

## **IEEE-LEVEL AWARDS**

The IEEE currently bestows a Medal of Honor, fifteen Medals, thirty-three Technical Field Awards, two IEEE Service Awards, two Corporate Recognitions, two Prize Paper Awards, Honorary Memberships, one Scholarship, one Fellowship, and a Staff Award. The awards and their past recipients are listed below. Citations are available via the "Award Recipients with Citations" links within the information below. Nomination information for each award can be found by visiting the IEEE Awards Web page [www.ieee.org/awards](http://www.ieee.org/awards) or by clicking on the award names below. Links are also available via the Recipient/Citation documents.

### **MEDAL OF HONOR**

[Award Recipients with Citations](#) (PDF, 26 KB)

The IEEE Medal of Honor is the highest IEEE award. The Medal was established in 1917 and is awarded for an exceptional contribution or an extraordinary career in the IEEE fields of interest. The IEEE Medal of Honor is the highest IEEE award. The candidate need not be a member of the IEEE. The IEEE Medal of Honor is sponsored by the [IEEE Foundation](#).

E. H. Armstrong	1917
E. F. W. Alexanderson	1919
Guglielmo Marconi	1920
R. A. Fessenden	1921
Lee deforest	1922
John Stone-Stone	1923
M. I. Pupin	1924
G. W. Pickard	1926
L. W. Austin	1927
Jonathan Zenneck	1928
G. W. Pierce	1929
P. O. Pedersen	1930
G. A. Ferrie	1931
A. E. Kennelly	1932
J. A. Fleming	1933
S. C. Hooper	1934
Balth. van der Pol	1935
G. A. Campbell	1936
Melville Eastham	1937
J. H. Dellinger	1938
A. G. Lee	1939
Lloyd Espenschied	1940
A. N. Goldsmith	1941
A. H. Taylor	1942
William Wilson	1943
Haraden Pratt	1944
H. H. Beverage	1945
R. V. L. Hartley	1946
No Award	1947
L. C. F. Horde	1948
Ralph Brown	1949
F. E. Terman	1950
V. K. Zworykin	1951
W. R. G. Baker	1952
J. M. Miller	1953
W. L. Everitt	1954
H. T. Friis	1955
J. V. L. Hogan	1956
J. A. Stratton	1957
A. W. Hull	1958
E. L. Chaffee	1959
Harry Nyquist	1960

Ernst A. Guillemin	1961
Edward V. Appleton	1962
John H. Hammond, Jr.	1963
George C. Southworth	1963
Harold A. Wheeler	1964
Claude E. Shannon	1966
Charles H. Townes	1967
Gordon K. Teal	1968
Edward L. Ginzton	1969
Dennis Gabor	1970
John Bardeen	1971
Jay W. Forrester	1972
Rudolf Kompfner	1973
Rudolf E. Kalman	1974
John R. Pierce	1975
H. Earle Vaughan	1977
Robert N. Noyce	1978
Richard Bellman	1979
William Shockley	1980
Sidney Darlington	1981
John Wilder Tukey	1982
Nicolaas Bloembergen	1983
Norman F. Ramsey	1984
John R. Whinnery	1985
Jack St. Clair Kilby	1986
Paul C. Lauterbur	1987
Calvin F. Quate	1988
C. Kumar N. Patel	1989
Robert G. Gallager	1990
Leo Esaki	1991
Amos E. Joel, Jr.	1992
Karl Johan Åström	1993
Alfred Y. Cho	1994
Lofti A. Zadeh	1995
Robert M. Metcalfe	1996
George H. Heilmeier	1997
Donald O. Pederson	1998
Charles Concordia	1999
Andrew S. Grove	2000
Herwig Kogelnik	2001
Herbert Kroemer	2002
Nick Holonyak, Jr.	2003
Tadahiro Sekimoto	2004
James L. Flanagan	2005
James D. Meindl	2006
Thomas Kailath	2007
Gordon E. Moore	2008
Robert H. Dennard	2009
Andrew J. Viterbi	2010
Morris Chang	2011
John Hennessy	2012
Irwin Mark Jacobs	2013
B. Jayant Baliga	2014
Mildred Dresselhaus	2015
G. David Forney	2016
Kornelis (Kees) A. Schouhamer Immink	2017
Bradford W. Parkinson	2018

## IEEE MAJOR MEDALS

### [Alexander Graham Bell Medal](#)

[Award Recipients with Citations](#) (PDF, 12 KB)

The IEEE Alexander Graham Bell Medal was established in 1976 and is awarded for exceptional contributions to communications and networking sciences and engineering. The Medal is sponsored by Nokia Bell Labs.

Amos E. Joel, Jr.	1976
William Keister	1976
Raymond W. Ketchledge	1976
Eberhardt Rehtin	1977
M. Robert Aaron	1978
John S. Mayo	1978
Eric E. Sumner	1978
Christian Jacobaeus	1979
Richard R. Hough	1980
David Slepian	1981
Harold A. Rosen	1982
Stephen O. Rice	1983
Andrew J. Viterbi	1984
Charles K. Kao	1985
Bernard Widrow	1986
Joel S. Engel	1987
Richard H. Frenkiel	1987
William C. Jakes, Jr.	1987
Robert M. Metcalfe	1988
Gerald R. Ash	1989
Billy B. Oliver	1989
Paul Baran	1990
C. Chapin Cutler	1991
John O. Limb	1991
Arun N. Netravali	1991
James L. Massey	1992
Donald C. Cox	1993
Hiroshi Inose	1994
Irwin M. Jacobs	1995
Tadahiro Sekimoto	1996
Vinton G. Cerf	1997
Robert E. Kahn	1997
Richard E. Blahut	1998
David G. Messerschmitt	1999
Vladimir A. Kotelnikov	2000
No Award	2001
Tsuneo Nakahara	2002
Joachim Hagenauer	2003
No Award	2004
Jim K. Omura	2005
John Wozencraft	2006
Norman Abramson	2007
Gerard J. Foschini	2008
Robert J. McEliece	2009
John M. Cioffi	2010
Arogyaswami J. Paulraj	2011
Leonard Kleinrock	2012
Andrew Chraplyvy	2013
Robert Tkach	2013
Dariush Divsalar	2014
Frank Kelly	2015
Roberto Padovani	2016
H. Vincent Poor	2017
Nambirajan Seshadri	2018

### [Edison Medal](#)

[Award Recipients with Citations](#) (PDF, 74 KB)

The IEEE Edison Medal was established in 1904 and is presented for a career of meritorious achievement in electrical science, electrical engineering or the electrical arts. The Medal is sponsored by Samsung Electronics Co. Ltd.

