

# THz Science & Technology Best Paper Award

*Recognizes, on an annual basis, the most significant contribution in a paper published in the IEEE Transactions on Terahertz Science and Technology.*

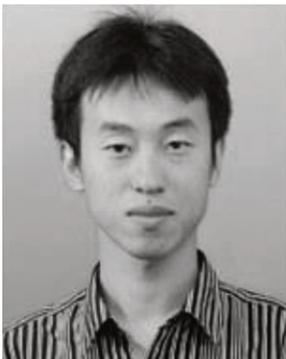
**M. I. B. Shams; Z. Jiang; S. M. Rahman; L. Cheng; J. L. Hesler; P. Fay; L. Liu**, for their paper “A 740-GHz Dynamic Two-Dimensional Beam-Steering and Forming Antenna Based on Photo-Induced Reconfigurable Fresnel Zone Plates,” *IEEE Transactions on Terahertz Science and Technology*, vol. 7, no. 3, pp. 310-319, May 2017.



## Md Ittrat B. Shams

Md Ittrat B. Shams (S'04–GS'11–M'14) was born in Dhaka, Bangladesh. He received the B.S. and M.S. degrees in electrical engineering from the Bangladesh University of Engineering and Technology (BUET), Dhaka, in 2006 and 2008, respectively. He is currently working toward the Ph.D. degree in electrical engineering at the University of Notre Dame, Notre Dame, IN, USA.

His current research interests include terahertz imaging, characterization, high-frequency devices and circuits, and microwave and radio-frequency components.



## Zhenguo Jiang

Zhenguo Jiang (GS'13–M'16) was born in Weihai, China. He received the B.S. and M.S. degrees in electrical engineering from Nanjing University, Nanjing, China, in 2008 and 2011, respectively. He is currently working toward the Ph.D. degree at the Department of Electrical Engineering, University of Notre Dame, Notre Dame, IN, USA.

His current research interests include microwave device and circuit design, fabrication and testing, terahertz detectors and imaging technologies, and superconducting devices.

# THz Science & Technology Best Paper Award

– CONTINUED –



## Syed M. Rahman

Syed M. Rahman (GS'11–M'15) received the B.S. degree in electrical engineering from the Bangladesh University of Engineering and Technology (BUET), Dhaka, Bangladesh, in 2004, and the M.S. degree in radio astronomy and space science from the Chalmers University of Technology, Göteborg, Sweden, in 2006. He is currently working toward the Ph.D. degree at the Department of Electrical Engineering, University of Notre Dame, Notre Dame, IN, USA.

His current research interests include terahertz devices, circuits, and systems.



## Li-Jing Cheng

Li-Jing Cheng (M'15) received the B.S. and M.S. degrees in electronics engineering from National Chiao Tung University, Hsinchu, Taiwan, in 1998 and 2000, respectively, and the Ph.D. degree in electrical engineering from the University of Michigan, Ann Arbor, MI, USA, in 2008.

He is currently an Assistant Professor with the School of Electrical Engineering and Computer Science at Oregon State University, Corvallis, OR, USA. From 2010 to 2013, he was a Research Assistant Professor of chemical engineering with the University of Notre Dame, Notre Dame, IN, USA. His current research interests include materials and scalable nanofabrication for electronic, photonic and THz devices, and lab-on-a-chip technologies for biomedical applications.

# THz Science & Technology Best Paper Award

– CONTINUED –

---



## Jeffrey L. Hesler

Jeffrey L. Hesler (S'88–M'89) was born in Seattle, WA, USA, on July 8, 1966. He received the B.S.E.E. degree from the Virginia Polytechnic Institute and State University, Blacksburg, VA, USA, in 1989, and the M.S.E.E. and Ph.D. degrees from the University of Virginia, Charlottesville, VA, in 1991 and 1996, respectively.

