Malcolm G. Keif, Ph.D.
https://orcid.org/0000-0001-7512-2289
https://www.keif.com
Professor, Graphic Communication Department
California Polytechnic State University

BACKGROUND

a. Education
- <u>Doctor of Philosophy</u> (December 1995) – Practical Arts/Vocational-Technical Education with a concentration in Technology Teaching, University of Missouri
- <u>Master of Arts</u> (August 1989) – Industrial Arts with a concentration in Graphic Arts, CSU Long Beach
- <u>Bachelor of Science</u> (June 1986) – Graphic Communication with a concentration in Printing Management, Cal Poly State University, San Luis Obispo

b. Academic experience
- <u>Professor of Practice</u>: Department of Packaging and Graphic Media Science – Rochester Institute of Technology, Rochester, NY
  Fall 2021 to present
- <u>Professor (tenured)</u>: Graphic Communication Department – Cal Poly State Univ.
  Fall 2009 to present
- <u>Visiting Professor</u>: Druck- und Medientechnik – Hochschule München für Angewandte Wissenschaften (Münch University of Applied Sciences)
  Winter 2013-2014 and Summer 2023.
- <u>Visiting Professor</u>: Printing Department – Shanghai Printing and Publishing College of USST
  Summer 2013
- <u>Associate Professor (tenured)</u>: Graphic Communication Department – Cal Poly State Univ.
  Fall 2004 to 2009
- <u>Assistant Professor</u>: Graphic Communication Department – Cal Poly State Univ.
  Fall 2001 to Summer 2004
- <u>Professor (tenured)</u>: Graphic Arts Technology–Management – University of Central Missouri.
  Fall 1997 to Summer 2001
- <u>Assoc. Professor (tenured)</u>: Graphic Arts Technology–Management – U. of Central Missouri.
  Fall 1994 to Summer 1997
- <u>Assistant Professor</u>: Graphic Arts Technology–Management – University of Central Missouri.
  Fall 1990 to Summer 1994

c. Certifications & Certificates
- <u>AWS Certified Cloud Practitioner</u> – Amazon Web Services, Aug 2020
- <u>Google Analytics for Power Users</u> – Google Analytics Academy, Aug 2020
- <u>Statistics Foundation 1</u> – LinkedIn Learning, July 2020
- <u>SQL Essential Training</u> – LinkedIn Learning, July 2020
- <u>Big Data Foundations: Techniques and Concepts</u> – LinkedIn Learning, July 2020

d. Related professional experience
- <u>Data Workflow/Variable Data Consultant</u>: DCR Design, San Luis Obispo, CA
  Fall 2023 to Present
- <u>Consulting/training/speaking</u>: Provided independent consulting, training, judging, or speaking programs for more than two dozen companies
- <u>Sales Representative</u>: Matco Packaging, City of Commerce, CA
  Fall 1988 to Fall 1989

- Cost Estimator**:** Madison Graham ColorGraphics, Los Angeles, CA
  Spring 1986 to Fall 1988

e. Awards
- Awarded the 2023 *Kagy/Prust Life Achievement Award* by the Graphic Communications Education Association.
- Awarded the 2020 *Hartman/Dennis Support of Education Award* by the Graphic Communications Education Association.
- Cal Poly awarded the Flexi Award for *Technology Leadership in Education* by the FlexTech Alliance, 2015.
- Awarded 2015 Xplor's *Brian Platte Lifetime Achievement* award.
- Awarded the *Freestyle Demonstrator* award for co-developed project title "Flexible Timer for Rough Environments" from the Organic Electronics Association (OE-A) 2014. This project was a collaborative project between Cal Poly and University of Munich Applied Sciences.
- Awarded *Commercialization Award of Excellence* from IDTechEx Printed Electronics Europe 2011. Canvas Magazine Cover Design. Developed first entirely printed, interactive, electronics magazine cover for publication with circulation of 14,000.
- Awarded Print and Graphics Scholarship Foundation (PGSF) *Educator of the Year* award, 2004.

TEACHING RELATED ACTIVITIES

f. Courses taught
- MAAT 301 *Database Publishing (RIT)*
- MAAT 401 *Team Project (RIT)*
- PPRT 600 *Graduate Seminar* (RIT)
- GrC 204 *Introduction to Contemporary Print Management and Manufacturing (Cal Poly)*
- GrC 228 *Film Assembly (Cal Poly)*
- GrC 301 *Electronic Publishing Systems (Cal Poly)*
- GrC 316 *Flexographic Printing Technology (Cal Poly)*
- GrC 320 *Quality Management in the Graphic Communication (Cal Poly)*
- GrC 324 *Binding, Finishing, and Distribution (Cal Poly)*
- GrC 329 *Web Offset and Gravure Printing Technologies (Cal Poly)*
- GrC 403 *Printing Estimating (Cal Poly)*
- GrC 404 *Data Management, Estimating and Visualization in Graphic Communication (Cal Poly)*
- GrC 411 *Pricing, Costing, and Web Estimating (Cal Poly)*
- GrC 437 *Consumer Packaging (Cal Poly)*
- GrC 451 *Printable Electronics*
- GrC 461 *Senior Project (Cal Poly)*
- GrC 471 *Applied Graphic Communication Management (Cal Poly)*
- GrC 485/495 *Cooperative Education in Graphic Communication (Cal Poly)*
- GrC 501 *Survey of Functional Printing (Cal Poly)*
- GrC 514 *Electrical and Optical Patterning (Cal Poly)*
- GrC 501 *Survey of Functional Printing (Cal Poly)*
- GrC 502 *Orientation to Functional Printing (Cal Poly)*
- GrC 514 *Optical and Electrical Patterning (Cal Poly)*
- GrC 530 *Functional Printing Workflows (Cal Poly)*
- GrC 553 *Current Trends in Security and Anti-Counterfeiting (Cal Poly)*
- GrC 596 *Research Project in Printed Electronics and Functional Imaging (Cal Poly)*
- GRAP 2031 *Electronic Publishing Systems (UCM)*
- GRAP 2610 *Principles of Multimedia (UCM)*