Elihu Thomson	1909
Frank J. Sprague	1910
George Westinghouse	1911
William Stanley	1912
Charles F. Brush	1913
Alexander Graham Bell	1914
Nikola Tesla	1916
John J. Carty	1917
Benjamin G. Lamme	1918
W. L. R. Emmet	1919
Michael I. Pupin	1920
Cummings C. Chesney	1921
Robert A. Millikan	1922
John W. Lieb	1923
John W. Howell	1924
Harris J. Ryan	1925
William D. Coolidge	1927
Frank B. Jewett	1928
Charles F. Scott	1929
Frank Conrad	1930
E. W. Rice, Jr.	1931
Bancroft Gherardi	1932
Arthur E. Kennelly	1933
Willis R. Whitney	1934
Lewis B. Stillwell	1935
Alex Dow	1936
Gano Dunn	1937
Dugald C. Jackson	1938
Philip Torchio	1939
George A. Campbell	1940
John B. Whitehead	1941
Edwin H. Armstrong	1942
Vannevar Bush	1943
E. R. W. Alexanderson	1944
Philip Sporn	1945
Lee de Forest	1946
Joseph Slepian	1947
Morris E. Leeds	1948
Karl B. McEachron	1949
Otto B. Blackwell	1950
Charles F. Wagner	1951
Vladimir K. Zworykin	1952
John F. Peters	1953
Oliver E. Buckley	1954
Leonid A. Umansky	1955
Comfort A. Adams	1956
John K. Hodnette	1957
Charles F. Kettering	1958
James F. Fairman	1959
Harold S. Osborne	1960
William B. Kouwenhoven	1961
Alexander C. Monteith	1962
John R. Pierce	1963
Schedule revised	1964*
Walker L. Cisl	1965
Wilmer L. Barrow	1966
George H. Brown	1967
Charles F. Avila	1968
Hendrik W. Bode	1969
Howard H. Aiken	1970
John W. Simpson	1971
William H. Pickering	1972
B. D. H. Tellegen	1973

Jan A. Rajchman	1974
Sidney Darlington	1975
Murray Joslin	1976
Henri Busignies	1977
Daniel E. Noble	1978
Albert Rose	1979
Robert Adler	1980
C. Chapin Cutler	1981
Nathan Cohn	1982
Herman P. Schwan	1983
Eugene I. Gordon	1984
John D. Kraus	1985
James L. Flanagan	1986
Robert A. Henle	1987
James Ross Macdonald	1988
Nick Holonyak, Jr.	1989
Archie W. Straiton	1990
John Louis Moll	1991
G. David Forney, Jr.	1992
James H. Pomerene	1993
Leslie A. Geddes	1994
Robert W. Lucky	1995
Floyd Dunn	1996
Esther M. Conwell	1997
Rolf Landauer	1998
Kees A. Schouhamer Immink	1999
Jun-ichi Nishizawa	2000
Robert H. Dennard	2001
Ed Hammer	2002
No Award	2003
Federico Capasso	2004
Peter Lawrenson	2005
Fawwaz T. Ulaby	2006
Russell D. Dupuis	2007
Dov Frohman-Bentchkowsky	2008
Tingye Li	2009
Ray Dolby	2010
Isamu Akasaki	2011
Michael F. Tompsett	2012
Ivan Paul Kaminow	2013
Ralph H. Baer	2014
James Julius Spilker, Jr.	2015
Robert W. Brodersen	2016
Magnus George Craford	2017
Eli Yablonovitch	2018

(\* ) Date of selection changed to date of presentation.

### **Medal for Engineering Excellence**

[Award Recipients with Citations](#) (PDF, 21 KB)

The Medal for Engineering Excellence was established in 1986 and is presented for exceptional achievement in application engineering in the technical disciplines of the IEEE, for the benefit of the public and the engineering profession. The medal was discontinued in November 2009.

Karl E. Martersteck, Jr.	1988
Walter A. Elmore	1989
John A. Pierce	1990
Alexander Feiner	1991
Charles Elachi	1992
Bernard C. DeLoach, Jr.	1993
Richard W. Dixon	1993

Robert L. Hartman	1993
Heiner Sussner	1994
Masasuke Morita	1995
John R. Dunki-Jacobs	1996
John G. Anderson	1997
C. James Erickson	1998
Kiyoji Morii	1999
Cyril G. Veinott	2000
L. Bruce McClung	2001
No Award	2002
Ralph S. Gens	2003
Richard L. Doughty	2004
H. Landis Floyd	2004
Thomas E. Neal	2004
No Award	2005
No Award	2006
No Award	2007
No Award	2008
No Award	2009

### **Medal for Environmental and Safety Technologies**

[Award Recipients with Citations](#) (PDF, 01 KB)

The IEEE Medal for Environmental and Safety Technologies was established in 2008 and is awarded for outstanding accomplishments in the application of technology in the fields of interest to the IEEE that improve the environment and/or public safety. The medal is sponsored by Toyota Motor Corporation.

Larry Chalfan	2010
Vicky Salazar	2010
Wayne F. Rifer	2010
Shoichi Sasaki	2011
John B. Goodenough	2012
Rachid Yazami	2012
Akira Yoshino	2012
Tsuneo Takahashi	2013
No award	2014
Rodolfo Schoeneburg	2015
Marica Paurevic	2015
Hans Weisbarth	2015
Masahiko Miyaki	2016
Yukihiro Shinohara	2016
Katsuhiko Takeuchi	2016
Alberto Broggi	2017
Jerome Faist	2018
Frank Klaus Tittel	2018

### **Founders Medal**

[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Founders Medal was established in 1952 and is awarded for outstanding contributions in the leadership, planning, and administration of affairs of great value to the electrical and electronics engineering profession. The Medal is sponsored by the [IEEE Foundation](#).

