

Society for Imaging Science & Technology

2010 HONORS AND AWARDS



imaging.org



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One role of our Society is to acknowledge the accomplishments of individuals and recognize the progress and leadership they have brought to the imaging community.

It is the privilege of the president of the IS&T, and my personal pleasure, to announce this year's Honors & Awards recipients. As in past years, these recognitions span the full range of the technical and scientific areas associated with imaging. The award recipients are selected for their contributions to our Society, as well as to the advancement of imaging science, technology, and education.

On behalf of IS&T, I would like to thank the chairs and members of the Honors & Awards, HP image Permanence Award, and Land Medal committees for their commitment and diligence in selecting this year's awardees.

Congratulations to our honorees.



Rita Hofmann,
IS&T President

2010 IS&T HONORS AND AWARDS COMMITTEE

Ken Lindblom (Hewlett-Packard Company), chair
Jan Allebach (Purdue University)
Reinhard Baumann (Fraunhofer Einrichtung für
Electronic Nano Systems ENAS)
Takashi Kitamura (Chiba University)
Nathan Moroney (Hewlett-Packard Company)

2010 HP IMAGE PERMANENCE AWARD COMMITTEE

James M. Reilly (Image Permanence Institute), chair
Paul Wight (FUJIFILM Imaging Colorants, Ltd.)
Doug Nishimura (Image Permanence Institute)
Joyce H. Townsend (Tate Britain)

2010 LAND MEDAL AWARD COMMITTEE

Daniel F.V. James (University of Toronto), chair
John Meyer (retired, Hewlett-Packard Company)
Peter D. Burns (Carestream Health Inc.)
Jin Mizuguchi (Yokohama National University)
Costas Fotakis (FORTH-IESL)
Jannick P. Rolland (University of Rochester)
Annette B. Jaffe (Annette Jaffe Consulting)
Peter Török (Imperial College London)

Honorary Membership

the highest award of the Society, for outstanding contribution to the advancement of imaging science and engineering to

DAVID McDOWELL

for his energetic and tireless support of standards in the graphic arts and imaging industries.



David Q. McDowell graduated with a BSc in engineering physics from the University of Rhode Island (1957), and retired in 1999 from the Professional Imaging Division of Eastman Kodak Company, where he worked for 42 years. As a senior technical associate, he represented Kodak in a variety of standards and industry activities, and within Kodak provided broad technical support to product development activities that involved or impacted the printing and publishing market.

In retirement he is working as a volunteer with NPES, the graphic arts trade association that provides coordination of all United States graphic arts accredited standards activities, to further the development of graphic arts standards. He is also continuing his involvement with Kodak in the area of color and imaging standards, on a part time basis.

McDowell is the chairman of ISO Steering Committee for Image Technology (SCIT), chairman of the US Technical Advisory Group

(USTAG) to ISO/TC 130 (Graphic technology), Convenor of TC130/WG2 (Prepress Data Exchange), Convenor of TC130/WG7 (ICC Standards), Convenor of ISO TC130/WG9 (Reference Image Development), Convenor of ISO/TC42/JWG21 (Revision of ISO 5 Densitometry Standards), and the Kodak alternate delegate to the International Color Consortium. He is active in many of the subcommittees and working groups of ANSI/ CGATS, ISO/ TC130 (Graphic technology), ISO/TC42 (Photography), ISO/TC171 (Document management applications), CIE, and the ICC (International Color Consortium).

He was a key participant in both the creation of the ANSI accredited standards effort within the United States graphic arts industry and in the reactivation of ISO/TC130, Graphic Technology.

He is a longtime member of both the Technical Association of the Graphic Arts (TAGA) and the Society for Imaging Science and Technology. He is a past president of TAGA and a Senior Member of IS&T. He is also editor of the Standards Update column for the *IS&T Reporter*, as well as being the author of most of the columns.

Senior Membership

for long-term service to the Society at the national level to

STUART GORDON

for his dedicated service and contributions to the Society, and leadership in creation of the Technologies for Digital Photo Fulfillment conference.

