

March 2010

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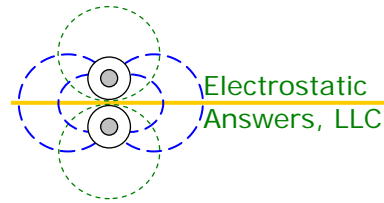
GOAL Diagnose root causes and deliver robust solutions for electrostatic problems in technology invention, development, product commercialization, roll-to-roll (RtR) manufacturing, electronic manufacturing and circuit board assembly, industrial production, and in customer applications.

SUMMARY OF QUALIFICATIONS

- **Over 28 years of engineering experience** in applied electrostatics in roll-to-roll manufacturing, solvent coating operations, web conveyance and converting (slitting, chopping, sheeting, packaging), ESD protection in electronic manufacturing and circuit board assembly operations, plastic parts mfg (injection molding, vibratory sorting, pneumatic transport), and copier technology.
 - **Patent Agent**, passed Patent Registration (Patent Bar) Exam 2/2010, registration in progress
 - **Professional Engineering License** – in progress
 - **Award winning** technical author and engineer
2009 Distinguished Service Award, Electrostatics Society of America
2005 IEEE James Melcher Award (excellence in a peer reviewed journal article)
 - **Ph.D. in Electrical Engineering** – Applied electrostatics
 - **Engineering Science Adjunct Instructor** – Monroe Community College, Rochester, NY
 - **13 US Patents** on sheet and film products, electronic displays, copier technologies, and coating technologies.
 - **6 Pending Patent Applications** on electrostatic instrumentation, electronic displays, coating technologies, nanoparticle generation, and roll-to-roll manufacturing technologies.
 - **Leadership** experience in industrial R&D and technical professional organizations.
 - **IEEE Senior Member** – Institute of Electrical and Electronics Engineers
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PROFESSIONAL CAREER

Electrostatic Answers LLC	Rochester, NY	2007 - present
Dr. Robinson is known internationally for developing electrostatic technology and solving static problems during technology invention, development, product commercialization, electronic manufacturing and assembly, industrial manufacturing, and customer applications. He has served multiple clients including 4 Fortune 500 companies.		
Monroe Community College	Rochester, NY	2009 - present
Dr. Robinson is an adjunct instructor in the Engineering Science and Physics Department where he teaches ENR 261 - Engineering Computing II (Matlab).		



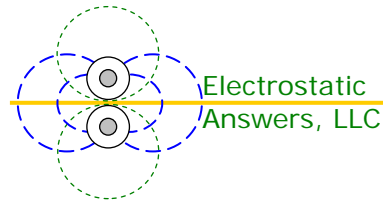
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PROFESSIONAL CAREER (continued)

Eastman Kodak Company	Rochester, NY	1982 - 2007
Dr. Robinson has served in multiple leadership and individual contributor roles throughout his career in invention, product/manufacturing process development, and commercialization.		
<u>Research Scientist / Group Leader</u>		2003 – 2007
Electrostatics Group, Global Manufacturing Technology Organization Senior Scientist and Group Leader (5 people) responsible for solving static problem, helping design new products, technical strategy for my Group, & performance appraisals.		
<u>Unit Director, Manufacturing Research & Engineering</u>		1998 – 2002
Surface Modification and Electrostatics Unit, responsible for technical strategy, project definition and deliverables, performance appraisals, hiring and daily operation of an R&D unit (18 people) with an annual budget of ~\$3.0M		
<u>Scientist, Manufacturing Research & Engineering</u>		1991 – 1998
Diagnosed and solved static problems in industrial manufacturing, electronic manufacturing and circuit board assembly, conducting applied research, assist in the design and commercialized new products.		
<u>Scientist, Copy Products Division</u>		1982 – 1990
The technical area was photocopier technology, responsible for conducting applied research, designing and commercializing new products, and lead manufacturing problem solving projects involving the toning process.		
Sandia National Laboratory	Albuquerque, NM	1978
<u>Project Engineer Summer Intern</u> , Capital Project Group, Security Clearance required		
Assisted in project management of the construction of the Electron Beam Fusion Facility		
Lawrence Livermore National Laboratory	Livermore, CA	1976
<u>Physicist Summer Intern</u> , Laser Fusion Target Fabrication Group		
Security Clearance required Investigated using colliding liquid droplets as a new method to form laser fusion targets.		