David Sarnoff	1953
Alfred N. Goldsmith	1954
Raymond A. Heising	1957
W. R. G. Baker	1958
Haraden Pratt	1960
Ralph Bown	1961
Frederick E. Terman	1963
Andrew G. L. McNaughton	1964
Elmer W. Engstrom	1966
Harvey Fletcher	1967
Patrick E. Haggerty	1968
E. Finley Carter	1969
Morris D. Hooven	1970
Ernst Weber	1971
Masaru Ibuka	1972
William R. Hewlett	1973
David Packard	1973
Lawrence A. Hyland	1974
John G. Brainerd	1975
Edward W. Herold	1976
Jerome B. Weisner	1977
Donald G. Fink	1978
Hanzo Omi	1979
Simon Ramo	1980
James Hillier	1981
Shigeru Yonezawa	1982
Joseph M. Pettit	1983
Koji Kobayashi	1984
William C. Norris	1985
George H. Heilmeier	1986
James B. Owens	1987
Ian M. Ross	1988
Ivan A. Getting	1989
Erich Bloch	1990
Irwin Dorros	1991
Roland W. Schmitt	1992
Kenneth H. Olsen	1993
Akio Morita	1994
Malcolm R. Currie	1995
Norman R. Augustine	1996
Gordon E. Moore	1997
Alan W. Rudge	1998
Benjamin M. Rosen	1999
Robert W. Galvin	2000
Robert A. Frosch	2001
Thomas E. Everhart	2002
Ray Stata	2003
Mildred Dresselhaus	2004
Eugene Wong	2005
Toshiharu Aoki	2006
Anita K. Jones	2007
Steven B. Sample	2008
Craig R. Barrett	2009
Paul E. Gray	2010
James F. Gibbons	2011
Faqir Chand Kohli	2012
Leo Beranek	2013
Eric Schmidt	2014
James Plummer	2015
No Award	2016
Takeo Kanade	2017
N.R. Narayana Murthy	2018

### **Richard W. Hamming Medal**

[Award Recipients with Citations](#) (PDF, 22 KB)

The IEEE Richard W. Hamming Medal was established in 1986 and is presented for exceptional contributions to information

sciences, systems and/or technology.  
The Medal is sponsored by QUALCOMM, Inc.

Richard W. Hamming	1988
Irving S. Reed	1989
Dennis M. Ritchie	1990
Kenneth L. Thompson	1990
Elwyn R. Berlekamp	1991
Lotfi A. Zadeh	1992
Jorma Rissanen	1993
Gottfried Ungerboeck	1994
Jacob Ziv	1995
Mark S. Pinsker	1996
Thomas M. Cover	1997
David D. Clark	1998
David A. Huffman	1999
Solomon W. Golomb	2000
A.G. Fraser	2001
Peter Elias	2002
Claude Berrou	2003
Alain Glavieux	2003
Jack Keil Wolf	2004
Neil J. A. Sloane	2005
Vladimir I. Levenshtein	2006
Abraham Lempel	2007
Sergio Verdú	2008
Peter Franzaszek	2009
Whitfield Diffie	2010
Martin E. Hellman	2010
Ralph C. Merkle	2010
Toby Berger	2011
Michael G. Luby	2012
Amin Shokrollahi	2012
Arthur Robert Calderbank	2013
Thomas Richardson	2014
Rüdiger Urbanke	2014
Imre Csiszar	2015
Abbas El Gamal	2016
Shlomo Shamai	2017
Erdal Arıkan	2018

### **Heinrich Hertz Medal**

[Award Recipients with Citations](#) (PDF, 19 KB)

The IEEE Heinrich Hertz Medal was established in 1987 and is awarded for outstanding achievements in electromagnetic waves. The medal was discontinued in November 2009.

Nathan Marcuvitz	1989
John D. Kraus	1990
Leopold B. Felsen	1991
James R. Wait	1992
Kenneth G. Budden	1993
Ronald N. Bracewell	1994
Jean Van Bladel	1995
Martin A. Uman	1996
L. R. Owen Storey	1997
Chen-To Tai	1998
Akira Ishimaru	1999
Arthur A. Oliner	2000
Adrianus T. De Hoop	2001
No Award	2002
No Award	2003
No Award	2004
No Award	2005
No Award	2006

No Award 2007  
 No Award 2008

**Medal for Innovations in Healthcare Technology**

[Award Recipients with Citations](#) (PDF, 01 KB)

The IEEE Medal for Innovations in Healthcare Technology was established in 2009 and is presented for exceptional contributions to technologies and applications benefitting healthcare, medicine, and the health sciences. The medal is sponsored by the IEEE Engineering in Medicine and Biology Society.

Ronald Nutt	2010
David Townsend	2010
Harrison H. Barrett	2011
Savio L.Y. Woo	2012
Robert Langer	2013
Leroy Hood	2014
Takuo Aoyagi	2015
Charles A. Mistretta	2016
Yulun Wang	2017
Thomas F. Budinger	2018

**Jack S. Kilby Signal Processing Medal**

[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Jack S. Kilby Signal Processing Medal was established in 1995 and is presented for outstanding achievements in signal processing. The Medal is sponsored by Texas Instruments, Incorporated.

Bernard Gold	1997
Charles M. Rader	1997
Thomas G. Stockham	1998
Lawrence R. Rabiner	1999
James F. Kaiser	2000
Thomas S. Huang	2001
James W. Cooley	2002
Hans W. Schuessler	2003
Thomas W. Parks	2004
James H. McClellan	2004
Fumitada Itakura	2005
Thomas Kailath	2006
Alan V. Oppenheim	2007
Robert M. Gray	2008
Charles Sidney Burrus	2009
Ronald Schafer	2010
Ingrid Daubechies	2011
Clifford Carter	2012
Bishnu S. Atal	2013
Thomas P. Barnwell, III	2014
Harry L. Van Trees	2015
Louis Scharf	2016
Martin Vetterli	2017
Bede Liu	2018

**Lamme Medal**

[Award Recipients with Citations](#) (PDF, 51 KB)

The IEEE Lamme Medal was established in 1928 and is presented for meritorious achievement in the development of electrical or electronic power apparatus or systems. The award was discontinued in August 2008.

