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GRADUATE STUDENT SUPERVISION:

Current Graduate Students:

Name	Degree (MAsc/PhD)	Start Date	Co-supervisor	Research Title and Comments
Mantosh Devgan	M. A. Sc.	July 2013	-	Topic: Insulation integrity in the future smart grid environment.
Shaharyar Anjum	M. A. Sc.	Sept. 2013	-	Topic: On-line detection of defected ceramic insulators
Tahir Ahmed Jeddy	M. A. Sc.	Jan. 2013	John Wen (MME)	Topic: Characterizing high energy capacitors for electric vehicles use.
Sarajit Banerjee	Ph.D. – part time	May 2013	-	Performance of high voltage cable terminations under high frequency high voltage effects.
Mohammad Saleh Moonesan	Ph.D.	Sept. 2011	Cherney	Topic: High voltage machine insulation studies under fast transients.
Mahdi Kendal	Ph.D.	Sept. 2011	-	Insulation failure analysis of transformers connected to renewable sources.
Ahmed Gad	Ph.D.	May 2010	-	Analysis of electrode processes under high voltage pulses, and their effects on treatment fluids.
Refat Ghunem	Ph.D.	Fall 2010	Cherney	Polymeric materials performance under DC voltages.
Jin Hee Kang	Ph. D.	Sept. 2011	John Wen (MME)	Nanomaterials as electrodes for ultra capacitors.
Colin Zhuo	M.A.Sc. – part time	Jan. 2010	-	Topic: Insulation integrity in the future smart grid environment.

Recent Graduates:

Name	Degree (MAsc/PhD)	Completion Date	Co-supervisor	Thesis research topic/current placements
Susan Bian	Ph.D.	Sept. 2013	Cherney	Synthesis of new polymeric nanocomposite materials using electrospinning.
Utkarsh Patel	M. A. Sc.	August 2012	-	<i>Analysis of Cable Termination under HF and distorted voltages</i> – Junior Engineer, Power Consulting Company, Ontario.
Emad Sharifi-Ghazvini	Ph.D.	March 2011	Cherney	<i>Analysis of Electrical and Thermal Stresses in the Stress Relief System of Inverter Fed Medium Voltage Induction Motors</i> ”. Engineer, Andritz Hydro Ltd. Peterborough.
Chitral Angamma	Ph.D.	July 2011	-	<i>A Study of the Effects of Solution and Process Parameters on the Electrospinning Process and Nanofibre Morphology</i> – MITACS Elevate Research Fellow, Industry partner GABAE Developments, Waterloo.
Omar Humid	M. A. Sc.	August 2011	-	<i>Effects of Power System Harmonics on Distribution Transformer Insulation</i> – Field Engineer, Suncor Energy Inc. Calgary,
Mohammad Saleh Moonesan	M. A. Sc.	Sept. 2011	-	<i>Design and Implementation of IGBT Based Power Supply for Food Treatment</i> Ph.D. Student – HVEL
Oscar Rodriguez Gonzalez	Ph.D.	December 2010	Griffiths	<i>Hurdle Technology in Non-thermal Food processing</i> – University of Guelph
Rina Baba	M.A.Sc.	Jan 2010	-	<i>Design of an IGBT-Based Pulsed Power Supply for Non continuous mode Electrospinning</i> – R&D Engineer, Schlumberger, Japan.
Alex Yu	M.A.Sc.	August 2009	-	Testing Engineer, PowerTech Laboratories, Vancouver, B.C.
Isaias Ramirez	Ph.D.	June 2009	Cherney	<i>“Performance evaluation of new nanocomposite materials for outdoor applications in power transmission”</i> R&D Engineer in National Research Institute, Mexico.
Sarajit Banerjee	M.A.Sc.	May 2008	-	<i>Performance of high voltage cable terminations under high frequency high voltage effects.</i> Kinectrics, Toronto, Ontario.
Saeed Ul-Haq	Ph.D.	June 2007	Cherney	<i>A study on insulation problems in drive (Inverter) fed medium voltage induction motors.</i> GE Motors Division, Peterborough, Ontario.
Fermin Espino	Ph.D.	August 2006	Cherney	<i>Field-Dependent Conductive Composites as Electric Stress Grading Materials;</i> Faculty, National Polytechnique Institute, Mexico City, Mexico.
Yuseph Montasser	M.A.Sc.	Sept. 2006	-	<i>“High voltage low power inverter designs and development for PWM drives to test motor insulation”,</i> GE Water Technologies, Alberta.