PROFESSIONAL ACTIVITIES

Patent Agent – Registration with the US Patent and Trademark Office in progress		
Passed Patent Registration Exam (Patent Bar Exam) 2/2010		2/2010
Professional Engineering License – in progress		
Intern Engineer in the State of New York Certificate Number 086434		2010
Admitted to Principles and Practice of Engineering Exam scheduled:		4/2010
Electrostatics Society of America (ESA)		
ESA Distinguished Service Award		2009
Technical Program Chair, 2009 Electrostatics Joint Conference, Boston, MA		2009
President, Electrostatics Society of America		2005 – 08
General Conference Chair, 2004 Annual Meeting, Rochester, NY		2004
ESA Executive Council		2003 – present



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PROFESSIONAL ACTIVITIES (continued)

Institute of Electrical and Electronics Engineers (IEEE)

- Chairman, Industry Applications Society (IAS), 1987 – 88
Electrostatic Processes Committee (EPC)
- IAS Annual Meeting Session Chair: 2010
Classical and Emerging Electrostatic Processes
- Chairman, IAS EPC Technical Awards Sub-Committee 2007 – present
- James Melcher Award (excellence in peer reviewed publication) from IAS EPC 2005
- Established the IAS EPC “Creativity and Innovation Prize Paper Award” 2003

International Conference on System Science, Engineering Design and Manufacturing Informatization (ICSEM 2010), Yichang, China

- Program Committee Member 2010

Paper Film and Foil Converter (PFFC) Contributing Editor

- Trade Publication for the converting industry 2009 – Present
- Kelly on Static, PFFC Blog

Academic Appointments

- Monroe Community College Adjunct Faculty, Engineering Science Dept 2009 – Present
ENR261 - Engineering Computing 2 (Matlab Programming)
- Univ. of Western Ontario External Examiner, PhD Defense 2007
- Univ. of Arkansas at Little Rock Adjunct Faculty, Applied Science Dept. 2003 – 05

Journal of Electrostatics, Guest Editor, Vol. 35, Issues 2-3 (August 1995)

- 1993 IEEE Industry Applications Society Meeting, Toronto, Canada, 1995
October 3 – 8, 1993 Edited by K. Robinson and J. Doshi

Reviewer

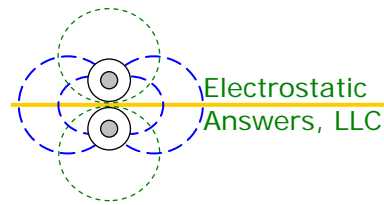
- IEEE Transactions on Dielectrics and Electrical Insulation 2009 – Present
- IEEE Transactions on Industry Applications 1982 – Present
- International Journal of Circuit Theory and Applications 2009 – Present
- Journal of Electrostatics 1982 – Present
- Natural Sciences & Engineering Research Council of Canada External Reviewer 2010

Memberships

- Institute of Electrical and Electronics Engineers, Inc. (Senior Member 1991) 1978 – present
- Electrostatics Society of America (ESA) 1978 – present
- Electrostatic Discharge Association (ESD Association) 2009 – present
- Sigma Xi (Research Honor Society) 1980 – present

EDUCATION

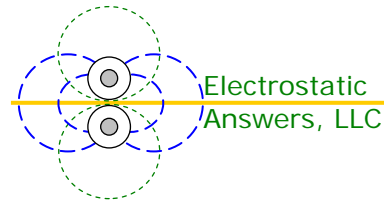
- Ph.D. Electrical Engineering, Colorado State University, Fort Collins, CO 1982
- M.S. Electrical Engineering, University of Illinois, Urbana, IL 1978
- B.S. Engineering Science, Colorado State University, Fort Collins, CO 1976
- Engineering Science, Montgomery College, Rockville, MD 1974



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PRESENTATIONS (recent)