Allan Bertram Field	1928
Rudolf E. Hellmund	1929
William J. Foster	1930
Giuseppe Faccioli	1931
Edward Weston	1932
Lewis B. Stillwell	1933
Henry E. Warren	1934
Vannevar Bush	1935
Frank Conrad	1936
Robert E. Doherty	1937
Marion A. Savage	1938
Norman W. Storer	1939
Comfort A. Adams	1940
Forrest E. Ricketts	1941
Joseph Slepian	1942
A. H. Kehoe	1943
S. H. Mortensen	1944
David C. Prince	1945
J. B. MacNeill	1946
A. M. MacCutcheon	1947
V. K. Zworykin	1948
C. M. Laffoon	1949
Donald I. Bohn	1950
Arthur E. Silver	1951
I. F. Kinnard	1952
F. A. Cowan	1953
A. M. deBellis	1954
C. R. Hanna	1955
H. H. Beverage	1956
H. S. Black	1957
P. L. Alger	1958
S. Beckwith	1958
L. W. Kilgore	1959
John G. Trump	1960
Charles Concordia	1961
E. L. Harder	1962
Loyal V. Bewley	1963
Schedule revised	1964*
A. Uno Lamm	1965
Rene Andre Baudry	1966
Warren P. Mason	1967
Nathan Cohn	1968
James D. Cobine	1969
Harry F. Olson	1970
Winthrop M. Leeds	1971
Yu H. Ku	1972
Robert H. Park	1972
Charles S. Draper	1973
Seymour B. Cohn	1974
Harold B. Law	1975
C. Kumar N. Patel	1976
Bernard M. Oliver	1977
Harry W. Mergler	1978
James M. Lafferty	1979
Eugene C. Starr	1980
George B. Litchford	1981
Marvin Chodorow	1982
Marion E. Hines	1983
William McMurray	1984
Loren Frank Stringer	1985
Ingolf Birger Johnson	1986
Leon K. Kirchmayer	1988
Eugene C. Sakshaug	1989

Thomas W. Dakin	1990
Shotaro Tominaga	1991
Dietrich R. Lambrecht	1992
Masayuki Ieda	1993
Michael E. Poloujadoff	1994
Narain G. Hingorani	1995
Bimal K. Bose	1996
Andre J. Calvaer	1997
Herbert H. Woodson	1998
B. Jayant Baliga	1999
Joachim Holtz	2000
No Award	2001
Sakae Yamamura	2002
No Award	2003
No Award	2004
No Award	2005
No Award	2006
No Award	2007
No Award	2008

(\*) Date of selection changed to date of presentation.

**[James H. Mulligan, Jr. Education Medal](#)**  
[Award Recipients with Citations](#) (PDF, 45 KB)

The IEEE James H. Mulligan, Jr. Education Medal was established in 1956 and is awarded for a career of outstanding contributions to education in the fields of interest of IEEE. The medal was renamed in 1999 in honor of James H. Mulligan, Jr. The medal is sponsored by MathWorks, Pearson Education Inc., and IEEE Life Members Fund.

F. E. Terman	1956
W. L. Everitt	1957
J. F. Calvert	1958
G. S. Brown	1959
Ernst Weber	1960
George F. Corcoran	1961
Ernst A. Guillemin	1962
William G. Dow	1963
B. R. Teare, Jr.	1964
Hugh H. Skilling	1965
William H. Huggins	1966
John R. Whinnery	1967
Edward C. Jordan	1968
Donald O. Pederson	1969
Jacob Millman	1970
Franz Ollendorff	1971
M. E. Van Valkenburg	1972
Lotfi A. Zadeh	1973
John G. Truxal	1974
Charles A. Desoer	1975
John G. Linvill	1976
Robert M. Fano	1977
Harold A. Peterson	1978
John R. Ragazzini	1979
Aldert van der Ziel	1980
Ernest S. Kuh	1981
King-Sun Fu	1982
Mischa Schwartz	1983
Athanasios Papaoulis	1984
James F. Gibbons	1985
Richard B. Adler	1986
Joseph W. Goodman	1987

Alan V. Oppenheim	1988
Ben G. Streetman	1989
James D. Meindl	1990
Hermann A. Haus	1991
Ronald W. Schafer	1992
Ronald A. Rohrer	1993
Chung Laung Liu	1994
Thomas Kailath	1995
Adel S. Sedra	1996
David A. Hodges	1997
Stephen W. Director	1998
Andries van Dam	1999
David A. Patterson	2000
Brian D. O. Anderson	2001
Petar V. Kokotovic	2002
Yasuharu Suematsu	2003
Paul R. Gray	2004
H. Vincent Poor	2005
Sanjit K. Mitra	2006
Andrew S. Tanenbaum	2007
Joseph Bordogna	2008
Jose B. Cruz	2009
Randy H. Katz	2010
Raj Mittra	2011
Fawwaz T. Ulaby	2012
J. David Irwin	2013
John George Proakis	2014
Richard Gordon Baraniuk	2015
Simon S. Haykin	2016
Stephen P. Boyd	2017
Delores M. Etter	2018

**[Jun-ichi Nishizawa Medal](#)**  
[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Jun-ichi Nishizawa Medal was established in 2002 and is awarded for outstanding contributions to material and device science technology, including practical application. The medal is sponsored by the Federation of Electric Power Companies, Japan.

Frederick H. Dill	2004
Jerry M. Woodall	2005
Hideo Sunami	2006
Mitsumasa Koyanagi	2006
Kiyoo Itoh	2006
Nicolaas Frans De Rooij	2007
Wolfgang Helfrich	2008
Martin Schadt	2008
James Fergason	2008
Chenming Hu	2009
Richard M. Swanson	2010
Bernard Lechner	2011
Peter Brody	2011
Fang-Chen Luo	2011
Mark T. Bohr	2012
Robert S. Chau	2012
Tahir Ghani	2012
Burn Lin	2013
Franz Laermer	2014
Andrea Urban	2014
Dimitri Antoniadis	2015
Masayoshi Esashi	2016
Ching W. Tang	2017
Stephen R. Forrest	2017
Mark Thompson	2017
Joe C. Campbell	2018

**Medal in Power Engineering**  
[Award Recipients with Citations](#) (PDF, 22 KB)

The IEEE Medal in Power Engineering was established in 2008 and is awarded for outstanding contributions to the technology associated with the generation, transmission, distribution, application and utilization of electric power for the betterment of society. The medal is sponsored by IEEE Applications Society, IEEE Industrial Electronics Society, IEEE Power Electronics Society and IEEE Power and Energy Society.