LIST OF GRADUATED STUDENTS - BETWEEN 1994 AND 2004

Saeed Ul-Haq ^{a, b, c}	Ph.D.	June 2007	A study on insulation problems in drive (Inverter) fed medium voltage induction motors. GE Motors Division, Peterborough, Ontario.
Gohar Syed	M.A.Sc.	May 2007	Worked at the Canadian Research Institute for Food Safety , University of Guelph. "Shelf life study of un-pasteurized apple cider by Pulsed Electric Field"
Fermin Espino ^d	Ph.D.	August 2006	Field-Dependent Conductive Composites as Electric Stress Grading Materials; Faculty, National Polytechnique Institute, Mexico City
Yuseph Montasser ^{a, e}	M.A.Sc.	Sept. 2006	High voltage low power inverter designs and development for PWM drives to test motor insulation, GE Water Technologies, Alberta
Jason Grenier	M.A.Sc.	Dec. 2006	Development of nano-second pulse power supplies for biomedical applications; Ph.D. student at Toronto.
Rocket Wei	M.A.Sc.	Aug. 2004	Polymeric HV Bushing – Grading the surface potential using resistively graded materials, Power Tech Labs, BC
Steven Li Feng ^{b,c}	M.A.Sc.	Aug. 2004	"Corona ring design around very high voltage insulation"; <i>Employed at Hydro One</i>
Edie Paul	M. Eng.	Sept. 2004	Formerly Edie was registered in M.A.Sc. Program; <i>Employed at ABB, Guelph.</i>
Luiz Myers ^{c,f}	Ph.D.	Nov. 2003	Role of Filler in Silicone Rubber Compounds, <i>Faculty, University in Brazil</i>
Ayman El-Hag ^{a, b,c}	Ph.D.	Nov. 2003	Leakage Current Harmonics as a Diagnostic Tool to Aging Performance"; <i>Faculty in American University, UEA</i>
Ying Shen	M. A. Sc.	Aug. 2003	Polymeric HV Bushing – Grading the surface potential using high dielectric material; <i>EPRI, USA.</i>
Ramtin Omranipour ^b	M. A. Sc.	Aug. 2002	Fillers in Silicone rubber composites; <i>Insulation Engineer, GE Peterborough</i>
Ivan Lopes ^c	Ph.D.	Dec. 2001	Diagnosing Aging of Silicone Rubber Insulation Using Partial Discharges; <i>Faculty, University in Brazil</i>
Kannan Sreenivasachar	Ph.D.	Sept. 2001	Unified Power Flow Controller: Modeling, Stability Control Strategy, and Control System Design; <i>Ontario Power Generation</i>
Hongyuan Wang	M. Eng.	May 1998	Numerical Computation of Corona Space Charge and V-I characteristics of ESP; unknown
Behdad Biglar	M.A.Sc.	May 1999	Salt-fog Testing of Polymer Housed Surge Arresters; Trench Electric, Toronto
Zukeran, Co-Supervisor J. S. Chang	Ph.D.	July 1999	"Ultrafine particles collection by ESP using dc and pulse energization"; unknown
Piotr Lubicki	Ph.D.	July 1998	"Removal of volatile organic compounds in water using low energy electron beam"; <i>CPI Semiconductors, USA</i>

LIST OF GRADUATED STUDENTS - BETWEEN 1994 AND 2004			
Xinghua Liang	M.A.Sc.	March 1998	The Study of Pulse Energization of ESPs; Power company
Marius Chis	M.A.Sc.	June 1997	Dynamics of Vector-Controlled Induction Machine Drives Fed from Non-linear Voltage Sources, SAF Drives
Rachel Feng, Co-Supervisor P. Castle	M.A.Sc.	June 1996	"Power Measurement of Corona Discharge for Ozone Generation"
Xiao Xu ^{a,b}	M.A.Sc.	June 1995	"Breakdown Probability of SF ₆ gas in Uniform Fields Under Nanosecond Pulse Application"
Hongbing Wu ^{a,b}	M.A.Sc.	June 1994	Mechanism of Charge Generation and Relaxation in Insulating Liquids during forced Flow"

- a. **Recipient of NSERC Scholarship.**
- b. **Recipient of Ontario Govt. Scholarship,**
- c. **Recipients of the IEEE Dielectric & Electrical Insulation Society Fellowship**
- d. **Recipient of the Mexican Government Scholarship,**
- e. **Recipient of GE Global Research, Bangalore, India, Internship**
- f. **Recipient of the Brazilian Government Scholarship**
- g. **Recipient of Japanese Scholarship**

Please note: All of my graduate students have been working in the fields for which they were trained at the University of Waterloo, High Voltage Engineering Laboratory. This certainly shows the quality of training and the need for training in the area of High Voltage Engineering/Applied Electrostatics.