Stuart Gordon received a BS in chemistry from Rensselaer Polytechnic Institute, and a MS in chemistry and a MEng in chemical engineering from Cornell University. He is currently a principal scientist at Eastman Kodak Company, where he has worked for 23 years.



Gordon has held a variety of positions in silver halide research and development. He has been awarded nine US patents and has written numerous internal and external technical reports. He is certified as a six sigma black belt. Gordon served as the papers chair and program chair for IS&T's International Symposium on Photofinishing Technology.

Most recently, he served as the general chair for the International Symposium on Technologies for Digital Photo Fulfillment in 2007 and 2009. In 1996, he received an IS&T Service Award.

IS&T Fellowship

for outstanding achievement in imaging science or engineering to

ZHIGANG FAN

for fundamental research and contributions to the fields of image processing and image recognition.

Zhigang (Zeke) Fan received his MS and his PhD in electrical engineering from the University of Rhode Island (1986 and 1988, respectively). He joined Xerox Corporation in 1988, where he is currently a principal scientist in Corporate Research and Technology. Dr. Fan's research interests include various aspects of image processing and recognition. He has authored or co-



authored more than 70 technical papers, as well as more than 150 patents and pending applications.

Dr. Fan served as an associate editor for the *IEEE Transactions on Image Processing* (2003- 2009).

He was program co-chair for the 3rd, 4th, 5th, and 6th International Conference on Imaging Science and Hardcopy (ICISH), and the conference co-chair for the Imaging and Printing in a Web 2.0 World Conference at the SPIE/IS&T 2010 Electronic Imaging Symposium.

IS&T Fellowship

for outstanding achievement in imaging science or engineering to

GRAHAM FINLAYSON

for outstanding research in the field of color imaging and color computer vision.

A professor in the School of Computing Sciences at the University of East Anglia (UK) for the past nine years, Graham Finlayson received his BSc in computer science from the University of Strathclyde in Glasgow, Scotland, and his MSc and PhD from Simon Fraser University in Vancouver, Canada, where his dissertation was awarded a Dean's medal for academic excellence. From 1995 to 1997, Finlayson was a lecturer in the department of computer science at the University of York (UK). In 1997, he was appointed to a readership at the University of Derby, where he was a founding member of the Colour & Imaging Institute.

Professor Finlayson is interested in how color can be used to solve problems in computer vision and allied disciplines such as image processing and digital photography. He has made many contributions toward solving the color constancy problem (removing color bias due to illumination from images) and his algorithms have been implemented in commercial cameras. His current research inter-



ests include dynamic range compression, the automated removal of shadows in images, photometric invariance, and the application of computational techniques to the understanding of human vision.

Professor Finlayson has published more than 200 papers including more than 50 at IS&T conferences. As well as being an academic, Professor Finlayson is the chief technical office of Im-Sense Ltd., a company spun out of the University of East Anglia in 2006 to exploit his research on image enhancement.

Professor Finlayson's research contributions were recognised by the Royal Society who awarded him a Royal Society-Wolfson Merit Award in 2008 and by the Royal Photographic Society who presented him with their Davies Medal in 2009.

He has served as a technical chair for IS&T's Second European Conference on Color in Graphics Imaging and Vision (2004) and for the 8th Color and Imaging Conference (2000), and as general co-chair for the 9th Color Imaging Conference (2001). Professor Finlayson currently serves on the IS&T board.

IS&T Fellowship

for outstanding achievement in imaging science or engineering to

STEVEN J. SIMSKE

for his leadership and innovation in the area of security printing and imaging.

Steve Simske is the director and chief technologist for the SPIEGEL (Security Printing and Imaging Engineering Geared toward Enterprise Lifecycle) program at Hewlett-Packard Laboratories. He received his BS in biomedical engineering from Marquette University (1986); his MS in biomedical engineering from Rensselaer Polytechnic Institute (1987); his PhD in electrical engineering from the University of Colorado (1990); and his Post-Doctorate in aerospace engineering from the University of Colorado (1993). Dr. Simske was a research professor at the University of Colorado until 2007, where he designed and built the first autonomous system to support mice in space and performed research on 11 US Space Shuttle missions.