Prabha S. Kundur	2010
William F. Tinney	2011
Edmund O. Schweitzer III	2012
Hermann W. Dommel	2013
Thomas Anthony Lipo	2014
Fred C. Lee	2015
Arun G. Phadke	2016
Marian P. Kazmierkowski	2017
Hirofumi Akagi	2018

**Simon Ramo Medal**  
[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Simon Ramo Medal was established in 1982 and is awarded for exceptional achievement in systems engineering and systems science. The medal is sponsored by Northrop Grumman Corporation.

Samuel C. Phillips	1984
Amaldo M. Angelini	1986
William W. Simmons	1987
John S. Mayo	1988
Edward H. Sussenguth	1989
Paul E. Green, Jr.	1991
Claud M. Davis	1993
Jack M. Sipress	1994
Joseph T. Threston	1995
Donald J. Leonard	1996
No Award	1997
No Award	1998
No Award	1999
Andrew P. Sage	2000
Kurt E. Petersen	2001
Bradford Wells Parkinson	2002
David R. Heebner	2003
Boris E. Chertok	2004
Nikolai N. Sheremetevsky	2004
Neal A. Richardson	2005
George Gelb	2005
Baruch Berman	2005
Donald C. Wetzel	2006
Victor B. Lawrence	2007
Chrysostomos L. Nikias	2008
Albert F. Myers	2009
Barry W. Boehm	2010
Neil Siegel	2011
William "Red" Whittaker	2012
B. Gentry Lee	2013
Lyndon Evans	2014

**Robert N. Noyce Medal**  
[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Robert N. Noyce Medal was established in 1999 and is awarded for exceptional contributions to the microelectronics industry. The medal is funded in perpetuity through an endowment from the Intel Foundation.

Morris Chang	2000
Hajime Sasaki	2001
Yoshio Nishi	2002
Donald R. Scifres	2003
Craig R. Barrett	2004
Wilfred J. Corrigan	2005
Shoichiro Yoshida	2006
Aart J. De Geus	2007
Paul R. Gray	2008
Eliyahou Harari	2009
James C. Morgan	2010
Pasquale Pistorio	2011
Yoon-Woo Lee	2012
Sunlin Chou	2013
Youssef A. El-Mansy	2013
John E. Kelly, III	2014
Martin van den Brink	2015
Takeuo Sugano	2016
Henry I. Smith	2017
Tsugio Makimoto	2018

**Dennis J. Picard Medal for Radar Technologies and Applications**  
[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Dennis J. Picard Medal for Radar Technologies and Applications was established in 1999 and is awarded for outstanding accomplishments in advancing the fields of radar technologies and their applications. The medal is sponsored by the Raytheon Company.

Merrill Skolnik	2000
Fritz Steudel	2001
David K. Barton	2002
William A. Skillman	2003
David Atlas	2004
William J. Caputi, Jr.	2005
Eli Brookner	2006
Russell K. Raney	2007
Yaakov Bar-Shalom	2008
Philip M. Woodward	2009
Alfonso Farina	2010
James Headrick	2011
Karl Gerlach	2012
Michael Wicks	2013
Yuri Abramovich	2014
Marshall Greenspan	2015
Nadav Levanon	2016
Hugh Griffiths	2017
Mark Edward Davis	2018

Paul Kaminski	2015
John P. Lehoczky	2016
Ragunathan Rajkumar	2016
Lui Sha	2016
John Baras	2017
Heinz Stoewer	2018

Richard S. Muller	2013
David Neil Payne	2014
Lynn Conway	2015
Geoffrey Hinton	2016
No Award	2017
Thomas Bryn Haug	2018
Philippe Dupuis	2018

### **John von Neumann Medal**

[Award Recipients with Citations](#) (PDF, 36 KB)

The IEEE John von Neumann Medal was established in 1990 and is presented for outstanding achievements in computer-related science and technology. The Medal is sponsored by IBM Corporation.

C. Gordon Bell	1992
Frederick P. Brooks, Jr.	1993
John Cocke	1994
Donald E. Knuth	1995
Carver A. Mead	1996
Maurice V. Wilkes	1997
Ivan E. Sutherland	1998
Douglas C. Engelbart	1999
John L. Hennessy	2000
David A. Patterson	2000
Butler W. Lampson	2001
Ole-Johan Dahl	2002
Kristen Nygaard	2002
Alfred V. Aho	2003
Barbara H. Liskov	2004
Michael Stonebraker	2005
Edwin Catmul	2006
Charles Thacker	2007
Leslie Lamport	2008
Susan L. Graham	2009
John Hopcroft	2010
Jeffrey D. Ullman	2010
C.A.R. (Tony) Hoare	2011
Edward McCluskey	2012
Jack Dennis	2013
Cleve Moler	2014
James A. Gosling	2015
Christos H. Papadimitriou	2016
Vladimir Vapnik	2017
Patrick Cousot	2018

### **IEEE/RSE JAMES CLERK MAXWELL MEDAL**

[Award Recipients with Citations](#) (PDF, 34 KB)

The IEEE/RSE Wolfson James Clerk Maxwell Medal was established in 2006 and is awarded for groundbreaking contributions that have had an exceptional impact on the development of electronics and electrical engineering or related fields.

Irwin M. Jacobs	2007
Andrew J. Viterbi	2007
Sir Timothy Berners-Lee	2008
A. Sangiovanni- Vincentelli	2009
Amar G. Bose	2010
Marcian Edward Hoff	2011
Gerhard Sessler	2012
Richard M. White	2013

## **IEEE RECOGNITIONS**

### **IEEE HONORARY MEMBERSHIP**

[Award Recipients with Citations](#) (PDF, 37 KB)

IEEE Honorary Members are elected by the IEEE Board of Directors from among those who have rendered meritorious service to mankind in IEEE's designated fields of interest and who are not members of the IEEE. The award is sponsored by the IEEE.