LIST OF Visitors/Post Doctoral Fellows - BETWEEN 2004 AND PRESENT

Name	Status (Postdoc, etc.)	Dates	Co-supervisor's name	Research Title and Comments
Peter Chen	PDF	July – Dec. 2012	-	Design of pulse forming networks in the generation of HV square pulses.
Tahir Ahmed Jeddy	Research Assistant	Sept. – Dec. 2012	-	Development of the needleless electrospinning facility for nanofabrication study
Paria Sattar	PDF	July 2011 – March 2012	John Wen	Failure Analysis of Ultra Capacitors under high electrical and thermal stresses.
Pei Hong Zhang	Visiting professor	Nov. 2009 – Nov. 2010	-	Analysis of electrical properties of nanocomposite materials for electric machines
Markus Walking	PDF	Jan. 2009 - present	Griffiths	Pulsed Electric Field and Microfiltration Hurdle Treatment for the Implementation of Microbial Safety and Shelf Life in Milk
Alex Yu	HVEL Technologist	Jan. 2007- August 2009	-	Alex worked full-time in HVEL as a lab technologist/instructor. He also helped with the reconstruction tasks of HVEL
Michael Zhang	HVEL Technologist	August 2009 - present	-	Michael is working full-time in HVEL as a lab technologist/research associate.
Ayman El-Hag*	Visiting professor	May and June 2009	-	Hurdle technique in inactivation of microbial contamination using PEF and thermal treatments.
Renu Dariwala	Research Associate	June 2008 -present	Griffiths	Working at University of Guelph on Food processing project.
Ayman El-Hag*	Visitor	May 2008 -Aug. 2008	-	Hurdle technique in inactivation of microbial contamination using PEF and thermal treatments.
Kevin (Kai) Zhau	Visitor	May 2008- Dec. 2008	-	Performance of high voltage cable terminations under high frequency high voltage and pulse effects.
Ali Naderian	HVEL supervisor	May 2006- April 2007.	-	Helped Jayaram with the equipment assessment, installation, and testing in the reconstruction task of HVEL.
Ayman El-Hag*	Visitor	June 2007- Aug. 2007	-	Cell membrane breakdown studies

LIST OF Visitors/Post Doctoral Fellows - BETWEEN 1994 AND 2004

Name	Status	Dates	Research Title and Comments
Renu Dariwala	Research Associate	April 2007-Oct. 2007	Worked at the Canadian Research Institute for Food Safety , University of Guelph on Food processing project.
Ali Naderian	PDF	Nov. 2005- May 2006	Acid rain effects on performance of polymeric insulation studies.
Ayman El-Hag	NSERC PDF	July. 2004 – Aug 2006	Pulse power applications to biotechnology
Ali Naderian	Visitor	Nov. 2004 - Oct.2005	Application of neural network to predict the leakage current patterns
Ayman El-Hag	NSERC PDF	July. 2004 – Aug. 2006	Steven Boggs (U of T)
Mostafa Marie (part time)	NSERC PDF	Oct. 2004 to July 2006	Drive circuits for solid state devices
Ayman El-Hag	PDF	Nov. 2003- June 2004	Composite Insulation – study on nano-composites materials
Mostafa Marie (part time)	NSERC PDF	Oct. 2004 to June 2006	Design “& development of solid state high voltage power supplies.
Adedayo Otunola	PDF	Jan. 2005 - present	Pasteurization of milk using PEF technology
Ali Naderian	PDF	Nov. 2005- present	Acid Rain effects on performance of polymeric insulation studies.
Ali Naderian [†]	Visitor	Nov. 2004 - Oct.2005	Acid Rain effects on performance of polymeric insulation studies.
Wenxia Sima ^{††}	Visitor	Nov. 2003 - April 2004	Long Rod Insulators design calculations for corona ring optimization.
Chaim Leibovitch ^{††}	Visitor	Aug. 2002 - July 2003	“Pulse power applications to food engineering; power supply design and development”
Kamesawara Rao	Visitor	Sept. 2000- Aug. 2001	“Pulse Power Applications for Food Sterilization”
Al-Arainy	Visitor	July 1995 - Oct. 1995	“Pulse Corona for Removing Volatile Impurities from Drinking Water”
Goran Djogo	PDF	March 95 – 96.	“Power Supply for Advanced Electrostatic Precipitators and Water purification System”
Thangaraj Dravia	PDF	July 94 - Oct. 94.	“Numerical solutions for Applied Electrostatics Problems”

[†] Partially supported by their home institutions.

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