Dr. Simske joined HP in 1994 and developed HP's automatic document analysis software, which still ships in HP's scanner, all-in-one, and copier products. Dr. Simske joined HP Labs in 2000, where he led HP's book and document digitization efforts and created HP's meta-algorithmic program focused on the



design patterns and mathematics for combining multiple intelligent systems for improved performance, accuracy, and robustness (since used in more than a dozen technology areas).

Dr. Simske helped create HP's product tracking and authentication program in 2004. This broad effort, which has evolved into the

SPIEGEL program, supports HP's own brand protection and anti-counterfeiting efforts, which protect a \$60B+/annum supply chain. SPIEGEL is supported by research in content understanding, intelligent analysis systems, biometric algorithms, track and trace, forensics, product authentication and dynamic biometrics. In 2008, HP began investigating counterfeits in its worldwide return centers using Dr. Simske's Image-Based Forensic Service. He also created a solution for the US-wide Tamper-Resistant Prescription Pad program within the Centers for Medicare and Medicaid.

Dr. Simske currently holds more than 30 US patents and has published more than 200 journal and conference papers. He has also supported more than 30 graduate students in the past 15 years.

Service Award

in recognition of service to a Chapter or to the Society to

ANDRONIQUE IOANNIDIS

for advancement of the principles and goals of IS&T, in particular for her service to the non-impact printing (NIP) community.



Andronique Ioannidis's most recent position was Laboratory Director, Senior Technologist, and Project Leader for Photoreceptor Design, Characterization, and Benchmarking at Xerox Corporation in Webster, NY, where her duties included organizing large multi-national teams for new photoreceptor design and development, as well as being responsible for the new designs' performance criteria throughout the product development and commercialization lifecycle.

Dr. Ioannidis obtained a BSc and MSc in physics from Concordia University (Montreal, Canada), and a PhD in energy and materials science (1997) as a Quebec Scholar at the National Science Research Institute (INRS) of the University of Quebec. Her research interests concentrate on organic photo-electronic materials and devices with applications in xerographic photoreceptors, solar energy devices, displays, and photo-sensors. This work has led to 20 refereed journal publica-

tions, 26 internal industry reports, numerous invited seminars at universities and international meetings, and 25 US and European patent submissions of which 18 have been issued to date.

Dr. Ioannidis is a reviewer for several journals and has been a session chair at IS&T, MRS, and SPIE conferences. She has been a member of IS&T since 1998 and has served the International Conference on Digital Printing (NIP) for 11 years in numerous capacities, including as the general chair for NIP20, and for 8 years as a member of the organizing committee and five years as a member of the NIP Technology Advisory Council.

Dr. Ioannidis's activities in her local community include volunteering as a Science Outreach teacher for the past decade, and being the NY Regents language teacher for the Greek community school, a Science Olympiad coach for the Webster Thomas High School, a certified foster parent, and active in animal rescue, whereby she and her family have accumulated four dogs and two cats, to date. In her spare time Dr. Ioannidis enjoys learning new languages, playing the piano, reading, and travelling.

Service Award

in recognition of service to a Chapter or to the Society to

HOWARD MIZES

for his many years of active and enthusiastic IS&T leadership and contributions.



Howard Mizes has been an active contributor to IS&T for almost 20 years. He is currently serving as an associate editor for the *Journal of Imaging Science and Technology*. From 2004 to 2007, he was a vice president on the IS&T Board of Directors. He acted as general chair for the NIP16 conference and has held various committee roles for NIP and other IS&T conferences. Dr. Mizes has presented regularly at IS&T conferences.

Dr. Mizes is a principal scientist in the Xerox Innovations Group at Xerox Corporation in Webster, NY, where he has been since 1988. His current research involves sensing and control schemes for color registration and image uniformity in electrophotographic and direct marking products. He has also worked in the areas of charge transport, particle adhesion, xerographic development, and xerographic system modeling.