- GRAP 3034 *Lithographic Press Technology (UCM)*
- GRAP 3045 *Substrates and Inks (UCM)*
- GRAP 3051 *Graphic Arts Management (UCM)*

g. **Visiting Professorships**
- Visiting professor in the Department for Technical Systems, Processes and Communication at *Hochschule München University of Applied Sciences* in Munich, Germany during summer 2023.
- Visiting professor at the *Shanghai Publishing and Printing College at USST* in Shanghai, China during summer 2013 and taught undergraduate courses in packaging and in cost estimating.
- Visiting professor in the Druck- und Medientechnik Department at *Hochschule München für Angewandte Wissenschaften* (Munich University of Applied Sciences) in Munich, Germany during winter 2013-2014 and taught the following courses:
  - o BAW26-DTP *Drucktechnik in der Praxis: Flexographic Printing*
  - o BAP28-PR1 *Projekt 1*
  - o MAP04-MAR *Print Media: Marketing*

PROFESSIONAL GROWTH AND DEVELOPMENT ACTIVITIES

h. **Presentations**
- Keif, M. & Templeton, D. (2021, July 29). *Data Visualization – Making compelling infographics in Tableau* – a presentation at the Graphic Communications Education Association (GCEA) annual virtual conference.
- Keif, M. (2020, July 28). *Teaching Digital Marketing Using Digital MediaPro Simulation* – a presentation at the Graphic Communications Education Association (GCEA) annual virtual conference.
- Keif, M. (2020, February 13). Rethinking your Makeready Efficiency [Webinar]. Printing Industries of America. Retrieved from https://www.printing.org/events/webinars/rethinking-your-makeready-efficiency
- Keif, M. (2019, July 30). *Entity Relationship Diagram* – a presentation at the Graphic Communications Education Association (GCEA) annual conference, Clemson SC.
- Keif, M. (2019, April 15). *Rethinking your Makeready Efficiency* – a presentation at the PIA Continuous Improvement Conference, Dallas TX.
- Pan, J., Keif, M., Rong, X., & Chason, M. (2019, Feb. 20). *Flexible Hybrid Electronics Integration– A Benchmark Study* – a group-authored report presented by Dr. Pan at the Flex Conference 2019, Monterey, CA.
- Keif, M. & Mazur, M. (2018, May 8). Co-chaired *FIRST in Motion* session at the Flexographic Technical Association Annual Forum 2018, Indianapolis IN.
- Keif, M. (2017, July 13). Making and Using Meaningful Test Targets [Webinar]. Flexographic Technical Association.
- Keif, M. (2017, May 2). *Eight Ingredients that Matter in the Pressroom* – a presentation at the Flexographic Technical Association Forum 2017, Phoenix AZ.
- Keif, M. (2017, May 1). *Printed Electronics, Smart and Interactive Packaging* – a presentation at the Flexographic Technical Association Forum 2017, Phoenix AZ.
- Keif, M. (2016, Feb. 29). *Introducing Printed Electronics: All the basics and more* – a short course presented at the Flex Conference 2016, Monterey, CA.
- Keif, M. (2015, Oct 23). *Printed Electronics Demo* – a presentation during Cal Poly's Open House.
- Keif, M. (2015. Sept 13). *Future Print* – a presentation at Graph Expo in Chicago.
- Keif, M. (2015 Sept 13). *Profit Potential with Printed Electronics* – a presentation at Graph Expo in Chicago.
- Keif, M. & Cooper, K. (2015). *Visual Management and Kanbans*. An online course offered in the Printing Industries of American Integrated Learning Center.

