

Kelly Robinson, PE, PhD

NFPA Committee on Static Electricity Principle Member, IEEE Fellow Patent Agent, Electrostatic Answers Founder and Owner 15 Piping Rock Run • Fairport, NY 14450-9596 USA

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Web Site: http://www.ElectrostaticAnswers.com

GOALS

- Eliminate injury and waste from static electricity.
- Diagnose root causes and deliver robust solutions for electrostatic problems in technology invention, development, product commercialization, manufacturing process development, industrial production, assembly, and in customer applications.

SUMMARY OF QUALIFICATIONS

- Over 30 years of engineering experience solving static problems in solvent handling, clean room operations, electronic assembly, plastic parts manufacturing (vibratory sorting, pneumatic transport), film forming, converting (slitting, chopping, sheeting, packaging), coating & printing, and problem solving in customer applications.
- **Electrostatic Answers** has served over 100 companies (many Fortune 500) located in North America, Europe, Central America, and Asia.
- Accomplished engineer and technical writer

NFPA 77 (2015) Nat'l Fire Protection Asso. Committee on Static Electricity principle member IEEE Fellow (2011), Institute of Electrical & Electronics Engineers, technical contributions ICE USA (2013 – 2017) Int'l Converting Exhibition static control expert, "Ask the Experts" AIMCAL John Matteucci Award (2012), technical presentation excellence Distinguished Service Award (2009), Electrostatics Society of America IEEE James Melcher Award (2005) - peer reviewed journal article excellence

- Paper Film and Foil Converter (PFFC-online.com) Contributing Editor on static control
- Technical Author Reference Book chapters:
 - K. Robinson, "Troubleshooting Static Problems in Plastic Processes," Chapter 21, <u>Handbook of Troubleshooting Plastic Processes</u>, A <u>Practical Guide</u>, Edited by John R. Wagner, Jr., Scrivener Publishing, 2012.
 - P. Krein and K. Robinson, "Chapter 14: Printers," <u>Handbook of Electrostatic Processes</u>, Edited by Jen-Shih Chang, Arnold J. Kelly, and Joseph M. Crowley, Marcel Dekker, 1995.
- <u>IEEE Fellow</u> cited in 2011 for "contributions to electrostatic performance of manufacturing processes and imaging devices."
- <u>Journal of Electrostatics</u> Associate Editor (2014 present), Editorial Board (2011 present)
- **Inventor** 14 US Patents issued on sheet/web products, and printer / copier technologies.
- Professional Engineer (2010) New York State License number 088222
- Patent Agent (2010) US Patent and Trademark Office Registration number 66,336
- **Ph.D. & M.S.** in Electrical Engineering electrostatics, analog circuit design, programming
- **B.S.** in Engineering Science electromagnetics, fluid mechanics, applied mathematics



PROFESSIONAL CAREER

Dr. Robinson brings unique value to your projects by drawing on his rich experiences as a consulting engineer (electrical engineer, expert witness), individual contributor (Professional Engineer, research scientist), technical writer (technical editor, author of peer reviewed journal articles and many trade publications), technical manager (R&D, product commercialization), business manager (business owner), Patent Agent, and academic instructor (adjunct faculty).

Electrostatic Answers LLC (engineering consulting)

Rochester, NY

Business Owner

2007 – present

Dr. Robinson founded and owns Electrostatic Answers, an engineering consulting business dedicated to eliminating injury and waste from static electricity by solving static problems in technology invention, product commercialization, production, and in customer applications. Electrostatic Answers has solved static problems for over 100 companies including many on the Fortune 500.

Engineer

1982 – present

Dr. Robinson defines the required performance, measures performance of existing systems to identify gaps, and recommends effective solutions.

Inventor

1986 – present

Dr. Robinson analyzes measurement methods and invents new, novel methods to dissipate static. His 14th <u>US Patent 8,354,847</u> on electrostatic instrumentation issued 1/15/2013. He has a pending US Patent Applications on using static charge to adhere sheets to surfaces.

Patent Agent

2010 – present

Dr. Robinson works with his clients to obtain broad and comprehensive patent protection for their inventions in electrostatic technologies & processes, electronic circuits & instrumentation, and methods for using these technologies. He provides unique insights gained from his technical background and experience. Kelly also conducts clearance and infringement searches.

