



## 2015 IEEE MEDALS AND RECOGNITIONS RECIPIENTS AND CITATIONS

1. **IEEE MEDAL OF HONOR**, for an exceptional contribution or an extraordinary career in IEEE fields of interest, sponsored by the *IEEE Foundation*, to **MILDRED DRESSELHAUS** (LFIEEE)—Institute Professor, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

“For leadership and contributions across many fields of science and engineering.”

2. **IEEE ALEXANDER GRAHAM BELL MEDAL**, for exceptional contributions to the advancement of communications sciences and engineering, sponsored by *Bell Labs, Alcatel-Lucent*, to **FRANK KELLY** (non-member)—Professor, University of Cambridge, Cambridgeshire, United Kingdom

“For creating principled mathematical foundations for the design and analysis of congestion control, routing, and blocking in modern communication networks.”

3. **IEEE EDISON MEDAL**, for a career of meritorious achievement in electrical science, electrical engineering, or the electrical arts, sponsored by *Samsung Electronics Co., Ltd.*, to **JAMES JULIUS SPILKER, JR.** (LFIEEE)—Executive Chairman, AOSense Inc., Half Moon Bay, California, USA

“For contributions to the technology and implementation of civilian GPS navigation systems.”

4. **IEEE MEDAL FOR ENVIRONMENTAL AND SAFETY TECHNOLOGIES**, for outstanding accomplishments in the application of technology in the fields of interest of IEEE that improve the environment and/or public safety, sponsored by Toyota Motor Corporation, to co-recipients:

**RODOLFO SCHOENEBUG** (non-member)—Daimler AG, Sindelfingen, Baden-Württemberg, Germany

AND

**MARICA PAUREVIC** (non-member)—Daimler AG, Sindelfingen, Baden-Württemberg, Germany

AND

**HANS WEISBARTH** (non-member)—Daimler AG, Sindelfingen, Baden-Württemberg, Germany

“For significant contributions to automotive safety through crash prevention and passenger protection using sensors, warning systems, and autonomous restraint systems.”

5. **IEEE FOUNDERS MEDAL**, for outstanding contributions in the leadership, planning, and administration of affairs of great value to the electrical and electronics engineering profession, sponsored by the *IEEE Foundation*, to **JAMES PLUMMER** (LFIEEE)—Dean, School of Engineering, Stanford University, Stanford, California, USA

“For leadership in the creation and support of innovative, interdisciplinary, and globally focused education and research programs.”

6. **IEEE RICHARD W. HAMMING MEDAL**, for exceptional contributions to information sciences, systems, and technology, sponsored by *Qualcomm, Inc.*, to **IMRE CSISZAR** (LFIEEE)—Research Professor, A. Rényi Institute of Mathematics, Hungarian Academy of Sciences, Budapest, Hungary

“For contributions to information theory, information-theoretic security, and statistics.”

7. **IEEE MEDAL FOR INNOVATIONS IN HEALTHCARE TECHNOLOGY**, for outstanding contributions and/or innovations in engineering within the fields of medicine, biology, and healthcare technology, sponsored by the *IEEE Engineering in Medicine and Biology Society*, to **TAKUO AOYAGI** (MIEEE)—Engineering General Manager, Nihon Kohden Corporation, Nakano-ku, Tokyo, Japan

“For pioneering contributions to pulse oximetry that have had a profound impact on healthcare.”

8. **IEEE JACK S. KILBY SIGNAL PROCESSING MEDAL**, for outstanding achievements in signal processing, sponsored by *Texas Instruments, Inc.*, to **HARRY L. VAN TREES** (LFIEEE)—University Professor Emeritus Affiliation, George Mason University, Stanardsville, Virginia, USA

“For fundamental contributions to detection, estimation, and modulation theory; sensor array processing; and Bayesian bounds.”

9. **IEEE/RSE WOLFSON JAMES CLERK MAXWELL AWARD**, for groundbreaking contributions that have had an exceptional impact on the development of electronics and electrical engineering or related fields, funded by *Cirrus Logic*, to **LYNN CONWAY** (LFIEEE)—Professor, University of Michigan, Ann Arbor, Michigan, USA

“For contributions to and leadership in design methodology and pedagogy enabling rapid advances and dissemination of VLSI design tools and systems.”

10. **IEEE JAMES H. MULLIGAN, JR. EDUCATION MEDAL**, for a career of outstanding contributions to education in the fields of interest of IEEE, sponsored by *MathWorks*;

*Pearson Education, Inc;*. and the *IEEE Life Members Fund*, to **RICHARD GORDON BARANIUK** (FIEEE)—Victor E. Cameron Professor of Electrical and Computer Engineering, Rice University, Houston, Texas, USA

“For fundamental contributions to open educational resources for electrical engineering and beyond.”