- Keif, M. (2015, Mar. 19). Lean Flexo – a presentation at Fullerton College for the Printing Industries Association of Southern California.
- Keif, M. (2015, Feb. 25). *Patterning for Transparent Conductive Grids* – a presentation at the Flex Conference 2015, Monterey, CA.
- Keif, M., Joyce, M., Kahn, B., MacKenzie, D. (2015, Feb. 23). *Introducing Printed Electronics: All the basics and more!* – a short course presented at the Flex Conference 2015, Monterey, CA.
- Cooper, K. & Keif, M. (2015, January). *Standard Work and Total Productive Maintenance*. An online course offered in the Printing Industries of American Integrated Learning Center.
- Keif, M., Twomey, C., Joachim, C., Reynolds, P. (2014, Oct. 23). Emerging Technologies for Packaging Innovation [Webinar]. Graphic Communication Institute and Packaging World Magazine.
- Keif, M. & Cooper, K. (2014). *Makeready Reduction: Reducing Setup Times for Printing*. An online course offered the Printing Industries of American Integrated Learning Center.
- Cooper, K. & Keif, M. (2014). *5S and Teams*. An online course offered the Printing Industries of American Integrated Learning Center.
- Keif, M. (2014). *RIT Cary Endowed Professor Panel: Applications of Functional Printing.* – a panel presenter at the Cross-Media Innovation Center at RIT CMIC Summit 2014. Rochester, NY. Oct. 16, 2014.
- Keif, M. (2014). *Printed Electronics 2014: A Getting Started Primer* – a presentation at Graph Expo in Chicago, September 2014.
- Keif, M. (2014). *Interactive Packaging* – a presentation given at the WestPack conference on February 11, 2014 in Anaheim, CA.
- Keif, M. (2013). *Printed Electronics* – a presentation given to employees at PolyIC, on Dec. 13, 2013 in Nuremberg, Germany.
- Keif, M. (2013). *Interactive Packaging* – a presentation given for the Exopack customer event held at Cal Poly, July 24, 2013.
- Keif, M. & Cramer, J. (2013). Co-chaired *Emerging Trends* session at the Flexographic Technical Association Annual forum, San Diego. April 2013.
- Keif, M. (2012). *Flexo Bootcamp* – a 2-day workshop given to Avery Dennison Corporation employees at Cal Poly on April 15-16, 2013.
- Keif, M. (2012). *Setup Reduction for Printers* – a presentation given at the Flexographic Technical Association Fall Technical Conference in Milwaukee WI October 2012.
- Keif, M. (2012). *Print 101: The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Visual Media Alliance in San Francisco, September 2012)
- Keif, M. (2012). *Setup Reduction for Printers* – a presentation given at the annual Printing Industries of New Zealand conference in Auckland, June 2012.
- Keif, M. (2012). *Printed Electronics* – a presentation given at the annual Printing Industries of New Zealand conference in Auckland, June 2012.
- Keif, M. (2012). *Creating and Sustaining Knowledge in a Changing Industry* – a keynote presentation given at EskoWorld 2012 in New Orleans, June 2012.
- Keif, M. (2012). *Flexo Bootcamp* – a 2-day workshop given for the Graphic Communication Institute at Cal Poly on June 11-13, 2012.
- Keif, M. & Cooper, K. L. (2012) *Lean Printing* – a workshop presented for Lithotype at Cal Poly, June 2012.
- Keif, M. & Cooper, K. L. (2012) *Lean Ink Management* – a presentation given in Dusseldorf, Germany, May 2012.
- Keif, M. (2012) *Innovative Process Trends* – a presentation given at the Envelope Manufacturers Association annual technical conference in Phoenix, April 2012.
- Keif, M. (2012). *Print 101: The Hitchhiker's Guide to the (Printing) Galaxy* – two one-day workshops given in Dallas TX and Kansas City MO in March 2012.
- Keif, M. & Whitfield, W. (2012). Co-chaired *Emerging Trends* session at the Flexographic Technical Association Annual forum, San Antonio. March 2012.
- Rong, X. & Keif, M. (2012). *Conventional Printing Processes for Functional Devices* – a short course provided at the Flexible Electronics Conference in Phoenix, February 2012.