Technical Writer

1980 – present

Dr. Robinson presents fundamental concepts and shares technical insights in peer reviewed journal articles and in <u>Static Beat</u>, his column in <u>PFFC On-line</u> (Paper Film and Foil Converter), the leading trade publication for the converting industry since 1927.

Technical Editor

2009 – present

Dr. Robinson works with authors to clarify their technical accomplishments and to distill information so that the resulting publications are clear and professional presentations of the author's fine works.

Monroe Community College

Rochester, NY

2009 - 2011

Dr. Robinson served as an adjunct instructor in the Engineering Science and Physics Department where he taught ENR 261 – Engineering Computing II (Matlab).





PROFESSIONAL CAREER (continued)

1 KOTESSIONAL CAREER (continucu)	
Expert Witness	
Corporate Liability, Texas	2010
This case involved liability for an industrial fire. Retained by defense counsel,	
Dr. Robinson reviewed records and performed background research. He	
provided an opinion on the origin of the ignition, on how the industrial	
environment and working conditions contributed to the event. He did not testify	
at deposition or testify at trial as the case settled.	
Patent infringement, California Eastern District Court	2007 - 2008
This patent dispute involved static dissipative technology used in magnetic hard	
drive manufacturing. Retained by defense counsel, Dr. Robinson reviewed	
documents, wrote expert reports, and measured the electrical properties of	
samples. He did not testify at deposition or testify at trial as the case settled.	
Corporate espionage, US Federal District Court, Western District of New York	1996 – 1997
Dr. Robinson worked with the plaintiff's legal team in this case involving the	
theft of proprietary information and corporate trade secrets. Dr. Robinson	
reviewed documents, performed back ground research, wrote expert reports, and	
testified at deposition.	
Eastman Kodak Company Rochester, NY	1982 - 2007
Dr. Robinson served in multiple leadership and individual contributor roles in	1702 2007
his 25 years of employment at the Eastman Kodak Company including concept	
invention, technology development, manufacturing process development,	
product commercialization, and resolving problems in customer applications.	
Senior Scientist, Global Manufacturing Technology Organization	2003 - 2007
As a Senior Scientist, Dr. Robinson was the corporate resource for electrostatic	
technologies, solved static problems in manufacturing operations and developed	
new products having world-class static performance. As a result of this work,	
Dr. Robinson is the inventor on 5 patents on improving the static performance of	
manufacturing processes and imaging products.	
Group Leader, Global Manufacturing Technology Organization	2003 - 2007
As Group Leader, Dr. Robinson was responsible for developing and	
implementing the technical strategy for the Electrostatics Group, defining	
projects and deliverables, tracking performance, and administering performance	
appraisals for 5 employees.	
<u>Unit Director</u> , Manufacturing Research & Engineering	1998 - 2002
As Director of the Surface Modification and Electrostatics Unit, Dr. Robinson	
russ as an an aible for to share all starts are music at definition and deliverables	
was responsible for technical strategy, project definition and deliverables,	
performance appraisals, hiring and daily operation of an R&D unit of 18 people with an annual budget of ~\$3.0M USD.	



PROFESSIONAL CAREER (continued)

