

BRUCE E. KAHN, Ph.D.

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PROFESSIONAL PROFILE

- Accomplished expert witness, multidisciplinary researcher, project manager, consultant, and author focusing on functional printing (electronic and 3D), printing and printed materials, flexible hybrid electronics, and nanotechnology.
- Innovative teacher and researcher devoted to education and experiential learning
- Excellent communication and people skills including team building and mentoring
- Invited lecturer in North America, Europe, and Asia

TECHNICAL SKILLS

- Functional printing (Electronics & 3D)
- Flexible and Printed Electronics
- Patterning techniques (printing, coating, transfer)
- Printing (flexo, gravure, inkjet, thermal, etc)
- Printing and coating material formulation, characterization and print/part evaluation
- Statistics (Design of Experiments, Modeling, Robust Design, Multivariate methods, Chemometrics, SPC)
- Chemistry (Inorganic, Physical, Organic, Organometallic, Analytical, AC and DC Electrochemistry, Environmental, Conductive Polymers, spectroscopy, inert atmosphere and UHV techniques)
- Microscopy (SEM, EDS, TEM, profilometry) and Surface Science (Auger, EELS, MS, XRD)
- Digital Imaging (Scanning, processing, measurement and quantification)
- Computer programming (HTML, perl, Visual Basic), interfacing, and data analysis.
- Intellectual Property (Patent, Trademark)
- Rheology (ink and coatings, surface mod.)
- Nanotechnology
- Battery chemistry and technology

WORK EXPERIENCE

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, N.Y. 2022-2025
Research Associate Professor

- Research and teaching in printing and packaging science

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, N.Y. 2021-2022
Adjunct Professor

- Teach graduate level Instrumental Techniques course in Materials Science and Engineering department

AMPrint Center at ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, N.Y. 2016-2020
Chief Scientist and Director of Business Development

- Acquire and direct functional printing projects, write proposals, papers and reports, present results
- Direct communication and outreach to companies, researchers, state and Federal agencies
- Formulate printable materials and evaluate functional characteristics of resulting print/part
- Initiate multidisciplinary team work and collaborations between departments, companies, and government.
- Supervise, advise and train students, teach courses, facilitate research and projects

CLEMSON UNIVERSITY, Clemson, S.C. 2010-2016
Adjunct Professor, Advisor, Project Technical Leader, and Printed Electronics Consultant

- Lead functional printing/printed electronics research and strategy.
- Business and technology development. Build multiorganizational and multifunctional teams.
- Write grant proposals (Obtained ~ \$2 M in Grant funding), research papers, and give presentations
- Coordinate, lead, and teach industry workshops.
- Advise students

PRINTED ELECTRONICS CONSULTING, Rochester, N.Y.

2005-Present

Consultant

- Expert witness and litigation consultant
- Write books, articles, and reports; invited conference speaker; create and deliver customized training.
- Provide technical advice to companies and governmental institutions in the U.S. and Europe and Asia.
- Coordinate and facilitate research efforts between academic, private and governmental organizations.
- Prepare grant proposals for printed electronic research projects.

ROCHESTER INSTITUTE OF TECHNOLOGY, Rochester, N.Y.

1998-2005

Assistant Professor

- Developed and taught courses on Photographic Chemistry, Materials and Processes of Photography, Photographic Optics, Scanning Electron Microscopy, Electronic Imaging Materials, Introduction to Research, Historic Photographic Processes, and Lenticular Imaging.
- Initiated research programs on printed electronics, and imaging materials and processes.

EASTMAN KODAK COMPANY, Rochester, N.Y.

1989-1998

Senior Research Scientist

- Pioneered a test to achieve fast, high capacity, and inexpensive photographic emulsion evaluation. Reduced cycle time by 5-10X, costs by at least 10X and greatly increased testing capacity.
- Developed image analysis method for silver halide photographic emulsions, which saved Kodak over \$1M per year. Received Outstanding Innovation Award.
- Synthesized and evaluated new Lithium alloys and materials for use in Lithium batteries.

EDUCATION

- Post-Doctoral Research Associate with Professor Arthur T. Hubbard at the University of Cincinnati. 1988-9
- Ph.D., Chemistry, University of Nebraska, 1987 under the supervision of Professor Reuben D. Rieke.
Dissertation:
 - I. The Preparation and Reactivity of Active Uranium
 - II. Computer Programming, and Electrochemistry and EPR Interfacing.
 - III. The Design and Construction of a Gas Chromatograph Temperature Programmer.
- S.B., Chemistry, University of Chicago. 1981 (equivalent to B.S.).
- A.B., Economics, University of Chicago. 1981 Met Divisional Core Requirements (equivalent to minor).

AWARDS AND HONORS

2014 Flexi Award (given by the FlexTech Alliance) for Technology Leadership in Education

Upstate Alliance for Innovation – 2001-2002 (One of 20 faculty selected from RIT)

Outstanding Innovation Award - 1997

(Eastman Kodak Company, Manufacturing Research & Engineering Division)

PUBLICATIONS, PRESENTATIONS, AND PATENTS

> 45 Publications

> 90 Presentations

19 Proprietary Eastman Kodak publications

2 Patents