Dr. Mizes holds a BS (1983) from UCLA and a PhD (1988) from Stanford University. He has 29 issued patents and has published 67 papers and conference proceedings.

Service Award

in recognition of service to a Chapter or to the Society to

ERIC STELTER

for significant contributions to the success of the NIP conference over the past several years.

Eric Stelter has been heavily involved in the NIP conferences since NIP16 (Vancouver), where he helped establish the printing systems engineering and optimization session. Since then, he has served as chair of a wide range of sessions, including production digital printing, commercial and industrial printing, and toner based printing processes. Dr. Stelter was also instrumental in starting the environmental sessions, as well as the sequence of digital art sessions. He was general chair of NIP22 (Denver) and has frequently been publicity chair for NIP.

During the era of the “Battle of the Big Printers” Dr. Stelter helped get keynote speakers from the major industry companies to speak at NIP. He formulated many of the current guidelines and methods for requesting papers



that are in use by NIP session chairs, and is currently serving on the NIP advisory committee. At NIP, his papers on development physics have included computer simulations of magnetic brush development, the effect of concentrated charges on attachment forces, development to completion, and a review of development processes from a mechanistic point of view. He also presented papers on the stretched exponential behavior of photoconductor discharge and new applications of electrophotography.

Dr. Stelter received a PhD in condensed matter physics from the University of Illinois at Urbana-Champaign (1985), after receiving a BS in physics from the University of Rochester. He has worked for Eastman Kodak's Graphic Communications Group, Heidelberg Digital, NexPress, and related organizations since 1985. Dr. Stelter has more than 40 US patents in the fields of electrophotography and ink jet printing.

Chester F. Carlson Award

sponsored by Xerox Corporation, Wilson Center for Research and Technology, recognizes outstanding work in the science or technology of electrophotography

RICHARD LUX

for his innovation and leadership in the creation, incubation, development, and delivery of electrophotographic processes and products.

Richard A. Lux received his PhD in mechanical and aerospace sciences from the University of Rochester (1979). After 18 months as a Carnegie Fellow in Washington DC, he joined Xerox in 1980 where he designed and developed two component magnetic brush development systems.

In 1991, Dr. Lux was appointed principal engineer with responsibility for electrophotographic marking within Xerox's Production Systems Group (PSG). During that time he and his team designed and delivered the flagship Docutech 180 and 4135MX (magnetic ink) printers. In 1996, he moved to Corporate Research and Technology where he managed



the Marking Elements Laboratory. In 2000, Dr. Lux returned to PSG to lead the delivery of the breakthrough Image on Image marking system that is the heart of iGen3. He retired in 2009 as Vice President PSG Marking and Imaging Competency Center with responsibility for design and delivery of all electrophotographic and direct marking systems for the Group.

Dr. Lux helped bring more than 15 new copiers and printers to life during his 29-year Xerox career, beginning with the Xerox 1065 Copier—a state-of-the-art office machine at the time of its 1987 launch—and ending with the production color iGen4 in 2008.

He is currently an adjunct faculty member at the College of Engineering at Rochester Institute of Technology and also works as an independent consultant.

Gutenberg Award

endowed by Hewlett-Packard Company and sponsored by IS&T, for an outstanding technical achievement in, or contribution to, printing technology to

KOJI HIRAKURA

for development and realization of the Four Drum Tandem Digital Color Laser Electrophotographic System.

Koji Hirakura received his BS in physics from Saga University (1970). He joined the RICOH Reprography Research and Development Center of Tokyo later that year. Hirkura's initial studies focused on stabilizing high spectral sensitivity of photoreceptors, especially of Cadmium Sulfide, under repetitive exposures. He also worked on measuring technologies of toner charge to mass ratio. Mr. Hirakura invented original technologies of measurement for the toner developability, and applied them to the output image density control systems of electrophotographic (EP) engines.