FROFE	SSIONAL CAREER (continued)		
Eastm	an Kodak Company (continued)	Rochester, NY	1982 - 2007
	st, Manufacturing Research & Engineeri	ng	1991 – 1998
As	an individual contributor, Dr. Robinson	diagnosed and solved static problems	
in i	ndustrial manufacturing, electronic man	ufacturing and circuit board assembly	
-	erations. He conducting applied research	<u>-</u>	
	nmercialize new products. As an expert		
	DT), a process technology in industrial re	<u> </u>	
	Robinson diagnosed and solved probler	ns with CD1 technology.	1982 – 1990
	st, Copy Products Division Robinson conducted applied research of	n the electrophotographic toning	1902 – 1990
	ocess for copiers and printers, worked to	1 0 1	
-	nufacturing problem solving projects. As	<u>=</u>	
	he inventor on 8 patents on copier and page 1		
Sandia	National Laboratory	Albuquerque, NM	1978
	Engineer Summer Intern, Capital Project	1 1 '	17.0
	the Electron Beam Fusion Facility, a lan		
sur	nmer intern for the construction project i	management team.	
Lawre	nce Livermore National Laboratory	Livermore, CA	1976
•	st Summer Intern, Laser Fusion Group,	•	
	the Laser Fusion Facility, Kelly served		
pro	ject team investigating new & novel me	thods to make laser fusion targets.	
PROFE	SSIONAL CERTIFICATIONS AND	ACCOMPLISHMENTS	
	PA 77 Nat'l Fire Protection Assoc. Static E	· · · · · · · · · · · · · · · · · · ·	2015 – present
· · · · · · · · · · · · · · · · · · ·	EE Fellow – Institute of Electrical and El	ectronics Engineers Fellow 1/1/2011	2011 – present
· · · · · · · · · · · · · · · · · · ·	rnal of Electrostatics – Associate Editor	on "A ale the Exports" Static export	2014 – present 2013 – 2015
· · · · · · · · · · · · · · · · · · ·	EUSA International Converting Exhibiti MCAL John Matteucci Award – technica	<u> </u>	2013 – 2013 2012
	h Patent on electrostatic instrumentation		2012
	fessional Engineer – New York State lic		2010 – present
	ent Agent – US Patent and Trademark O		2010 – present
<u>Ele</u>	ctrostatics Society of America (ESA) Di	stinguished Service Award	2009
_	oer Film and Foil Converter Contributing	_	2009 – present
	EE EPC James Melcher Award – peer		2005
	esident – Electrostatics Society of Ameri		2005 – 2008
	airman, IEEE – Industry Appl. Society,	Electrostatic Processes Committee	1987 – 1988
EDUCA		T	1002
Ph.D.	Electrical Engineering, Colorado State	· · · · · · · · · · · · · · · · · · ·	1982
M.S. B.S.	Electrical Engineering, University of II Engineering Science, Colorado State U		1978 1976
ъ.э.	Engineering Science, Colorado State O Engineering Science, Montgomery Col	• •	1976
-	Engineering belefiee, Wolligothery Col	1050, 100K viiio, 141D	1/11



PROFESSIONAL ACTIVITIES

Dr. Robinson advances the practice of engineering through industrial education (articles, short courses, conference presentations, writing books), scientific publications (peer reviewed journal publications), academic education (academic appointments, seminar presentations), leadership of professional organizations, and mentoring (peer reviewer for journal publications, technical editor).

Association of International Metallizers, Coaters and Laminators (AIMCAL)	
2016 AIMCAL Web Coating & Handling Conf. 10/9–22/16, Memphis TN	2016
Organizer: Session: Management Session	
2015 AIMCAL Web Coating & Handling Conf. 10/25–28/15, Naples FL	2015
Session Co-Chair w/Ken Guhse: Web Handling - Winding and More	
Session Co-Chair w/D. Krasucki: Web Coating – Solution Delivery Technology	
AIMCAL Web Handling Committee Member. The Web Handling Committee	2015 – present
organizes technical sessions at AIMCAL Technical Conferences.	
2014 AIMCAL Web Coating & Handling Conf. 10/19–22/14, Myrtle Beach SC	2014
Session Co-Chair w/Ken McCarthy: Gauging and Extrusion Technology	
2013 AIMCAL Web Coating and Handling Conf. 10/27–30/2013, Charleston SC	2013
Session Co-Chair w/Ed Cohen: Pre-metered Coating	
AIMCAL-PFFC Webinar: So Should We Patent That?	2013
Presented 3/27/2013, AIMCAL.org	
2012 AIMCAL Coating Conference 10/23–26/2012, Myrtle Beach, SC	2012
2012 AIMCAL John Matteucci Technical Award	
Technical Presentation: So, Should We Patent That?	
Session Co-Chair Session 1A: Lean Manufacturing	
with G. Williams: Session 1B: New Materials for Functional Coatings	
2011 AIMCAL Coating Conference 10/23–26/2011, Reno, Nevada	2011
Honorable Mention: 2011 AIMCAL John Matteucci Technical Award	
Session Co-Chair w/ D. Krasucki Improving Your Web Handling Operations	
AIMCAL Coating & Laminating Committee Member. The C&L Committee	2010 – present
organizes technical sessions at AIMCAL Technical Conferences.	
Short Course: Electrostatics in Web Handling	
2016 AIMCAL Web Coating & Handling Conf. 10/9/2016, Memphis, TN	2016
2014 AIMCAL Web Coating & Handling Conf.10/19/2014, Myrtle Beach, SC	2014
2012 AIMCAL Web Coating & Handling Conf.10/21/2012, Myrtle Beach, SC	2012
2010 AIMCAL Fall Technical Conference, 10/17/10, Myrtle Beach, SC	2010
2010 AIMCAL Applied Web Handling Conference (AWEB)	2010
5/17/2010, Rochester, NY with Prof. T. B. Jones, University of Rochester	
Converting Equipment Manufacturers Association (CEMA)	
CEMA Fundamentals Seminars Faculty – Static Control Best Practices	2012 – Present
April 24, 2017, Orange County Convention Center, Orlando FL	2017
September 14, 2015, McCormick Place, Chicago IL	2015
February 10, 2015, Orange County Convention Center, Orlando FL	2015
April 7-8, 2014, Hilton Woodcliff Lake, Woodcliff Lake, NJ	2014
April 8, 2013, Orlando, FL (prior to ICE USA)	2013
April 16-17, 2012 Cleveland, OH (prior to CPP Expo).	2012