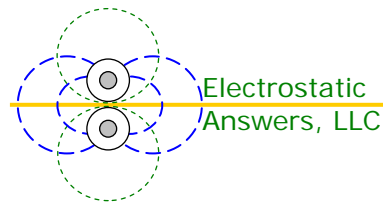
- Conference Presentation: Controlling Static in Winding Rolls** 2010
Accepted for presentation: AWEB 10 AIMCAL Applied Web Handling Conference,
5/17 – 20/2010, Rochester, NY
- Short Course: Electrostatics in Web Handling** 2010
with Prof. Thomas B. Jones, University of Rochester, scheduled for the AWEB 2010
AIMCAL Applied Web Handling Conference, 5/17/2010, Rochester, NY
- Conference Presentation: Electrostatic Force on a Charged Dielectric Sphere near a
Grounded Conducting Plate** 2010
Accepted for presentation: Electrostatics Society of America Annual Meeting, June 2010,
University of North Carolina – Charlotte, Charlotte, NC
- Conference Presentation: Electrostatic Sheet Sticking Mechanisms** 2010
Accepted for presentation: IEEE Industry Applications Society Annual Meeting,
10/3 – 7/2010, Houston, TX
- Conference Presentation: Locate Static Dissipaters Using Film - Roller Electrification,”** 2009
AIMCAL Fall Technical Conference, 10/18 – 21/2009, Amelia Island, FL
- Conference Presentation: Electrostatic Sticking of Sheets Fed from a Stack** 2009
2009 Electrostatics Joint Conference, 6/16 – 18/2009, Boston University, Boston, MA
- AIMCAL-PFFC Webinar: Static Control in Converting** 2009
6/12/2009, ConvertingPortal.com an AIMCAL Website
- Conference Presentation: Stay Ahead of Static Problems in Film Conveyance** 2008
AIMCAL Fall Technical Conference, 10/19 – 22/2008, Myrtle Beach, South Carolina
- Conference Presentation** with Robert Brearey and John Szafraniec:
Voltage Diffusion in an Insulating Sheet with a Conductive Layer 2008
Electrostatics Society of America Annual Meeting, 6/17 – 19/2008, Minneapolis, MN
- Invited Lecture: Electrostatic Charge Control in Slitting Operations** 2008
AWEB 08 AIMCAL Applied Web Handling Conference, 5/6 – 9/2008, Minneapolis, MN
- Invited Lecture** with William Durkin: Electrostatic Issues in Roll-to-Roll Manufacturing 2007
2007 IEEE Industry Application Society Annual Conf, 9/23 – 28/07, New Orleans, LA
- Conference Presentation** with Dr. Ravi Sharma: Electrophoretic Mobility 2007
Estimated from the Transient Current in a Parallel Plate Cell
Electrostatics Society of America Annual Meeting, 6/12 – 14/2007,
Purdue University, West Lafayette, IN
- Invited Lecture: Design Your Experiment to Deliver** 2001
University Institute of Technology, Angoulême, Cedex, France
The University of Western Ontario, London, Ontario, Canada



PUBLICATIONS – Peer Reviewed Publications

IEEE JAMES MELCHER PRIZE PAPER AWARD for excellence in a peer reviewed journal publication:

- 1 **K. Robinson**, “Charge Relaxation Due to Surface Conduction on an Insulating Sheet Near a Grounded Conducting Plane,” IEEE Trans. Industry Applications, vol. 40, No. 5, pg. 1231 – 1238, 2004.
- 2 **K. Robinson**, W. Durkin, “Electrostatic Issues in Roll-to-Roll Manufacturing Operations,” IEEE. Trans. on Industry Applications, Vol. 46, No. x, pg. yyyy – zzzz, 2010.
- 3 **K. Robinson**, R. Brearey, J. Szafranec, “Sheet sticking caused by charge flow in a buried conducting layer,” Journal of Electrostatics vol. 67, No. 5, pg. 781 – 788, 2009.
- 4 **K. Robinson**, J. J. Coleman, “Spark Protection Circuit for Measuring Current in High voltage Circuits,” Journal of Electrostatics, vol. 63, No. 3 – 4, pg. 285 – 296, 2005.
- 5 A. Chirokov, A. Gutsol, A. Fridman, K. Sieber, J. Grace, **K. Robinson**, “Self Organization of Microdischarges in Dielectric Barrier Discharge Plasma,” IEEE Trans. on Plasma Science, Vol. 33, No. 2, pg. 300 – 301, April 2005.
- 6 A. Chirokov, A. Gutsol, A. Fridman, K. Sieber, J. Grace, **K. Robinson**, “Analysis of two-dimensional microdischarge distribution in dielectric-barrier discharges,” Plasma Sources Sci. Technol., Vol. 13, pg. 1 – 13, 2004.
- 7 S. Conti, P. I. Porshnev, A. Fridman, L. A. Kennedy, J. M. Grace, K. D. Sieber, D. R. Freeman, **K. Robinson**, “Experimental and numerical investigation of a capacitively coupled low frequency nitrogen plasma,” Exp. Thermal Fluid Sci., vol. 24, pg. 79 – 91, 2001.
- 8 P. Krein, **K. Robinson**, “Printers” in Handbook of Electrostatic Processes, edited by J.S. Chang, A. J. Kelley, and J. M. Crowley, Marcel Dekker, Inc., Chap. 14, pg. 295 – 320, 1995.
- 9 T. B. Jones, R. D. Miller, **K. Robinson**, W. Y. Fowlkes, “Multipolar Interactions of Dielectric Spheres,” Journal of Electrostatics, Vol. 22, pp. 231, 1989.
- 10 W. Y. Fowlkes, **K. Robinson**, “The Electrostatic Force on a Dielectric Sphere Resting on a Conducting Substrate,” Particles on Surfaces, Ed. K. L. Mittal, Plenum Publishing Corp., pg. 143 - 155, 1988.
- 11 **K. Robinson**, T. B. Jones, “Particle-Wall Adhesion in Electropacked Beds,” IEEE Transactions on Industry Applications, Vol. IA-20, No. 6, pp. 1573, 1984.
- 12 **K. Robinson**, T. B. Jones, “Slope Stability of Packed Beds,” IEEE Transactions on Industry Applications, Vol. IA-20, No. 2, pp. 253, 1984.
- 13 **K. Robinson**, R. J. Turnbull, K. Kim, “Electrostatic Spraying of Liquid Insulators,” IEEE Transactions on Industry Applications, Vol. IA-16, No. 2, pp. 308, 1980.



