Ray Measurements, Ph.D. (UF, Co-Chair)

74. Denis Flache, 2008, Analysis of Lightning Current Waveforms and Corresponding Video Records with Emphasis on Leader/Return Stroke Mode Versus M-Component Mode of Charge Transfer to Ground, Masters (Univ. of Federal Armed Forces, Munich, Germany, Co-Chair)
73. Alan Passman, 2007, Masters (UF, Chair)
72. Santanu Mishra, 2006, Hysteretic Modulation for Point of Load Application, Ph.D. (UF, Member)
71. Khristian Kotov, 2010, A Comprehensive Study of Perturbative and Non-Perturbative Quantum Chromodynamics in Measurements of the Underlying Event and the Transverse Momentum of the Z Boson with the CMS Detector at the LHC, Ph.D. (UF Department of Physics, Member)
70. Jayanth Ramamurthy, Distributed-Circuit Models of the Lightning Return Stroke, Masters (UF, Chair)
69. Sandip Kiron Nallani Chakravartula, 2008, Characterization of lightning using optical techniques, Masters (UF, Chair)
68. Amitabh Nag, 2007, Microsecond- and Submicrosecond-Scale Electric Field Pulses Produced by Lightning Discharges, Masters (UF, Chair)
67. Arkadiy Lyakh, 2007, High Power Bipolar and Unipolar Quantum Cascade Lasers, Ph.D. (UF, Member)
66. Yuriy A. Pakhotin, Discovery Potential of Supersymmetry Using the Same-Sign Di-muon Signature with the CMS Detector, Ph.D. (UF Department of Physics, Member)
65. Theron Colbert, Testing of the Lightning Protective System of a Residential Building, Major Project (UF, Chair)
64. Sergo Jandariani, 2007, Measurement of Two-Particle Momentum Correlation in Jets, Ph.D. (UF Department of Physics, Member)
63. Ashwin Jhavar, 2005, Triggered-Lightning Properties Inferred from Measured Currents and Very Close Magnetic Fields, Masters (UF, Chair)
62. Venkateswararao Kodali, Ph.D. (UF, Chair)
61. Robert Olsen, 2008, Optical Properties of Lightning Discharges, Ph.D. (UF, Chair)
60. Brian DeCarlo, 2006, Triggered-lightning testing of the performance of grounding systems in Florida sandy soil, Masters (UF, Chair)
59. Beyza Caliskan Aslan, 2007, A Continuous Approach to the Lightning Discharge, Ph.D. (UF Department of Mathematics, Member)
58. Vinod Jayakumar, 2004, Estimating Power, Energy, and Action Integral in Rocket-Triggered Lightning, Masters (UF, Chair)
57. Jason Jerauld, 2007, Properties of Natural Cloud-to-Ground Lightning Inferred from Multiple-Station Measurements of Close Electric and Magnetic Fields and Field Derivatives, Ph.D. (UF, Co-Chair)
56. Yuhu Zhai, 2003, Model-Order Reduction for Efficient Simulation of Nonlinear Electro-Magneto-Thermal Coupled Problems, Ph.D (UF, Member)
55. Jen Schoene, 2007, Direct- and nearby-strike interactions of rocket-triggered lightning with unenergized power distribution lines, Ph.D (UF, Co-Chair)
54. Baqar Tabrez, Masters (UF, Chair)
53. Robert Olsen, 2003, Optical Characterization of Rocket-Triggered Lightning at Camp Blanding, Florida, Masters (UF, Chair)
52. Shu-Jen Huang, 2005, Multistate Discretization of the Electric Field Equations, Ph.D. (UF Department of Mathematics, Member)
51. Venkateswararao Kodali, 2003, Characterization and Analysis of Close Lightning Electromagnetic Fields, Masters (UF, Chair)
50. Angel Mata, 2003, Interaction of Lightning with Power Distribution Lines: 2001 and 2002 Experiments at the International Center for Lightning Research and Testing (ICLRT), Masters (UF, Chair)
49. Jason Jerauld, 2003, A Multiple-Station Experiment to Examine the Close Electromagnetic Environment of Natural and Triggered Lightning, Masters (UF, Co-Chair)
48. Mohammed S. Alam, 2001, Fabrication and Characterization of Multiple Flexible Magnetic Windings, Masters (UF, Member)
47. Jens Schoene, 2002, Analysis of Parameters of Rocket-Triggered Lightning Measured During the1999 and 2000 Camp Blanding Experiment and Modeling of Electric and Magnetic Field Derivatives Using the Transmission Line Model, Masters (UF, Co-Chair)
46. P. Nakmahachalasint, 2002, Static and Dynamic Hysteresis Modeling of Power Ferrites at Temperature Limits for Power Electronics Applications, Ph.D. (UF, Member)

45. Rafael Kolic, 2000, Design and Analysis of AC/AC Converter and Controller Using DSP for Load Matching Variable Speed Permanent Magnet Generator Set, Masters (UF, Member).