PROFESSIONAL ACTIVITIES (continued)

PROFESSIONAL ACTIVITIES (continued)	
Electrostatics Society of America (ESA)	
ESA Executive Council member	2003 - 2015
2014 ESA Annual Conf. organizer, Special Session Electrostatic Demonstrations	2014
2012 Electrostatic Joint Conf. Session Chair: Materials Behavior & Processing I	2012
ESA Distinguished Service Award	2009
2009 Electrostatics Joint Conference, Boston, MA, Technical Program Chair	2009
President, Electrostatics Society of America	2005 - 2008
General Conference Chair, 2004 Annual Meeting, Rochester, NY	2004
Flexible Packaging Association (FPA)	
FPA EHS Summit (2/14/2014) presentation:	2014
Preventing Static Fires: Best Practices for Printing & Converting	
FPA: Preventing Static Fires: Best Practices for Printing & Converting	2013
Presented 7/30/2013	
Institute of Electrical and Electronics Engineers (IEEE)	
2014 Industry Applications Society (IAS) Annual Meeting	2014
Session Chair: Session 2 Electrostatic Applications	
Named IEEE Fellow	2011
Chairman, IAS EPC Technical Awards Sub-Committee	2007 - 2014
IAS EPC James Melcher Award – peer reviewed journal article excellence	2005
Established the IAS EPC "Creativity and Innovation Prize Paper Award"	2003
Member, IAS EPC Technical Awards Sub-Committee	2001 – present
Chairman, Industry Applications Society (IAS)	1987 – 1989
Electrostatic Processes Committee (EPC)	-, -, -, -,
International Converting Exhibition (ICE)	
2017 International Converting Exhibition (ICE) USA Exhibition, Orlando FL	2017
Static Control Expert for "Ask the Experts"	_01,
2015 International Converting Exhibition (ICE) USA Exhibition, Orlando FL	2015
Static Control Expert for "Ask the Experts"	2013
2013 International Converting Exhibition (ICE) USA Exhibition, Orlando FL	2013
Static control expert for "Ask the Experts"	2013
2011 International Converting Exhibition (ICE) USA Exhibition, Orlando FL	2011
Web Handling Machine Design for Static Control	2011
Journal of Electrostatics	
Associate Editor	2014 – present
Editorial Board member	2011 – present
Guest Editor, Vol. 35, Issues 2-3 (August 1995)	1995
1993 IEEE Industry Applications Society Meeting, Toronto, Canada,	1773
October 3 – 8, 1993 Edited by K. Robinson and J. Doshi	
National Fire Protection Association (NFPA)	
	2015 present
NFPA 77 Committee on Static Electricity (STA-AAA) Principle Member	2015 – present
Paper Film and Foil Converter (PFFC) Contributing Editor on Static Electricity Trade Publication for the converting industry where Dr. Rebinson writes	2009 – present
Trade Publication for the converting industry where Dr. Robinson writes	
Static Beat, a periodic column on static control.	