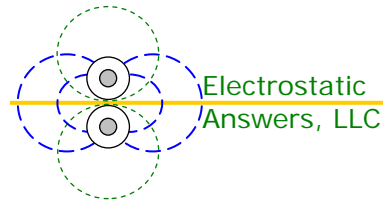
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PUBLICATIONS – Issued US Patents

- 1 P. Aylward, D. Majumdar, B. Fitzgerald, **K. Robinson**, “Antistatic conductive grid pattern with integral logo,” US Patent 7,255,912, 8/14/2007.
 - 2 R. Mehta, R. Jagannathan, S. Jagannathan, **K. Robinson**, K. Pond, B. Houghtaling, “Process for the deposition of uniform layer of particulate material,” US Patent No. 7,223,445, 5/29/2007
 - 3 P. Aylward, D. Majumdar, H. Yau, W. Durkin, D. Bigelow, D. Slater, **K. Robinson**, “Antistatic Layer for Electronically Modulated Display,” US Patent No. 7,087,351 8/8/2006
 - 4 P. Aylward, D. Majumdar, R. Daly, **K. Robinson**, B. Fitzgerald, P. Christian, “Transparent Invisible Conductive Grid,” US Patent 7,083,885 B2 8/1/2006.
 - 5 D. Majumdar, N. Dontula, S. Sunderrajan, P. Aylward, **K. Robinson**, M. Kestner, “Conductive Foam Core Imaging Member,” US Patent 6,566,033, 5/20/2003.
 - 6 **K. Robinson**, A. Lucas, T. Hilbert, “Developer flow rate regulation for an electrophotographic toning roller,” US Patent No. 5,227,848, 7/13/1993.
 - 7 W. Mey, J. May, W. Gruenbaum, S. Riblett, **K. Robinson**, O. Rodenberg, “Xerotyping Using a Corona Charge Injection Modifying Material, US Patent No. 5,101,216, 3/1992.
 - 8 **K. Robinson**, L. Hill, K. Arnold, “Replaceable Developer Station Having Indicator For Determining Whether Developer Station is Used or New,” US Patent No. 5,043,764, 8/27/1991.
 - 9 J. K. Lee, D. McJury, M. Pickup, **K. Robinson**, “Bar Magnet for Construction of a Magnetic Roller Core,” US Patent 5,019,796, 5/28/1991.
 - 10 K. Arnold, W. Chang, **K. Robinson**, “Developer Mix Monitoring for Replaceable Developer Stations,” US Patent No. 4,956,668, 9/11/1990.
 - 11 W. Mey, W. Gruenbaum, **K. Robinson**, “Electrographic Method for Multiple Images (Xerotyping),” US Patent 4,898,797, 2/6/1990.
 - 12 **K. Robinson**, A. Rushing, B. Steele, “Electrographic Magnetic Brush Development Apparatus and System,” US Patent No. 4,714,046, 12/22/1987.
 - 13 **K. Robinson**, R. Weitzel, A. Kroll, “Electrographic Development Apparatus,” US Patent No. 4,570,572, 2/18/1986.
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PUBLICATIONS – Pending Patent Applications