11. **IEEE JUN-ICHI NISHIZAWA MEDAL**, for outstanding contributions to material and device science and technology, including practical application, sponsored by *The Federation of Electric Power Companies, Japan*, to **DIMITRI ANTONIADIS** (LFIEEE)—Professor, Department of Electrical Engineering and Computer Science, Massachusetts Institute of Technology, Cambridge, Massachusetts, USA

“For contributions to metal oxide semiconductor field-effect transistor physics, technology, and modeling.”

12. **IEEE ROBERT N. NOYCE MEDAL**, for exceptional contributions to the microelectronics industry, sponsored by *Intel Foundation*, **MARTIN VAN DEN BRINK** (non-member), President & CTO, ASML, The Netherlands

“For technical and managerial leadership driving the continuation of optical lithography as the enabling technology for the semiconductor industry.”

13. **IEEE DENNIS J. PICARD MEDAL FOR RADAR TECHNOLOGIES AND APPLICATIONS**, for outstanding accomplishments in advancing the fields of radar technologies and their applications, sponsored by *Raytheon Company*, to **MARSHALL GREENSPAN** (FIEEE)—Senior Consulting Systems Engineer, Northrop Grumman, Norwalk, Connecticut, USA

“For contributions to the development of multiple phase-center airborne surface surveillance and targeting radars.”

14. **IEEE MEDAL IN POWER ENGINEERING**, for outstanding contributions to the technology associated with the generation, transmission, distribution, application, and utilization of electric power for the betterment of society, sponsored by the *IEEE Industry Applications, Industrial Electronics, Power Electronics, and Power & Energy Societies*, to **FRED C. LEE** (FIEEE)—University Distinguished Professor, Virginia Polytechnic Institute and State University, Blacksburg, VA, USA

“For contributions to power electronics, especially high-frequency power conversion.”

15. **IEEE SIMON RAMO MEDAL**, for exceptional achievement in systems engineering and systems science, sponsored by *Northrop Grumman Corporation*, to **PAUL KAMINSKI** (LFIEEE)—Chairman and Chief Executive Officer, Technovation Inc., Sterling, Virginia, USA

“For leading the development of advanced low-observable airborne systems, including the F-117, and the supporting tools, training, and weapons.”

16. **IEEE JOHN VON NEUMANN MEDAL**, for outstanding achievements in computer-related science and technology, sponsored by *IBM Corporation*, to **JAMES A. GOSLING** (non-member)—Chief Software Architect, Liquid Robotics, Redwood, California, USA
- “For the Java programming language, Java Virtual Machine, and other contributions to programming languages and environments.”
17. **IEEE CORPORATE INNOVATION AWARD**, an outstanding and exemplary innovation by an industrial entity, governmental or academic organization, or other corporate body, within the fields of interest to the IEEE, sponsored by *IEEE*, to **SANDISK CORPORATION**—Milpitas, California, USA
- “For pioneering innovation, development, and deployment of Flash Memory Technology, which has profoundly changed the world.”
18. **IEEE ERNST WEBER MANAGERIAL LEADERSHIP AWARD**, for exceptional managerial leadership in the fields of interest of IEEE, sponsored by *IEEE*, to **SHANG-YI CHIANG** (LFIEEE)—Advisor to Chairman, TSMC, Los Gatos, California, USA
- “For visionary leadership in research and development establishing foundry, System-on-Chip, and 3-Dimensional Integrated Circuit technologies that transformed the industry.”
19. **IEEE HARADEN PRATT AWARD**, for outstanding service to IEEE, sponsored by the *IEEE Foundation*, to **FUMIO HARASHIMA** (LFIEEE)—President, Tokyo Metropolitan University, Tokyo, Japan
- “For outstanding leadership in globalization and diversity of IEEE communities.”
20. **IEEE RICHARD M. EMBERSON AWARD**, for distinguished service to the development, viability, advancement, and pursuit of the technical objectives of IEEE, sponsored by the *IEEE Technical Activities Board*, to **RAYMOND S. LARSEN** (LFIEEE)—Special Projects Engineering Manager, ICD Division, SLAC National Accelerator Laboratory, Stanford University, Half Moon Bay, California, USA
- “For inspiring locally owned businesses to provide sustainable humanitarian benefits in underprivileged communities.”
21. **IEEE HONORARY MEMBERSHIP**, elected by the Board of Directors from among those individuals, not members of IEEE, who have rendered meritorious service to humanity in IEEE’s designated fields of interest, sponsored by IEEE, to **ELON MUSK** (non-member)—CEO, Chairman, Co-Founder, Tesla Motors, Palo Alto, California, USA
- “For leadership in and innovative contributions to space-exploration technology, combatting global warming and promoting science education, pediatric health, and clean energy.”