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PROFESSIONAL ACTIVITIES (co	ntinued)
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Academic Appointments	
Monroe Community College Adjunct Faculty, Engineering Science Dept	2009 - 2011
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 - 2005
Peer Reviewer	
Journal of Electrostatics	1982 – Present
IEEE Transactions on Industry Applications	1982 – Present
IEEE Transactions on Dielectric and Electrical Insulation	2009 – Present
National Science Foundation	2015 – Present
Natural Sciences & Engineering Research Council of Canada External Reviewer	2010 – Present
Memberships	
AIMCAL Coating & Laminating, Web Handling & Winding Committees	2010 – present
American Intellectual Property Law Association	2015 - 2016
Converting Equip. Manufacturers Assoc. Fundamentals Seminars Faculty	2012 – present
Electrostatic Discharge Association (ESD Association)	2009 – present
Electrostatics Society of America (ESA)	1978 – present
Institute of Electrical and Electronics Engineers, Inc. (Fellow 2011)	1978 – present
NFPA 77 Committee on Static Electricity (STA-AAA) principle membership	2015 – present
Phi Kappa Phi (Honor Society Life Member)	1976 – present
Sigma Xi (Research Honor Society)	1980 – present
PRESENTATIONS (recent)	
Dr. Robinson advances the practice of engineering by summarizing new analyses	
and by sharing technical insights and know-how in conference presentations.	
Conf. Presentation: Solvent Exposure Compromises Some Antistatic Containers	2017
accepted for presentation at: 2017 Electrostatics Society of America Annual Conference	
6/13–15/2016, University of Ottawa, Ottawa, ON	<u>cc</u> ,
Conf. Presentation: Static Control Best Practices for Converting, presented at:	2017
2017 International Converting Exposition (ICE 2015 USA) AIMCAL Technical P	
Orange County Convention Center, 4/25–26/2017 Orlando, FL.	rogram,
Conf. Presentation: Suppress Static Sparks When Unwinding Release Liners	2016
Or Laminated Webs, presented at: AIMCAL Web Coating & Handling Conference,	2010
10/9–12/2016, The Peabody Hotel, Memphis TN	
Conf. Presentation: Static Performance Standard Test Methods, presented at:	2016
AIMCAL Web Coating & Handling Conference,	2010
10/9–12/2016, The Peabody Hotel, Memphis TN	
Conf. Presentation: Static Control Evolves with Hardware and Process Changes	2016
presented at: AIMCAL Web Coating & Handling Conference	2010
10/9–12/2016, The Peabody Hotel, Memphis TN	
Conf. Presentation: Assessing Passive Static Dissipators presented at:	2016
2016 Electrostatics Joint Conference, 6/14–16/2016, Purdue University, West Lafe	ayelle, IIN



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PRESENTATIONS (continued)	
Demonstration: Measure Static Charge Using an Electrostatic Fieldmeter, presented at:	2016
2016 Electrostatics Society of America Annual Meeting, 6/14–16/2016,	
Electrostatic Demonstrations Session, Purdue University, West Lafayette, IN	
Demonstration: Needle Point Static Dissipator, presented at:	2016
2016 Electrostatics Society of America Annual Meeting, 6/14–16/2016,	
Electrostatic Demonstrations Session, Purdue University, West Lafayette, IN	
Conf. Presentation: Suppress Static Sparks When Unwinding Release Liners	2016
Or Laminated Webs, presented at AIMCAL 2016 Europe Web Coating & Handling Conf.	
5/30 – 6/2/2016, The Westin Bellevue Hotel, Dresden, Germany	
Conf. Presentation: Managing Static, presented at: AIMCAL Web Coating & Handling Conf.,	2015
10/25–28/2015, Naples Grande Beach Resort, Naples FL	
Conf. Presentation: Printing, Coating, and Laminating – Static Control, :	2015
Converting and Package Printing Expo – CPP 2015, Presented at:	
9/13–16/2015, McCormick Place, Chicago IL	
Conf. Presentation: Static Control for a Web Conveyance Line presented:	2015
2015 Electrostatics Society of America Annual Meeting,	
6/16–18/2015, Cal Poly Pomona, Pomona CA	
Conf. Presentation: Static Control Best Practices for Converting and Printing presented:	2015
2015 International Converting Exposition (ICE 2015 USA) AIMCAL Technical Program,	
Orange County Convention Center, 2/10–12/2015 Orlando, FL.	
Conf. Presentation: Static Control for Legacy Lines	2014
AIMCAL 2014 Web Coating and Handling Conference 10/19–22/2014, Myrtle Beach, SC	
Conf. Presentation: Maximize Static Dissipator Neutralization Efficiency,	2014
2014 IEEE Industry Applications Society Annual Meeting, Sheraton Vancouver	
Wall Centre Hotel, 10/5 – 9/2014, Vancouver, BC Canada	
Invited Lecture: Measuring Static Charges Using Electrostatic Voltmeters	2014
University of Waterloo, Waterloo, Ontario, 7/9/14	
Conf. Presentation: Prevent Static Fires in Solvent Coating and Printing	2014
2014 Electrostatics Society of America Annual Meeting,	
6/17–19/2014, University of Notre Dame, South Bend, IN	
Conf. Presentation: Static Dissipator Neutralization Efficiency,	2014
2014 Electrostatics Society of America Annual Meeting, 6/17–19/2014,	
University of Notre Dame, South Bend, IN	
Demonstration: Measure Static Charge Using an Electrostatic Fieldmeter,	2014
2014 Electrostatics Society of America Annual Meeting, 6/17–19/2014,	
Electrostatic Demonstrations Session, University of Notre Dame, South Bend, IN	
Demonstration: Static Sparks Ignite Flammable Solvent Vapors,	2014
2014 Electrostatics Society of America Annual Meeting, 6/17–19/2014,	
Electrostatic Demonstrations Session, University of Notre Dame, South Bend, IN	
Conf. Presentation: Preventing Static Fires: Best Practices for Printing and	2014
Converting Operations, Flexible Packaging Association,	
Environmental Health and Safety Summit 2/12–14/2014 St. Petershurg Reach, FL.	