- 1 **K. Robinson**, “Electrometer with in-measurement range adjustment and methods thereof for measuring electrostatic charge,” US Patent Application 2009/0045816A1, 2/19/2009.
- 2 P. Aylward, **K. Robinson**, K. Ng, J. Brewer, “Stacked-cell display with field isolation layer,” US Patent Application 2007/0195399A1, 8/23/2007.
- 3 R. Mehta, R. Jagannathan, B. Houghtaling, R. Link, **K. Robinson**, R. Sprout, K. Reed, A. Verma, S. Mahon, R. Gutierrez, T. Blanton, J. Fornalik, “Deposition of uniform layer of desired material,” US Patent Application 2006/0275542A1, 12/7/2006.
- 4 R. Mehta, R. Jagannathan, B. Houghtaling, R. Link, **K. Robinson**, R. Sprout, “Process for making an organic light-emitting device,” US Patent Appl. 2006/0273713A1, 12/7/2006.
- 5 H. Lei, B. Rice, R. Walton, **K. Robinson**, R. Updike, “Process for forming polarizer plate,” US Patent Application 2006/0225831A1, 10/12/2006.
- 6 H. Lei, B. Rice, R. Walton, **K. Robinson**, R. Updike, “Process for forming polarizer plate,” US Patent Application 2006/0225827A1, 10/12/2006.



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PUBLICATIONS – Trade Publications

- 1 **K. Robinson**, “Static Beat: Using a Faraday Cup to Measure Static,” Paper, Film & Foil Converter, Vol. 84, No. 4, April 2010 pg. xx.
 - 2 **K. Robinson**, “Static Beat: Using an Electrostatic Fieldmeter to Measure Static,” Paper, Film & Foil Converter, Vol. 84, No. 3, March 2010 pg. xx.
 - 3 **K. Robinson**, “Static Beat: When To Use Ionizing Blowers,” Paper, Film & Foil Converter, Vol. 84, No. 2, February 2010 pg. 10.
 - 4 **K. Robinson**, “Static Beat: The Best Places for Static Bars,” Paper, Film & Foil Converter, Vol. 84, No. 1, January 2010 pg. 14.
 - 5 **K. Robinson**, “Static Beat: How Static Bars Work,” Paper, Film & Foil Converter, Vol. 83, No. 12, December 2009 pg. 14.
 - 7 **K. Robinson**, “Static Beat: Static, Be Gone!” Paper, Film & Foil Converter, Vol. 83, No. 11, November 2009 pg. 16.
 - 8 **K. Robinson**, “Static Beat: Dissipating Static,” Paper, Film & Foil Converter, Vol. 83, No. 10, October 2009 pg. 16.
 - 9 **K. Robinson**, “Static Beat: Winter Static,” Paper, Film & Foil Converter, Vol. 83, No. 9, September 2009, pg. 14.
 - 10 **K. Robinson**, “Static Beat: How To Prevent Unwinding Roll Static,” Paper, Film & Foil Converter, Vol. 83, No. 8, August 2009, pg. 14.
 - 11 **K. Robinson**, “Static Beat: How To Prevent Winding Roll Sparks,” Paper, Film & Foil Converter, Vol. 83, No. 7, July 2009, pg. 12.
 - 12 **K. Robinson**, “Static Beat: Film Charge Causes Winding Static,” Paper, Film & Foil Converter, Vol. 83, No. 6, June 2009, pg. 10.
 - 13 **K. Robinson**, “Static Beat: Stop Tribocharging Your Products,” Paper, Film & Foil Converter, Vol. 83, No. 5, May 2009, pg. 12.
 - 14 **K. Robinson**, “Static Specified,” Paper, Film & Foil Converter, vol. 83, No. 4, April 2009, pp. 38–40.
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PUBLICATIONS – Blogs

- 1 **K. Robinson**, “Kelly on Static,” sponsored by Paper, Film & Foil Converter, <http://blog.pffc-online.com/kelly/>, established November 2009.
- 2 **K. Robinson**, “Electrostatics Technology and Applications,” LinkedIn Group, http://www.linkedin.com/groups?gid=1852382&trk=myg_ugrp_ovr, established August 2009.