- Cooper, K. L & Keif, M. (2012). Lean Printing – a three-day workshop given to Czech Republic printers in Cancun, Mexico. January 2012.
- Keif, M. (2011). *HD Flexo Bootcamp* – a three-day workshop provided at Cal Poly, December 2011.
- Keif, M. & Rong, X. (2011). *Printing Technologies: The Place for Reel to Reel Printing Technologies* – a short course presented at the Printed Electronics USA conference in Santa Clara CA November, 2011.
- Keif, M. (2011). *Setup Reduction for Label Printers* – a presentation at the Label Printing Conference in Pismo Beach sponsored by the Visual Media Alliance in September 2011.
- Keif, M. (2011). *Setup Reduction for Printers* – a presentation at Graph Expo in Chicago, September 2011.
- Keif, M. (2011). *Printed Electronics* – a presentation at Graph Expo in Chicago, September 2011.
- Keif, M. (2011). *Print 101: The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Visual Media Alliance in San Francisco, September 2011)
- Keif, M. & Cullins, N. C. (2011). *Three Very Cool Packaging Projects* – a presentation at the International Graphic Arts Education Foundation annual conference in Reno, NV, July 2011.
- Keif, M. (2011). *Interactive Electrochromic Magazine Cover* – a presentation given at the Printed Electronics and Membrane Switch Conference in Santa Clara CA in June 2011.
- Keif, M. & Bankson, D (2011). Co-chaired *Emerging Trends* session at the Flexographic Technical Association Annual forum, Indianapolis. April 2011.
- Keif, M. (2010). *Printed Electronics: Cal Poly's Approach to Printing Electronics* – a presentation given at the Printed Electronics USA conference in Santa Clara, CA December 2010.
- Keif, M. & Cooper, K. L. (2010). Lean Printing at Royal Paperbox – a presentation given onsite at Royal Paperbox in Los Angeles, CA in October, 2010.
- Keif, M. (2010). *Flexo Bootcamp* – a 2-day workshop given for the Graphic Communication Institute at Cal Poly on June 24-25, 2010.
- Sperry, J. & Keif, M. (2010). Co-chaired *Flexo 101* session at the Flexographic Technical Association Annual Forum, Las Vegas, May 1, 2010.
- Keif, M. (2010). *Print 101: The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Printing Industries of Northern California on April 2, 2010 in San Francisco, CA.
- Cooper, K. L. & Keif, M. (2009). *Lean Printing* – a 3-day workshop given in Amsterdam Netherlands October 5-7, 2009.
- Keif, M. (2009). *Press and Bindery Setup Reduction* – a presentation given at Print09 on September 13, 2009 in Chicago, IL.
- Keif, M. (2008). *Building a Packaging Business* – a presentation given at GraphExpo on October 26, 2008 in Chicago, IL.
- Keif, M. (2008). *Print 101: The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Printing Industries of Northern California on October 3, 2008 in San Francisco, CA.
- Keif, M. (2008). *The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Printing Industries of MidAmerica on September 12, 2008 in Dallas, TX.
- Keif, M. (2008) *Flexographic Printing* – a presentation given at the Printing Industry Overview Workshop for the Graphic Communication Institute at Cal Poly on Aug 26, 2008.
- Keif, M. (2008). *Process Control* – a presentation given for the Graphic Communication Institute at Cal Poly on August 15, 2008.
- Keif, M. (2008). *The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Pacific Printing and Imaging Association July 18, 2008 in Portland, OR.
- Keif, M. (2008). *Flexo Bootcamp* – a 2-day workshop given for the Graphic Communication Institute at Cal Poly on June 17-18, 2008.
- Keif, M. & Cooper, K. L. (2008). *Lean Label Printing* – a 2-day follow-up workshop presented at Label Impressions (Orange, CA) on May 8-9, 2008.
- Keif, M. (2008). *Web Offset Printing* – a presentation given for the Graphic Communication Institute at Cal Poly on March 21, 2008.

- Keif, M. (2008) *Paper and Press Troubleshooting* – a presentation given at the National Paper Trade Association Workshop for the Graphic Communication Institute at Cal Poly on March 21, 2008.
- Keif, M. (2008). *The Hitchhiker's Guide to the (Printing) Galaxy* – a presentation given for the Printing Industries of Northern California on January 11, 2008 in San Francisco, CA.
- Keif, M. & Cooper, K. L. (2008). *Lean Label Printing* – a 3-day workshop presented at Label Impressions (Orange, CA) on Dec 12-14, 2007.
- Cooper, K. L., Keif, M., & Macro, K. L. (2007). Lean Printing – a 3-day workshop presented for the Graphic Communication Institute at Cal Poly on Feb 21-23, 2007 & Dec 5-7 2007. .
- Keif, M. (2007). *Roundtable Discussion: Opportunities in Packaging* – moderation of a roundtable at the Printing Industries of the West 2007 Management Conference on October 16, 2007 in Kauai, HI
- Keif, M. (2007). *Forget the Hype: Why Lean Manufacturing Works* – a presentation giving at the Printing Industries of the West 2007 Management Conference on October 15, 2007 in Kauai, HI
- Keif, M. (2007). *Unwrap New Profits – Diversifying into Packaging* – a presentation given at GraphExpo on September 8, 2007 in Chicago, IL.
- Keif, M. & Cooper, K. L. (2007). *Lean Manufacturing for Lower Costs* – A 3-day workshop given at Signature Offset Corporate Retreat on June 20-24, 2007 in Glenwood Springs, CO.
- Keif, M. (2007). *Estimating and MIS Systems* – a presentation given for Canon at the Graphic Communication Institute at Cal Poly on May 24, 2007.
- Keif, M. (2007). *Beginner's & Expert's Guide to Printing Processes* – a presentation given at the PINCShow 2007 on May 4, 2007 in San Francisco, CA.
- Keif, M. (2007) *Paper and Press Troubleshooting* – a presentation given at the National Paper Trade Association Workshop for the Graphic Communication Institute at Cal Poly on March 22, 2007.
- Keif, M. (2007). *The Truth about FlexSys™ Simulator* – a presentation given at the FTA Regional Flexo Workshop on March 8, 2007 in Dublin, CA.
- Keif, M. (2007). *Cost Estimating for Commercial Digital Printing* – a paper presentation given at the IS&T/SPIE 19th Annual Symposium on January 31, 2007 in San Jose, CA.
- Keif, M. (2006). *Lean Label Printing: Applying the Lean Culture* – a presentation given at the TLMI/LabelExpo conference in Chicago, IL on Sep 12, 2006.
- Keif, M. (2006). *Web Offset* – a presentation given at the GOSS Web Offset workshop for the Graphic Communication Institute at Cal Poly on June 7, 2006
- Keif, M. (2006). *Estimating and MIS Systems* – a presentation given for Canon at the Graphic Communication Institute at Cal Poly on May 24, 2006.
- Keif, M. (2006). *Panel Moderator – Label and Packaging Printing* – a panel presentation given at the 2006 PrintFest Conference in Long Beach, CA on May 11, 2006.
- Keif, M. (2006). *A Candid Look at Print: Die, Survive or Thrive?* - a presentation given at the North American Graphic Arts Suppliers Association annual meeting on March 23, 2006 in Dallas, TX.
- Keif, M. (2006). *Paper and Press Troubleshooting* – a presentation given at the National Paper Trade Association Workshop for the Graphic Communication Institute at Cal Poly on March 15, 2006.
- Keif, M. (2005). *Basic Flexography* – a 3-day workshop co-sponsored by the Flexographic Technical Association and the Graphic Communication Institute at Cal Poly on Oct 26-28, 2005.
- Keif, M. (2005). *Web Offset* – a presentation given at the GOSS Web Offset workshop for the Graphic Communication Institute at Cal Poly on Oct 5, 2005
- Keif, M. & Cooper, K. L. (2005). *Thriving in Print through World-Class Manufacturing* – a presentation given for CTM Event Management on September 13-14, 2005 in the Kingdom of Bahrain.