In 1985, Mr. Hirakura started to work on a number of projects for the Digital Color EP Systems as a project manager. In 1991, he



published "Four Drum Digital Color EP System" at IS&T's 7th International Congress on Advances in Non-Impact Printing Technologies, and proved the realization of the Four Drum Tandem Digital Color Laser EP System for the first time in the world.

This paper presented the original architecture of Tandem EP engine system and subsystems, and also suggested the desirable way to optimize the halftone dot density according to the types of printed matters. At present, the Four Drum Tandem System makes the mainstream of versatile color MFPs and printers including digital production printing systems.

Currently, Mr. Hirakura is an associate director of RICOH Research and Development Group, and the executive engineer for marking technology at RICOH. He also is serving as the director of the Imaging Society of Japan.

Gutenberg Award

endowed by Hewlett-Packard Company and sponsored by IS&T, for an outstanding technical achievement in, or contribution to, printing technology to

STEPHEN TEMPLE

for invention of shear mode-shared wall piezo inkjet.

Stephen Temple joined Cambridge Consultants Limited (CCL) in 1968 fresh out of Oxford University, with the intention of becoming a successful inventor.



At that time, there was much talk of start-ups and of a vision of Cambridge as a center of a new hi-tech revolution. Temple failed to join this bandwagon until 1990, when Xaar was founded.

In the meantime, he worked on and produced inventions for a large diversity of industries and technologies: textiles (carpets and weaving); printing (inkjet—CCL was the founding father of the Cambridge Ink Jet cluster—conventional, and electrophotographic); new materials; space-sails; and parachutes.

Printing was a recurring theme during this time, and in 1987 together with others, Mr. Temple invented the Xaar technology. As soon as this became a spin-off prospect, he joined Xaar and has been instrumental in its evolution from four people to a listed company of 300+ with sites in Cambridge, Huntingdon, Sweden, Japan, and the US.

In 2007, he left Xaar with a view to starting a new venture and is currently exploring the potential for rapid manufacture using ink jet technology.

Mr. Temple's interests are wine, painting, opera, windmills (he is restoring the Impington Mill), and flying—none of which gets the full attention they deserve!

Edwin H. Land Medal

awarded by IS&T and OSA to recognize pioneering work empowered by scientific research to create inventions, technologies, and products, and to reflect Land's scientific intensity and curiosity in optics and imaging as inventor, scientist, entrepreneur, and teacher to

ELIEZER PELI

for pioneering research, clinical, and entrepreneurial contributions to providing enhanced imagery for people with impaired vision through image processing, innovative optical designs, fiber optics, and applications of vision science.



Eli Peli received a BSEE and MSEE from the Technion-Israel Institute of Technology and doctorate from New England College of Optometry. Dr. Peli is the Moakley Scholar in Aging Eye Research and a Co-director of Research at Schepens Eye Research Institute, and Professor of Ophthalmology at Harvard Medical School. He is a fellow of the Optical Society of America, the

American Academy of Optometry, the Society for Information Display, and SPIE.

Dr. Peli's principal research interests are image processing in relation to visual function and clinical psychophysics in low vision rehabilitation; image quality; and evaluation of display-vision interaction. He is also studying control of eye movements and binocular vision. Dr. Peli invents, develops, and evaluates optical and electro-optical devices to improve function with impaired vision with emphasis on enhancing the experience of TV viewing and facilitating safe mobility on foot or in driving.

HP Image Permanence Award

sponsored by the Hewlett-Packard Company and given with participation of the IIC, for outstanding contributions that advance the longevity of photographic and fine art images created via modern digital methods to

MARTIN JÜRGENS

for his outstanding efforts as a teacher and advocate for the preservation of digital prints. Specifically, this award recognizes his accomplishment as the first photograph conservator to specialize in digital prints and the first person to teach a comprehensive workshop on the care and identification of digital print processes, as well as the years he spent collecting print samples and their technological histories, which resulted in his digital print identification web site and book, *The Digital Print: Identification and Preservation*, published by Getty in 2009.