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from static electricity	
PRESENTATIONS (continued)	
Conf. Presentation: Fault Tolerant Static Control	2013
AIMCAL 2013 Web Coating and Handling Conference 10/27–30/2013, Charleston, SC	
FPA Webinar: Preventing Static Fires: Best Practices for Printing and Converting Operations	2013
Flexible Packaging Association Safety Webinar, 7/30/2013	
Conf. Presentation: Roll-to-Roll Manufacturing Static Control Best Practices	2013
2013 International Converting Exposition (ICE 2013) Technical Program,	
Orange County Convention Center, 4/9–11/2013 Orlando, FL.	
AIMCAL 2012 John Matteucci Award – Technical Presentation Excellence	
Conf. Presentation: So, Should We Patent That?:	2012
AIMCAL 2012 Web Coating Conference 10/21–24/2012, Myrtle Beach, SC	
AIMCAL-PFFC Webinar: Static Control in Converting	2009
6/12/2009, ConvertingPortal.com an AIMCAL Website	
Conf. Presentation: Electrostatic Charge Control in Slitting Operations	2008
AWEB 08 AIMCAL Applied Web Handling Conference, 5/6 – 9/2008, Minneapolis, MN	
Conf. Presentation: Electrostatic Issues in Roll-to-Roll Manufacturing with William Durkin	2007
2007 IEEE Industry Application Society Annual Conf, 9/07, New Orleans, LA	
Conf. Presentation: Electrophoretic Mobility Estimated from the Transient Current	2007
in a Parallel Plate Cell with Dr. Ravi Sharma	
Electrostatics Society of America Annual Meeting, 6/2007, 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	
High School Science Fair Project Demonstration: Kelvin Water Droplet Static Generator	1972
Gaithersburg High School, Science Department	
DIDI ICATIONS Pook Chanters	
PUBLICATIONS – Book Chapters Book chapters are archival contributions and represent tangible accomplishments.	
	2016
	2010
in Roll to Roll Manufacturing: Process Elements and Recent Advances, edited by Jehuda Greener and Glen Pearson, Wiley, to be published 2016.	
2 K. Robinson , "Troubleshooting Static Problems in Plastic Processes," Chapter 21 in	2012
Handbook of Troubleshooting Plastic Processes, edited by John R. Wagner,	2012
ISBN: 978-0-470-63922-1, Scrivener Publishing, pp. 441 – 479, 2012.	
3 P. Krein and K. Robinson , "Printers" Chapter 14, in <u>Handbook of Electrostatic Processes</u> ,	1995
edited by J.S. Chang, A. J. Kelley, and J. M. Crowley, ISBN: 0-8247-9254-8,	1773
Marcel Dekker, Inc., pp. 295 – 320, 1995.	
Marcol Dokkol, Ille., pp. 273 – 320, 1773.	



PUBLICATIONS – Peer Reviewed Publications

Peer reviewed publications are tangible accomplishments. They are a record of engineering excellence that document specific expertise.