- Keif, M. & Cooper, K. L. (2005). *Strategically Positioning your Organisation for Growth* – a presentation given for CTM Event Management on September 12, 2005 in the Kingdom of Bahrain.
- Keif, M. (2005). *Digital Prepress for Flexo* – a 3-day workshop co-sponsored by the Flexographic Technical Association and the Graphic Communication Institute at Cal Poly on August 28-30, 2005.
- Keif, M. (2005). Process Control – a presentation given at the Western Flexo Label Association's FlexoTech West 05 seminar in San Francisco, CA on June 30, 2005.
- Keif, M. (2005). *Recruitment, Training, and Leadership* – a presentation given at the Web Offset Association 53rd Annual Management and Technical Conference on May 2, 2005 in Dallas, TX.
- Keif, M. (2005) *Paper and Press Troubleshooting* – a presentation given at the National Paper Trade Association Workshop for the Graphic Communication Institute at Cal Poly on March 14, 2005.
- Keif, M. (2004) *Lean Manufacturing* – a presentation made at the Northern California Label Manufacturers Association (NCLMA) summer conference on June 19, 2004 in San Luis Obispo, CA.
- Keif, M. (2003) *Cold Foil Update* – a presentation made at the FTA/TLMI Technical Conference (Flexographic Technical Association in partnership with the Tag and Label Manufacturers' Institute) on September 11, 2003 in Chicago, IL.
- Keif, M., Henry, C. L, and Ko, K. K (2003) *5S in the Pressroom: A Cal Poly Case Study* – a presentation given at the NEXPO SuperConference 2003 Newspaper conference on June 17, 2003 in Las Vegas, NV.
- Keif, M. (2003) – Presentation series: *Teacher Workshop* – presentation series given the week of August 18-22, 2003 at the GAERF/Cal Poly Graphic Communication Teacher Workshop.
- Keif, M. (2003) – Presentation series: *Flexographic Printing* – presentation series given the week of August 11-14, 2003 at the GAERF/Cal Poly Introduction to Flexography Workshop.
- Keif, M. (2003) – Presentation series: *Flexographic Printing* – presentation series given the week of June 23-25, 2003 at the Cal Poly Digital Prepress for Flexography workshop.
- Keif, M. (2002) *Leveraging a Digital Workflow* – a keynote presentation given October 8, 2002 at the Wallace Beyond Ink on Paper conference, San Francisco, Calif.
- Keif, M. (2002) Presentation series: *Color Theory and Separation, and Postpress finishing* – presentation series given the week of August 26, 2002 at the Xerox Graphic Arts conference, Cal Poly State University.
- Keif, M. (2002) *State of the University: A look at Binding Education* – a presentation given April 13, 2002 at the Binding Industries Association International Conference, Las Vegas, Nev.
- Keif, M. (2002) Presentation series: *Prepress hardware, Color Theory and Separation, Digital reproduction model, and Postpress finishing* – presentation series given the week of March 18, 2002 at the Xerox Graphic Arts conference, Cal Poly State University.
- Keif, M. (2002) *Web Press Technology* – a presentation given March 18, 2002 at the NPTA west coast conference, Cal Poly State University.
- Keif, M. (2002) *Lithography* – a presentation given March 16, 2002 at the Pacific Southwest Container customer conference, Modesto, CA.
- Keif, M. (2000) *PDF Forms.* Presentation made at the Center for Teaching & Learning, CMSU.
- Keif, M. (2000) *The Importance of Printing in your Marketing-mix and How to Buy Printing.* A seminar given at the Energizing Entrepreneurs Expo, Kansas City, MO.
- Keif, M. (1998) *PDF Workflows.* Presentation made at 1998 Four-State Technology Conference, Pittsburg, KS.

i. **Publications – Peer-reviewed** *(visit http://works.bepress.com/mkeif/)*
- Dhote, Y., Mittal, R., Keif, M. G., Altay, B. N. (2023). Effect of Electrophotography Printing on Paper Strength and Thermal Properties. *Proceedings of TappiCon 2023*, Atlanta, GA *(Refereed)*
- Vees, D., & Keif, M. (2021). A Comparison of App-based Color Measurement Devices to