44. Rafael Sutil, 2001, EMTP Modeling of Direct Lightning Strikes to the Lightning Protective System of a Residential Building, Masters (UF, Chair).
43. Carlos Mata, 2000, Interaction of Lightning with Power Distribution Lines, Ph.D. (UF, Chair).
42. Wanpeng Cao, Ph.D. (UF, Member).
41. David E. Crawford, Ph.D. (UF, Chair).
40. Sanjeev Thottapilly, MS (UF, Member).
39. Jun Chen, 2000, High-Order Linearizing Pulsewidth Modulator for Three-Phase Power Converters, Ph.D. (UF, Member).
38. Mirela Bejleri, 1999, Triggered-Lightning Testing of an Airport Runway Lighting System, Masters (UF, Chair).
37. Stephen M. Davis, 1999, Properties of Lightning Discharges from Multiple-Station Wideband Electric Field Measurements, Ph.D. (UF, Member).
36. David E. Crawford, 1998, Multiple-Station Measurements of Triggered Lightning Electric and Magnetic Fields, Masters (UF, Chair).
35. Srinivas Shailendra, 1998, Frequency Domain Modeling of Multi-Winding Magnetics Based on the Extended Cantilever Model, MS (UF, Member).
34. Guoxin Li, 1998, Low Frequency Conductance Voltage (LFGV) Characterization of Si/GexSi1-x/Si Heterojunction Bipolar Transistors, Ph.D. (UF, Member).
33. Mark I. Fernandez, 1997, Responses of an Unenergized Test Power Distribution System to Direct and Nearby Lightning Strikes, Masters (UF, Chair).
32. Raisa Esipenko, Ph.D. (Tomsk Polytechnic)
31. Dmitry Shelukhin, Statistical Characteristics of Lightning Discharges from Remote Field Measurements, Ph.D. (Tomsk Polytechnic).
30. Dariusz Czarkowski, 1996, Measurements and Analysis of Electrical Inputs to Adjustable Speed Motors and Their Power Electronic Converters, Ph.D. (UF, Member).
29. Joseph A. Bach, 1996, Instrumentation for Measuring Electric and Magnetic Fields at Different Distances from Lightning Discharge, Masters (UF, Chair).
28. Akram A. Abu-Aisheh, 1995, Performance of a Squirrel Cage Induction, Brushless DC, and Switched Reluctance Motors and Their Adjustable Speed Drives at Different Loading/Speed Combinations, Masters (UF, Member).
27. Yong Su, 1995, Testing of the Engineering Model of the Galileo Lightning and Radio Emission Detector, Masters (UF, Chair).
26. Asif Gilani, 1994, Polyphase and Single Phase Revenue Meter Accuracy Under Controlled Unbalanced Non-Sinusoidal Voltage and Current Condition, Masters (UF, Member)
25. Wesley "Ried" Crowe, 1994, Developing "Ground Truth" Instrumentation for Testing of the Galileo Lightning and Radio Emission Detector on Earth Lightning, High Honors (UF).
24. Mehrdad Tartibi, 1994, Design Procedure, Calculation and Analysis of AC-Exciter of a Brushless Exciter, Masters (UF, Member).
23. Joseph A. Versaggi, 1994, The Measurement of Near and Distant Lightning Electromagnetic Fields, Masters (UF).
22. Valentina Gorbatenko, 1993, Spatial Inhomogeneity of Thunderstorm Distribution, Ph.D. (Tomsk Polytechnic).
21. Kurosu Risa Altaf, 1993, A Comparison of Microsecond-Scale Electric Field Pulses in Cloud and Ground Flashes, High Honors (UF).
20. Yuri Villanueva, 1992, Microsecond-Scale Electric Field Pulses in Cloud Lightning Flashes, Masters (UF).
19. Rajeev Thottappillil, 1992, A Study of Cloud-to-Ground Lightning Processes with Emphasis on Data Analysis and Modeling of the Return Stroke, Ph.D. (UF).
18. Douglas M. Jordan, 1990, Relative Light Intensity and Electric Field Intensity of Cloud to Ground Lightning, Ph.D. (UF).
17. Rajeev Thottappillil, 1989, Electric Field Changes due to K Processes and M Components in Cloud-to-Ground Lightning Flashes, Masters (UF).
16. Yury Shoivanov, 1989, Development of Technique and Equipment for Studying Ground Flash Density, Ph.D. (Tomsk Polytechnic).
15. - 1. Fifteen Masters Theses (Power Systems and Lightning areas) at Tomsk Polytechnic, 1978-1988.