- 1 **K. Robinson**, "Variation in Static Decay Time with Surface Resistivity," <u>IEEE Trans. on</u> 2013 <u>Industry Applications</u>, Vol. 49, No. 8, pp. 1 8, September/October 2013.
- 2 M. Sow, R. Widenor, A. R. Akande, K. Robinson, R. M. Sankaran, and D. J. Lacks, "The Role of Humidity on the Lift-off of Particles in Electric Fields," <u>Journal of the Brazilian Chemical Society</u>, Vol. 24, No. 2, pp. 273-279, 2013.
- 3 **K. Robinson,** W. Durkin, "<u>Electrostatic Issues in Roll-to-Roll Manufacturing Operations</u>," 2010 <u>IEEE Trans. on Industry Applications</u>, Vol. 46, No. 6, pg. 2172 2178, November / December 2010.
- 4 **K. Robinson**, R. Brearey, J. Szafraniec, "Sheet sticking caused by charge flow in a buried conducting layer," Journal of Electrostatics vol. 67, No. 5, pg. 781 788, 2009.
- 5 **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.
- 6 A. Chirokov, A. Gutsol, A. Fridman, K. Sieber, J. Grace, **K. Robinson**, "Self Organization 2005 of Microdischarges in Dielectric Barrier Discharge Plasma," <u>IEEE Trans. on Plasma</u> Science, Vol. 33, No. 2, pg. 300 – 301, April 2005.
- 7 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.

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

- 8 **K. Robinson**, "Charge Relaxation Due to Surface Conduction on an Insulating Sheet Near 2004 a Grounded Conducting Plane," IEEE Trans. Industry Applications, vol. 40, No. 5, pg. 1231 1238, September / October 2004.
- 9 S. Conti, P. I. Porshnev, A. Fridman, L. A. Kennedy, J. M. Grace, K. D. Sieber, D. R. Freeman, and **K. Robinson**, "Experimental and numerical investigation of a capacitively coupled low frequency nitrogen plasma," <u>Exp. Thermal Fluid Sci.</u>, vol. 24, pg. 79 91, 2001.
- 10 T. B. Jones, R. D. Miller, **K. Robinson**, W. Y. Fowlkes, "<u>Multipolar Interactions of Dielectric Spheres</u>," Journal of Electrostatics, Vol. 22, pp. 231, 1989.
- W. Y. Fowlkes, **K. Robinson**, "<u>The Electrostatic Force on a Dielectric Sphere Resting on a Conducting Substrate</u>," <u>Particles on Surfaces</u>, Ed. K. L. Mittal, Plenum Publishing Corp., pg. 143 155, 1988.
- 12 **K. Robinson,** T. B. Jones, "<u>Particle-Wall Adhesion in Electropacked Beds</u>," <u>IEEE</u>

 <u>Transactions on Industry Applications</u>, Vol. IA-20, No. 6, pp. 1573, November / December 1984.
- 13 **K. Robinson,** T. B. Jones, "Slope Stability of Packed Beds," IEEE Transactions on 1984 Industry Applications, Vol. IA-20, No. 2, pp. 253, March / April 1984.
- 14 **K. Robinson**, R. J. Turnbull, K. Kim, "<u>Electrostatic Spraying of Liquid Insulators</u>," <u>IEEE</u> 1980 Transactions on Industry Applications, Vol. IA-16, No. 2, pp. 308, March / April 1980.



PUBLICATIONS – Issued US Patents

Issued US Patents are creative and innovative contributions having potential commercial impact.

- 1 **K. Robinson**, "Electrometer with in-measurement range adjustment and methods thereof for measuring electrostatic charge," <u>US Patent 8,354,847</u>, 1/15/2013.
- 2 P. Aylward, D. Majumdar, B. Fitzgerald, **K. Robinson**, "Antistatic conductive grid pattern with integral logo," US Patent 7,255,912, 8/14/2007.
- 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
- 4 P. Aylward, D. Majumdar, H. Yau, W. Durkin, D. Bigelow, D. Slater, **K. Robinson**, "Antistatic Layer for Electronically Modulated Display," <u>US Patent No. 7,087,351</u>, 8/8/2006
- 5 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.
- 6 D. Majumdar, N. Dontula, S. Sunderrajan, P. Aylward, **K. Robinson**, M. Kestner, "Conductive Foam Core Imaging Member," <u>US Patent 6,566,033</u>, 5/20/2003.
- 7 **K. Robinson**, A. Lucas, T. Hilbert, "Developer flow rate regulation for an electrophotographic toning roller," US Patent No. 5,227,848, 7/13/1993.
- 8 W. Mey, J. May, W. Gruenbaum, S. Riblett, **K. Robinson**, O. Rodenberg, "Xeroprinting Using a Corona Charge Injection Modifying Material, US Patent No. 5,101,216, 3/1992.
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