Spectrophotometers. *TAGA 73rd Annual Conference Proceedings, 2021.* Page number unknown. *(Refereed)*

- Pan, J., Keif, M., Ledgerwood, J., Rong, X., & Wang, X. (2018, Oct.). Screen Printing Fine Pitch Stretchable Silver Inks onto a Flexible Substrate for Wearable Applications. *Journal of Microelectronics and Electronic Packaging. 15(4), 1-8. (Refereed)*

- Twomey, C., Rong, X., O'Hara, L., Tonkin, C., Keif, M. (2015). Printing Transparent Grid Patterns with Conductive Silver Ink with Flexography. *TAGA 67th Annual Conference Proceedings, 2015.* Page number unknown. *(Refereed)*

- Keif, M., Twomey, C., & Stoneman, A. (2015). Consumer Perception of Tactile Packaging: A Research Study on Preferences of Soft Touch and Hi Rise Coatings in Cosmetic Packaging. *Journal of Applied Packaging Research, 7(1), 59-72. (Refereed)*

- Wang, Z., Winslow, R., Madan, D., Wright, P. K., Evans, J. W., Keif, M., & Rong, X. (2014). Development of MnO_2 Cathode Inks for Flexographically Printed Rechargeable Zinc-based Battery. *Journal of Power Sources. 268(1), 246-254. (Refereed)*

- Winslow, R., Wu, C., Wang, Z., Kim, B., Keif, M., Evans, J., & Wright, P. (2013). In P Mitcheson (Chair). Development and manufacture of printable next-generation gel polymer ionic liquid electrolyte for zn/mno2 batteries. *Powermems 2013 conference proceedings. 476(1), 012085. (Referred)*

- Vogl, H. & Keif, M., (2012). Color Measurement on Substrates with Optical Brightening Agents. *Proceedings: The 18th IAPRI World Conference on Packaging*, San Luis Obispo, California. *(Refereed)*

- Jacobson, J., Keif, M., Rong, X., Singh, J., & Vorst, K. (2009) Flexography Printing Performance of PLA Film *Journal of Applied Packaging Research 3*(2). 91-104. *(Refereed)*

- Bayard, M., Rong, X., & Keif, M. (2008). G7 Method for Flexographic Press Calibration. *TAGA 59th Annual Conference Proceedings, 2008.* Page number unknown. *(Refereed)*

- Keif, M. (2007). Cost-Estimating for Commercial Digital Printing. *Proceedings: Electronic Imaging Science and Technology. Document Recognition and Retrieval XIV. (Refereed)*

- Rong, X. & Keif. M. (2007) The Study of PLA Printability with Flexography. A Poster Paper. TAGA 59th Annual Technical Conference March 18-21 2007 Pittsburgh, PA. *(Refereed)*

- Singh, J., Vorst, K., Keif, M. & Jacobson, J. (2006). Printing Sustainability on Biodegradable Film. *Proceedings: The 15th IAPRI World Conference on Packaging.* Tokyo, Japan. *(Refereed)*

- Keif, M. and Goglio, T. (2005). Identifying High-volume Printing Processes. *Visual Communications Journal 2005.* 35-42. *(Juried)*

- Keif, M. and Stewart, B. R. (1996). A Study of Instruction in Applied Mathematics: Student Performance and Perception. *The Journal of Vocational Education Research. 21*(3). 31-48. *(Refereed)*

j. Publications – Books and other publications *(visit http://works.bepress.com/mkeif/)*

- Keif, M. & Campbell, T. (2022, June). *Sales Compensation 2022 Report.* Dallas, TX: PIA MidAmerica.

- Keif, M., Chason, M., Pan, J. & Rong, X. (2018, October). *Realizing Fully-Printed Electronics – State of Technology in 2018.* Milpitas, CA: SEMI-Flextech.

- Mazur, M. & Keif, M. (2018, May). FIRST in Motion: Objectives. *FLEXO Magazine.* 45-52. *Note: this was one article of a six-part series summarizes a year-long project, of which a team of six expert subject matter professionals and I contributed to all six parts.*

- Does Tactile Packaging Increase Sales? [Review of research project titled *Consumer Perception of Tactile Packaging* by Keif, M., Twomey, C., & Stoneman] (2015, May). *Folding Carton Industry, 42(3).* 66-69.

- Keif, M. (2015, January). Printed Electronics 2015. *Printing Industries of America: The Magazine, 7(1).* 32-34.

- Keif, M. (2015, January). Printed Electronics for the Label Printer. *Labels and Labeling 2015 Yearbook.* 37-41.

- Keif, M. (2014, September 29). Capitalizing on Printed Electronics–a Primer for Printers. *Graph Expo Official Show Daily.* 14-14.

- Keif, M. (2014). Reducing Changeover Times on Older Presses. *Corrugated Today, 10.* 36-41.