John Bardeen	1981
Walter H. Brattain	1981
Edwin H. Land	1981
Brian W. Josephson	1982
Donald E. Knuth	1982
Wolfgang K. H. Panofsky	1982
George D. Dantzig	1983
Cecil H. Green	1983
Norman Ramsey	1983
M. G. K. Menon	1984
Herbert A. Simon	1984
Hideo Yamashita	1985
Arthur E. Bryson, Jr.	1986
Gene H. Golub	1987
Arno A. Penzias	1987
Luis W. Alvarez	1988
No Award	1989
No Award	1990
Akio Morita	1991
Mark Krivocheev	1992
Robert W. Galvin	1993
Michael Carpentier	1994
Ralph E. Gomory	1994
Lars Henry Ramquist	1995
Leon M. Lederman	1996
Hiroyuki Mizuno	1996
Pekka J. Tarjanne	1997
Pavagada V. Indiresan	1998
Sheila E. Widnall	1998
No Award	1999
Norio Ohga	2000
Charles M. Geschke	2001
James C. Morgan	2002
Jorma Ollila	2003
Tadashi Sasaki	2003
No Award	2004
Dean Kamen	2005
Vladimir Rokhlin	2006
Ian C. McRae	2007
Tsutae Shinoda	2007
Jong Yong Yun	2008
Gerald Posakony	2009
N. R. Narayana Murthy	2010
Avul Pakir Jainulabdeen Abdul Kalam	2011
Wang Jianzhou	2011
Yoshio Utsumi	2012
No award	2013



Shirley M. Tilghman	2014
Elon Musk	2015
Serge Haroche	2016
Rodolfo Zich	2016
James Dyson	2017
Mihal (Mike) Lazaridis	2018
Anton Zeilinger	2018

Ivan S. Coggeshall	1978
John D. Ryder	1979
Raymond W. Sears	1980
Robert H. Tanner	1981
Thomas H. Lee	1983
William W. Middleton	1984
Donald S. Brereton	1985
Robert C. Winton	1986
Robert F. Cotellessa	1987
Irene C. Peden	1988
Edward J. Doyle	1989
Robert M. Saunders	1990
Thelma Estrin	1991
Richard J. Backe	1992
Harold S. Goldberg	1993
Ronald G. Hoelzeman	1994
Henry L. Bachman	1995
Walter E. Proebster	1996
Robert A. Rivers	1997
Frederick T. Andrews	1998
Vijay K. Bhargava	1999
Charles A. Eldon	2000
Arthur P. Stern	2001
Robert T. H. Alden	2002
Charles Turner	2003
Jerry Yeargan	2004
Daniel Benigni	2005
Antonio C. Bastos	2006
Luis T. Gandia	2007
Maurice Papo	2008
James H. Beall	2009
Raymond D. Findlay	2010
Levent Onural	2011
Hugh Rudnick	2012
Barry L. Shoop	2013
V. Prasad Kodali	2014
Fumio Harashima	2015
Moshe Kam	2016
John T. Barr	2017
Loretta J. Arellano	2018

## IEEE SERVICE AWARDS

### Richard M. Emberson Award

[Award Recipients with Citations](#) (PDF, 25 KB)

The IEEE Richard M. Emberson Award was established in 1986 and is presented for distinguished service advancing the technical objectives of the IEEE. The Award is sponsored by IEEE Technical Activities.

Merlin G. Smith	1988
Jose B. Cruz, Jr.	1989
Harold Chestnut	1990
Stephen J. Kahne	1991
Bruno O. Weinschel	1992
William R. Tackaberry	1993
Oscar N. Garcia	1994
Theodore W. Hissey, Jr.	1995
Theodore S. Saad	1996
Friedolf M. Smits	1997
H. Troy Nagle	1998
Edward A. Parrish	1999
J. David Irwin	2000
Charles J. Robinson	2001
Robert W. Lucky	2002
Wilfred Kenneth Dawson	2003
Kenneth R. Laker	2004
Lloyd A. (Pete) Morley	2005
Don Bolle	2006
No Award	2007
James T. (Tom) Cain	2008
Harold L. Flescher	2009
James M. Tien	2010
Donald C. Loughry	2011
Bruce Eisenstein	2012
Leah H. Jamieson	2013
Wanda K. Reder	2014
Raymond S. Larsen	2015
Stephen Weinstein	2016
David Hodges	2017
Donald Heirman	2018

### Haraden Pratt Award

[Award Recipients with Citations](#) (PDF, 31 KB)

The IEEE Haraden Pratt Award was established in 1971 and is presented for outstanding volunteer service to the IEEE. The Award is sponsored by the IEEE Foundation.

Alfred N. Goldsmith	1972
Elgin B. Robertson, Sr.	1973
James H. Mulligan, Jr.	1974
Walter J. Barrett	1975
Clarence H. Linder	1976
Schedule revised	1977*

(\* ) Date of selection changed to date of presentation.

## IEEE CORPORATE RECOGNITIONS

### Corporate Innovation Award

[Award Recipients with Citations](#) (PDF, 42 KB)

The Corporate Innovation Award was established in 1985 as the Corporate Innovation Recognition and is presented for outstanding innovation by an organization in an IEEE field of interest. The award is sponsored by IEEE.