Martin Jürgens has worked as a photograph conservator in private practice in Hamburg, Germany since 2001. His clients include museums, archives, galleries, collectors, photographers, and artists. Treated objects have ranged from the mid-19th Century through to the present day, and have included the earliest photographs such as salted paper prints, daguerreotypes, albumen prints, silver gelatin prints, and an increasing number of contemporary objects such as chromogenic and inkjet prints, as well as face-mounted photographs. Beginning in June 2010, Mr. Jürgens will take on the position of photograph conservator at the Rijksmuseum in Amsterdam.

Mr. Jürgens first studied photography and design at the Technical Universität in Dortmund, Germany, in the 1990s. He then took part in the Certificate Program in Photographic Preservation at the George Eastman House in Rochester, NY, and graduated from Rochester Institute of Technology (RIT, 1998) with a Master of Science.

In 2001, he acquired a Master of Art Conservation at Queen's University in Kingston, Canada, specializing in paper conservation.

Since then, his areas of research, publishing, and teaching have included historic and contemporary photography and digital printing. Together with Prof. Franziska Frey (RIT), he has taught a large number of workshops on the identification and conservation of digital prints. Following a guest scholarship at the J. Paul Getty Museum in 2006, Mr. Jürgens spent two years working on a book on the materials, identification, and preservation of digital prints, a topic that he had been researching since 1998. The Getty Conservation Institute published his book, *The Digital Print: Identification and Preservation*, in 2009.

Raymond Bowman Award

established by the Tri-State Chapter, for excellence in imaging education to

GERALD A. DOMOTO

for his history of advising students in the thermo-fluidic sciences of printing and fostering industrial/academic collaborations that create learning opportunities for both students and existing employees at Xerox.



Dr. Domoto was born in an internment camp near Denson, Arkansas in 1942. Shortly after the end of WWII, his family moved back to Fresno in the central valley of California. Dr. Domoto and his two sisters grew up on a farm where they were surrounded by many uncles, aunts, and cousins. His parents were very active participants in the Japanese-American community in Fresno.

Dr. Domoto attended Fresno High School, Fresno State College and the University of California at Berkeley. It was at UC Berkeley that he first met his mentor and friend Chiang-Lin Tien, who served as his advisor for both his master's degree and his doctorate. Dr. Tien was a tremendous researcher and teacher who later became Chancellor of the

Berkeley campus. Dr. Tien was his role model when he accepted the position of assistant professor in the mechanical engineering department at Columbia University. During his tenure at Columbia, Dr. Domoto sponsored 10 doctoral students and achieved the rank of full professor.

Dr. Domoto left Columbia to join Xerox in 1981. Together with one of his Columbia colleagues, Rino Castelli and Barry Wolf, professor at Brooklyn Polytechnic, they co-founded a Xerox research facility in Sleepy Hollow, New York devoted to research in mechanical engineering. Dr. Domoto sponsored six more doctoral students at Columbia receiving funding from the Xerox University Affairs Committee.

While a graduate student at UC Berkeley, he met and married his wife, Marge. They have a son, Jeff, and a daughter, Jenny, and five grandchildren. They all live within a 30-mile radius so that they spend most of their free time enjoying each other's company.

Charles E. Ives/Journal Award

in recognition of the best engineering paper published in the Journal of Imaging Science and Technology the preceding year to

HIROYUKI KAWAMOTO AND TAKASHI HIRATSUKA

for "Statics and Dynamics of Carrier Particles in Two-Component Magnetic Development System in Electrophotography," *JIST* 53(6): 060201-1 – 060201-10, 2009.

Hiroyuki Kawamoto holds a BS in electrical engineering from Hiroshima University (1972) and a Dr. degree in mechanical engineering from Tokyo Institute of Technology (1983). From 1972 to 1991 he was a senior engineer at the Nuclear Division of Hitachi Ltd. In 1991, he moved to Fuji Xerox, where he was engaged in the research of electrophotography as a research fellow. In 1999, he left Fuji Xerox and he is now a professor at Waseda University in Tokyo.