He is one of the founding members and a Vice President of Virginia Diodes, Inc., Charlottesville. In addition, he is affiliated with the University of Virginia, as a Visiting Research Assistant Professor with the Department of Electrical and Computer Engineering. His current research interests include millimeter- and submillimeter-wave device and circuit design, modeling, and testing and the development of compact terahertz sources and mixers. He has authored or coauthored more than 70 technical papers in refereed international conferences and journals.

Jeffrey L. Hesler (S'88–M'89) was born in Seattle, WA, USA, on July 8, 1966. He received the B.S.E.E. degree from the Virginia Polytechnic Institute and State University, Blacksburg, VA, USA, in 1989, and the M.S.E.E. and Ph.D. degrees from the University of Virginia, Charlottesville, VA, in 1991 and 1996, respectively.

# THz Science & Technology Best Paper Award

– CONTINUED –

---



## Patrick Fay

Patrick Fay (M'99–SM'07–F'16) received the B.S. degree in electrical engineering from the University of Notre Dame, Notre Dame, IN, USA, in 1991, and the Ph.D. degree in electrical engineering from the University of Illinois at Urbana–Champaign, Urbana, IL, USA, in 1996.

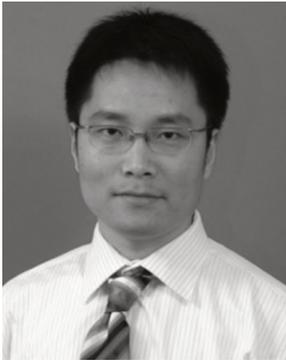
He is currently a Professor with the Department of Electrical Engineering, University of Notre Dame. He was a Visiting Assistant Professor with the Department of Electrical and Computer Engineering, University of Illinois at Urbana–Champaign, in 1996 and 1997, and joined the faculty of the University of Notre Dame in 1997. He has authored or coauthored 9 book chapters and more than 100 papers in refereed scientific journals. His current research interests include the design, fabrication, and characterization of microwave and millimeter-wave electronic devices and circuits, as well as high-speed optoelectronic devices and optoelectronic integrated circuits for fiber-optic telecommunications and the development and use of micromachining techniques for the fabrication of microwave and millimeter-wave components and packaging. His educational initiatives include the development of an advanced undergraduate laboratory course in microwave circuit design and characterization and graduate courses in optoelectronic devices and electronic device characterization.

Dr. Fay was the recipient of the Department of Electrical Engineering's IEEE Outstanding Teacher Award in 1998–1999 and the College of Engineering's Outstanding Teacher Award in 2015.

# THz Science & Technology Best Paper Award

– CONTINUED –

---



## Lei Liu

Lei Liu (S'99–M'07) received the B.S. and M.S. degrees in electrical engineering from Nanjing University, Nanjing, China, in 1998 and 2001, respectively, and the Ph.D. degree in electrical engineering from the University of Virginia, Charlottesville, VA, USA, in 2007.

From 2007 to 2009, he was a Postdoctoral Research Associate with the Department of Electrical and Computer Engineering, University of Virginia. In September 2009, he joined the faculty of the University of Notre Dame, Notre Dame, IN, USA, where he is currently an Assistant Professor of electrical engineering. His current research interests include millimeter- and submillimeter-wave device and circuit design, modeling, and testing, quasi-optical techniques, terahertz detectors for imaging and spectroscopy, novel microwave materials and devices, superconducting electronics, micro-fabrication, and processing. He has authored or coauthored more than 100 journal and conference papers.

Dr. Liu was a Session Chair for the IEEE ASC Conference (2006), Session Co-Chair for the IEEE MTT-S International Microwave Symposium (IMS 2015), and a Student Paper Competition Judge for the IEEE MTT-S IMS (2011), Baltimore, MD, USA. His students were the recipients of the 2012 IEEE Asia–Pacific Microwave Conference (APMC, Taiwan) Student Prize, the 2012 International Conference on Infrared, Millimeter, and Terahertz Waves (IRMMW-THz, Wollongong, Australia) Best Student Paper Award, and the 2015 IEEE MTT-S Graduate Fellowship Award.