Intel Corporation	1986
Southern California	1986
Sony Corporation	1987
IBM Corporation	1987
AT&T Bell Laboratories	1988
Hewlett-Packard Company	1989
IBM Corp. - Somers, NY	1990
Apple Computer, Inc.	1991
Ericsson Radio Systems AB	1992
Philips Electronics	1992
Jet Propulsion Laboratory	1993
Bellcore	1994
IBM Corp. - Armonk, NY	1995

Texas Instruments/Digital	
Signal Processing Group	1996
Motorola, Inc.	1997
Microsoft Corporation	1998
BBN Technologies	1999
Nokia Corporation	1999
Lucent Technologies	2000
Sun Microsystems	2000
No Award	2001
Cadence DesignSystems, Inc.	2002
Seiko Epson Corporation	2002
Taiwan Semiconductor	
Manufacturing Co., Ltd.	2002
Xerox Corporation	2003
Titan Corporation	2003
Hewlett-Packard Company	2004
QUALCOMM, Inc.	2004
AMD	2005
NTT DoCoMo	2005
ARM Limited	2006
Toyota Motor Corporation	2007
Texas Instruments	
DLP Products	2007
Research in Motion	2008
Corning, Inc.	2009
IBM T.J. Watson Research	
Center	2009
Samsung Electronics Co.,	
Ltd	2010
IMEC	2011
SANYO Electric Co., Ltd.	2012
Applied Materials, Inc.	2013
Defense Advanced Research	
Projects (DARPA)	2014
Sandisk Corporation	2015
Intel Corporation	2016
Analog Devices, Inc.	2017
Pixar Animation Studios	2018

Angus McMillian Tait	1998
Bernard S. Meyerson	1999
Joel S. Birnbaum	2000
Michael J. Birck	2001
Chris Earnshaw	2001
No Award	2002
William J. Spencer	2003
Pasquale Pistorio	2004
No Award	2005
No Award	2006
Narayana N. R. Murthy	2007
No Award	2008
No Award	2009
Hidehito Obayashi	2010
Tze-Chiang Chen	2011
Tetsuya Iizuka	2012
Gururaj Deshpande	2013
Paul E. Jacobs	2014
Shang-Yi Chiang	2015
David Fairbanks Welch	2016

## IEEE PRIZE PAPER AWARDS

### W. R. G. Baker Award

[Award Recipients with Citations](#) (PDF, 43 KB)

The IEEE W. R. G. Baker Award was established in 1956 and is presented for the most outstanding paper reporting original work published in any IEEE archival publications (such as TRANSACTIONS, JOURNALS, and LETTERS), MAGAZINES, or PROCEEDINGS published during a three to five year window prior to the presentation of the award. It is sponsored by the IEEE Circuits and Systems, Communications, Control Systems, Information Theory, Power and Energy, Signal Processing, and Vehicular Technology Societies. The award was discontinued in February 2016.

### Ernst Weber Managerial Leadership Award

[Award Recipients with Citations](#) (PDF, 31 KB)

The IEEE Ernst Weber Managerial Leadership Award was established in 1985 as the Ernst Weber Engineering Leadership Recognition and is awarded for exceptional managerial leadership in the fields of interest to the IEEE. The award is sponsored by IEEE. The award was discontinued after 2016.

William C. Norris	1986
Kenneth H. Olsen	1986
Andrew S. Grove	1987
Ralph E. Gomory	1988
Arnaldo M. Angelini	1989
Roland W. Schmitt	1989
Irwin Dorros	1990
Edson Fregni	1990
Seymour R. Cray	1991
Bernard M. Gordon	1992
Percy Barnevik	1993
Clarence G. Thornton	1994
John B. Terry	1995
Alan G. Chynoweth	1996
Sol Triebwasser	1996
William J. Weisz	1997
John H. Crawford	1997
Jerome Swartz	1998

D. R. Fewer	1957
R. J. Kircher	1957
R. L. Trent	1957
R. L. Kyhl	1958
H. F. Webster	1958
R. D. Thronton	1959
E. J. Nalos	1960
Manfred Clynes	1961
Marvin Chodorow	1962
Tore Wessel-Berg	1962
Leonard Lewin	1963
Donald L. White	1964
D. C. Youla	1965
Robert G. Gallager	1966
Dean E. McCumber	1967
Allan G. Chynoweth	1967
J. Anderson	1968
H. B. Lee	1968
Tosior Koga	1969
George J. Friedman	1970
Cornelius T. Leondes	1970
Andrew H. Bobeck	1971
Robert F. Fischer	1971
Anthony J. Perneski	1971
J. P. Remeika	1971

L. G. Van Uitert	1971
Dirk J. Kuizenga	1972
Anthony E. Siegman	1972
Leon O. Chua	1973
David B. Large	1973
Lawrence Ball	1974
Arnold J. Farstad	1974
Stewart E. Miller	1975
Enrique A. J. Marcatili	1975
Tingye Li	1975
Robert W. Keyes	1976
Manfred R. Schroeder	1977
Eugene C. Sakshaug	1977
James S. Kresge	1978
Stanley A. Miske, Jr.	1978
Stephen W. Director	1979
Gary D. Hachtel	1979
Gordon M. Jacobs	1980
David J. Allstot	1980
Robert W. Brodersen	1980
Paul R. Gray	1980
Timothy C. May	1981
Murray H. Woods	1981
Garry D. Alley	1982
Carl O. Bozler	1982
Ryszard A. Malewski	1983
Chinh T. Nguyen	1983
Kurt Feser	1983
Nils Hylten-Cavallius	1983
Yannis Tsividis	1984
John W. Adams	1985
Alan N. Willson, Jr.	1985
Adi Shamir	1986
James L. Massey	1987
Peter Mathys	1987
Benjamin Kedem	1988
Randal E. Bryant	1989
Allen C. Newell	1990
John C. Doyle	1991
Keith Glover	1991
Bruce A. Francis	1991
Pramod P. Khargonekar	1991
Alon Orlitsky	1992
Narasimham Vempati	1993
Ilya W. Slutsker	1993
William F. Tinney	1993
Michael M. Green	1994
Alan N. Willson	1994
Petros Maragos	1995
James F. Kaiser	1995
Thomas F. Quatieri	1995
Will E. Leland	1996
Walter Willinger	1996
Daniel V. Wilson	1996
Murad S. Taqqu	1996
Rajiv Ramaswami	1997
Kumar N. Sivarajan	1997
Paul F. McManamon	1998
Terry A. Dorschner	1998
David L. Corkum	1998
Larry J. Friedman	1998
Douglas S. Hobbs	1998
Michael Holz	1998
Sergey Liberman	1998
Huy Q. Nguyen	1998
Daniel P. Resler	1998
Richard C. Sharp	1998
Edward A. Watson	1998
Wayne D. Grover	1999
A. Lee Swindlehurst	2000
Petra Stoica	2000
Keshab K. Parhi	2001