Dr. Kawamoto's primary research focus is dynamics of electromagnetic particles and its application for imaging technology, microfab-



Hiroyuki Kawamoto



Takashi Hiratsuka

rication, and micromachines. Recently, based on the matured technology on the toner dynamics, he started the investigation on the mitigation and utilization technologies of lunar dust for long-term lunar exploration in collaboration with NASA.

Dr. Kawamoto was selected a Fellow of the IS&T in 1999 and awarded Chester F. Carlson Award in 2007.

Takashi Hiratsuka received his MS in mechanical engineering from Waseda University (2007). He has been working with Canon, Inc since 2007, where he is currently at Imaging Device System Development Center, Corporate R&D Headquarters. His research interests include particle simulation, high-precision

drive control, color registration, paper handling, and optimization problem. He is a member of ISJ.

Raymond Davis Scholarship

granted to an imaging science or engineering student for use in continuing graduate or undergraduate studies to

ABHIJIT SARKAR

Abhijit Sarkar received his BS in electrical engineering from Jadavpur University, Kolkata, India (2000), an MS specializing in lighting from Pennsylvania State University (2005) and an MS in color science from Rochester Institute of Technology (2008). He is currently a PhD student at Technicolor Research, Rennes, France, and is affiliated to the Ecole Polytechnique de l'université de Nantes. His academic advisors are Prof. Patrick Le Callet and Dr. Florent Autrusseau of Image and Video Communication Group (IVC), IRCCyN, Nantes, and his technical advisors are Mr. Laurent Blondé and Dr. Jürgen Stauder at Technicolor Research. His thesis has been approved and partially funded by the French government's prestigious ANRT-CIFRE program, aimed at fostering high-quality technical research through new industry-university collaborations.

During his graduate studies to date, Sarkar has authored two journal papers and seven international conference papers, and has been involved in several innovative research



projects. He was named the first inventor in a US patent application filed by Intel Corporation based on his summer internship work on perceptual color enhancement, and in two European patent applications filed by Technicolor Research based on his first year's doctoral research. Sarkar also received a departmental research grant at RIT to pursue an independent proof-of-concept research on a CMOS-sensor based intelligent and fully digital lighting control system.

Sarkar's current work focuses on the fundamental issue of observer metamerism in industrial applications such as modern displays with narrow-band primaries. His research interests include digital color imaging, color vision and perception. He is a student member of IS&T and SID.

Sarkar is keen on learning about different countries and cultures. Through his diverse international experiences, he continues to broaden his vision, and enhance his ability to work and share with people from different nationalities.

About IS&T's Honors and Awards Program

One of the principal privileges of a technical society is to seek out and cite those members whose work significantly contributes to the advancement of the discipline(s) represented by the society. Indeed, it is an obligation of a technical society to recognize distinction and diligence among practitioners. No greater accolade can come to a person than one awarded by their peers who know best the value of their contributions to the general good.

IS&T encourages all members of the Society to nominate colleagues and peers for appropriate awards. The deadline for nominations is October 1. Nominations are made through a simple online form. Please think about your fellow imaging scientists and nominate those who are deserving of an IS&T award.

Honors and Awards for a given year are determined by a committee, whose chair is appointed by the IS&T President and whose members come from the IS&T membership at large. Awards are given annually, although not every award is given each year.

IS&T Honors and Awards

The following is a list of Honors and Awards bestowed by the Society:

- Honorary Membership
- Fellowship
- Senior Membership
- Service Award
- Chester F. Carlson Award
- Johann Gutenberg Prize
- Edwin H. Land Medal (co-sponsored with OSA)
- HP Image Permanence Award
- Charles E. Ives Journal Award (best science or engineering paper in an IS&T journal)
- Itek Award (best student paper in an IS&T journal)
- Raymond C. Bowman Award
- Raymond Davis Scholarship

For more information about IS&T's Honors and Awards process, please visit <http://www.imaging.org/ist/membership/honors.cfm>



Society for Imaging Science & Technology
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