- Keif, M. (2013). Innovative Printing Solutions in 2014 and Beyond… *Graphic Arts Magazine, 16,* 17-22.
- Keif, M. (2013). Reducing Changeover Times on Older Presses. *Flexo and Gravure Global, 19,* 10-13.
- Keif, M. (2013). Creating and Sustaining Knowledge in a Changing Industry. *Labels and Labeling, Yearbook 2013,* 13-14.
- Keif, M. & Cooper, K. (2011). *Setup Reduction for Printers: A Practical Guide for Reducing Makeready Time in Print Manufacturing.* Templeton, CA. Malcolm G. Keif.
- Keif, M. (2008) If only I could learn more… *The Phoenix News.* April 2008. 1st Ed. P 16.
- Keif, M. (2008) It May Need the "Rubber Stamp": What every Buyer and Designer Needs to Know about Flexography. *Blueline.* #79 (Winter 2008). 2-8.
- Keif, M. (2008). Pre-registering Print Cylinders on Press. *NarrowWebTech.* Vol 11, February 2008. 6-8.
- Keif, M. (2008). Making Superior Plates Every Time. *Flexo.* January 2008. 42-44.
- Keif, M. (2005-2008). WFLA TechTip. WFLA Quarterly E-Newsletter – have written a monthly or quarterly TechTip for this newsletter since its inception.
- Printing Industries of Northern California (2007). Label and Packaging Resources. *Print Buyers Guide 2007.* 261-272.
- Cooper, K. L. & Keif, M. (2007). Why Lean isn't Working in the Print Industry, and What You Should be Doing about It. *PIA/GATF 2007 Forecast: Technology, Trends, Tactics. 19*(1). 21-22.
- Cooper, K. L., Keif, M. & Macro, K. L. (2007) *Lean Printing: Pathway to Success.* Sewickley, PA: PIA/GATF.
- Keif, M. (2007). IGAEA holds its 82nd annual conference at RIT. *Phoenix Challenge.* Charlotte, NC: Phoenix Challenge Foundation. 3.
- Keif, M. (2006) *Cost Estimating for Commercial Digital Printing* – a study completed for the Graphic Communication Institute at Cal Poly.
- Keif, M. & Donegan, L. (2006). Recruiting Gen X and Millennial Employees to Grow your Business. *PIA/GATF 2006 Forecast: Technology, Trends, Tactics. 18*(1). 89-92.
- Keif, M. (2006). Cal Poly Hosts Graphic Arts Educators Conference. *Phoenix Challenge.* Charlotte, NC: Phoenix Challenge Foundation. 4.
- Keif, M. (2006). Why Aren't We Leaner in the United States? *Flexo.* November 2006. 24-27.
- Keif, M. (2005). Increasing Flexo Shadow and Solid Ink Density with High-Lines Screens. *IDS Publishing Conference.* http://www.ids-publishing.com.
- Keif, M. (2004). *GuÍa de Postimpresión del Diseñador*, Barcelona, España: Ricard Casals Consultants, S.A.
- Keif, M. (2004). An Educator's Drupa Experience. *Gravure.* October 2004. 24-29.
- Keif, M. (2003). *Designer's Postpress Companion*, Paramus, NJ: The National Association of Printing Leadership.
- Gravure Education Foundation/Gravure Association of America (2003). *Gravure: Process and Technology.* Rochester, NY: GAA and GEF. (Chapter 1 lead author and chapter 15 coordinator and contributing author).
- Keif, M. (2003). Curriculum Development in Graphic Communication Degree Programs. *2003—GATF Technology Forecast.* 73-75.
- Keif, M. (2002). Training from the Corporate Viewpoint. *2002—GATF Technology Forecast.* 93-94.
- Keif, M. (2001). Do you have your Training Foundation in Place? *Binding, Finishing, & Distribution. 4*(6)*. 10-11.*
- Keif, M. (2001) *Ink Tutorial.* An on-line ink course published by the Association for Graphic Arts Training.
- Keif, M. (2000) *Review of GATF's Imaging Skills Training Program*. Review published at http://www.agatweb.org/GATF.htm
- Keif, M. (1998). Educators Speak Out. *Digital Production Insight. 1*(1). 3.
- Keif, M. (1996). So where do we go from here? *Graphic Impressions, 1*(3). 20-23.

- Keif, M. and Stewart, B. R. (1996). A Study of Instruction in Applied Mathematics: Student Performance and Perception. *The Journal of Vocational Education Research. 21*(3). 31-48. (Refereed)
- Keif, M. (1995). *Performance of Students Completing Courses Using the CORD Applied Mathematics Curriculum in Four Missouri School districts.* (Doctoral Dissertation, University of Missouri, 1995). Note: This dissertation was nominated by University of Missouri faculty for the University Council for Vocational Education's Outstanding Dissertation competition. It ranked in the top 11 nationally.
- Keif, M. (1994). Creative Ways to Help Your Favorite Graphic Arts School. *Images. 16*(1), 2.
- Keif, M. (1993). *Color Stripping: A Guide for Process Color Image Assembly.* San Luis Obispo, CA: Graphic Services & Seminars.
- Keif, M. (1992). Trends in Book Publishing and Printing. *Print Today, 2*(21).
- Keif, M. (1992). Waterless Offset Printing. *Print Today, 2*(2).

k. Professional judging/publication reviewing/advisement
- Past member of Graphic Communication Advisors - http://graphcommadvisors.com
- Conference Advisor Flex Conference 2015 – served as conference advisor for FlexTech Alliance Flex Conference.
- Served as judge for the IDTechEx Printed Electronics USA awards of excellence, 2011-2015.
- Served as judge for SAPPI North American Printer of the Year Awards – 2008-2015
- Served as judge for Flexographic Technical Foundation (FTA) Excellence in Flexography Awards: Wide-Web Film – 2013.
- Served as juror 2005-2012 for the International Graphic Arts Education Association's (IGAEA) peer-reviewed *Visual Communication Journal.*
- Served as judge for SAPPI International Printer of the Year Award - 2012
- Served as book reviewer and contributor for…
  - Cooper, K. (2010) *Lean Printing: Cultural Imperatives for Success.* Sewickley, PA: PIA/GATF.
  - Flexographic Technical Association (2010). *Flexographic Principles and Practices* (6th ed.) Ronkonkoma, NY: FTA.
  - Flexographic Technical Association (2009). *Flexographic Image Reproduction Specifications and Tolerances* (4th ed.) Ronkonkoma, NY: FTA
- Served as judge for the PIA/GATF InterTech Technology Awards – 1999-2002
- Served as judge for the PIA Mid-America Print Excellence Awards on 1998, 1999, 2000, 2004 and 2005 in Dallas, TX.
- Served as judge for FloridaPrint Awards – 1998, 1999.

l. Other notable projects
- Collaborated with Kenneth N. Edwards Western Coatings Technology Center on research titled *Development of a Novel Barrier Coating* 2017.
- Worked with MS Printed Electronics and Functional Imaging students in the development of capacitive sensing label for pharmaceutical applications 2016.
- Co-advised student groups from University of Munich Applied Sciences and Cal Poly for Freestyle Demonstrator project submitted to the Organic Electronics Association (OE-A) competition.
- Developed/participated in three collaborative demonstrators for the Printed Electronics USA 2012, Printed Electronics Europe 2013, and Printed Electronics Europe 2014 conferences.
  - Printed Electronics USA 2012 Printed Electronics Demonstrator – Developed and printed conference giveaway: electronic origami that lit LEDs when properly folded.
  - Printed Electronics Europe 2013 Printed Electronics Demonstrator – Designed and managed a printed drink coaster that lights LEDs corresponding to the temperature of the drink.
  - Printed Electronics Europe 2014 Printed Electronics Demonstrator – Designed and printed (graphics) for a pocket timer.

- February 2011 CANVAS Magazine Cover Design and Project Management – Developed first entirely printed magazine cover, incorporating electrochromic cover and printed battery.

m. Participation in professional associations and organizations
- **Association offices held**
  - **President** Graphic Communication Education Association (GCEA) 2017-2018. GCEA president is a three-year appointment beginning as President-elect, President and then Immediate Past President. GCEA is the premier international association for policy, research, and pedagogy in Graphic Communication education. As president, I worked on a 10-year strategic plan for the organization as well as implemented five live webinars as a member service.
  - **Secretary** for the International Graphic Arts Education Association (IGAEA), now GCEA, 2005-2007. Duties of the secretary include recording minutes of all meetings of the Board of Directors, the Executive Assembly, and the Annual Business Meeting. The Secretary is also responsible for notifying members of meetings and proposed changes in the Constitution and Bylaws.
  - **Chair** of the Education Leadership Council of the Flexographic Technical Association, 2005-2011.
- **Association memberships**
  - Member of the Flexographic Technical Association (FTA).
  - Member of the Printing Industries Association (PIA).
  - Active with the three west coast chapters of the Printing Industries of America (PIA): PIASC (southern California), Visual Media Alliance (northern California), PIASD (San Diego).
- **Professional committee membership**
  - Member of the Phoenix Challenge College committee 2008-present. This committee is charged with development of the Phoenix Challenge College competition for excellence in flexography.
  - Member of the Flexographic Technical Association Technical Education and Services Team advisory board 2009-2011.

n. Grants
- Co-PI (with Dr. Pan) in sponsored research titled: *Printed Electronics – A Benchmark Study.* This research is administered by FlexTech, a special interest group of SEMI. The funding source is the US Army Research Lab. Awarded in 2017. Funded and completed: $165,000.
- Co-PI (with Dr. Pan) in sponsored research titled: *Process Development & Reliability Evaluation of Assembling Ultra-Thin Silicon Integrated Circuits onto Textiles for Human Monitoring Systems.* This research is administered by NextFlex, formed in 2015 through a cooperative agreement between the US Department of Defense (DoD) and FlexTech Alliance. Awarded in 2016. Funded and completed: $249,985.
- Co-PI for Flextech Alliance grant proposal titled: *Printed Wireless Sensor for Engine Condition Monitoring.* Proposed with University of California Berkeley Mechanical Engineering Department. Funded and completed.
- Co-PI (with Dr. Rong) for Flextech Alliance grant titled: *Characterizations of Screen Printing Low Viscosity Ink, Thin Ink Film, and Small Features for Printed Electronics Applications.* Funded and completed.