No Award	2002
No Award	2003
No Award	2004
No Award	2005
No Award	2006
No Award	2007
No Award	2008
No Award	2009
No Award	2010
No Award	2011
Gerhard Krieger	2012
Alberto Moreira	2012
Hauke Fiedler	2012
Irena Hajnsek	2012
Marian Werner	2012
Marwan Younis	2012
Manfred Zink	2012
Erdal Arıkan	2013
Stephen J. Wright	2014
Robert Nowak	2014
Mario A.T. Figueiredo	2014
Thomas L. Marzetta	2015
No Award	2016

### **Donald G. Fink Award**

[Award Recipients with Citations](#) (PDF, 51 KB)

The IEEE Donald G. Fink Award was established in 1979 and is presented for the outstanding survey, review, or tutorial paper in any of the IEEE TRANSACTIONS, JOURNALS, MAGAZINES, or PROCEEDINGS issued between 1 January and 31 December of the preceding year. The Award is sponsored by the IEEE Life Members Fund. The award was discontinued after 2016.

Whitfield Diffie	1981
Martin E. Hellman	1981
John O. Limb	1982
Arun N. Netravali	1982
Anil K. Jain	1983
Robert A. Scholtz	1984
Enders A. Robinson	1984
Arnold Reisman	1985
Thomas H. Johnson	1986
Shahid U. H. Qureshi	1987
Raymond L. Murray	1988
Karl Johan Astrom	1989
G. David Forney, Jr.	1990
Tadao Murata	1991
Anthony Ephremides	1992
Sergio Verdu	1992
Pravas R. Mahapatra	1993
Dusan S. Zrnic	1993
Andrew P. Sage	1994
Nikil Jayant	1995
James D. Johnston	1995
Robert J. Safranek	1995
Thomas Kailath	1996
Ali H. Sayed	1996
Asad A. Abidi	1997
Francis T. S. Yu	1998
Don A. Gregory	1998
Richard P. Wildes	1999
Ezio Biglieri	2000
Shlomo Shamai	2000
Xin Yao	2001

Ted Painter	2002
Andreas S. Spanias	2002
Sunil R. Das	2003
C. V. Ramamoorthy	2003
Mansour H. Assaf	2003
Emil M. Petriu	2003
Wen-Ben Jone	2003
Alan Willsky	2004
Henry Baltes	2005
Oliver Brand	2005
Christoph Hagleitner	2005
Andreas Hierlemann	2005
S.N. Diggavi	2006
N. Al-Dhahir	2006
A. Stamoulis	2006
A. Calderbank	2006
Arturas Zukauskas	2007
Michael Shur	2007
Yann Frauel	2008
Thomas J. Naughton	2008
Osamu Matoba	2008
Enrique Tajahuerce	2008
Bahram Javidi	2008
Daniel J. Costello	2009
G. David Forney	2009
John W. Arthur	2010
Andreas F. Molisch	2011
Larry J. Greenstein	2011
Mansoor Shafi	2011
Kannan Krishnan	2012
Stefano Galli	2013
Anna Scaglione	2013
Zhifang Wang	2013
Dipankar Raychaudhuri	2014
Narayan B. Mandayam	2014
Theodore S. Rappaport	2015
Shu Sun	2015
Rimma Mayzus	2015
Hang Zhao	2015
Yaniv Azar	2015
Kevin Wang	2015
George N. Wong	2015
Jocelyn K. Schulz	2015
Mathew Samimi	2015
Felix Guttierrez Jr.	2015
Timothy York	2016
Samuel Bear Powell	2016
Shengkui Gao	2016
Lindsey Kahan	2016
Tauseef Charanya	2016
Debajit Saha	2016
Nicholas Roberts	2016
Thomas W. Cronin	2016
Justin Marshall	2016
Samuel Achilefu	2016
Spencer P. Lake	2016
Baranidharan Raman	2016
Viktor Gruev	2016

**[Leon K. Kirchmayer Prize Paper Award](#)**  
[Award Recipients with Citations](#) (PDF, 14 KB)

The IEEE Leon K. Kirchmayer Prize Paper Award was established in 1997 and is presented for the most outstanding paper in any IEEE publication issued between 1 January and 31 December of the preceding year by an author or joint authors under thirty years of age at the

time the original manuscript was submitted. The award was discontinued in 2002.

Andrew R. Teel	1998
Naresh Shanbhag	1999
Geoffrey M. Davis	2000
A. Annamalai, Jr.	2001
Muriel Medard	2002

**Browder J. Thompson Memorial Prize Paper Award**

[Award Recipients with Citations](#) (PDF, 34 KB)

The IEEE Browder J. Thompson Memorial Prize Paper Award was established in 1945 and is presented for the most outstanding paper in any IEEE publication issued between 1 January and 31 December of the preceding year by an author or joint authors under thirty years of age at the time the original manuscript was submitted. This award was discontinued after the 1997 Award and replaced by the [Leon K. Kirchmayer Prize Paper Award](#).

G. M. Lee	1946
C. L. Dolph	1947
W. H. Huggins	1948
R. V. Pound	1949
J. F. Hull	1950
A. W. Rands	1950
A. B. Macnee	1951
H. W. Welch, Jr.	1952
R. C. Booton, Jr.	1953
R. L. Petritz	1954
B. D. Smith, Jr.	1955
J. E. Bridges	1956
D. A. Buck	1957
Arthur Karp	1958
F. H. Blecher	1959
J. W. Gewartowski	1960
Eiichi Goto	1961
Henri B. Smets	1962
Chih-Tang Sah	1963
Harry B. Lee	1964
S. R. Hofstein	1965
F. P. Heiman	1965
Kenneth M. Johnson	1966
Leon O. Chua	1967
R. A. Rohrer	1967
Michael L. Dertouzos	1968
Malvin C. Teich	1969
J. David Rhodes	1970
L. J. Griffiths	1971
G. David Forney, Jr.	1972
Jerry Mar	1973
J. Justesen	1974
Nuggehally S. Jayant	1975
Russell M. Mersereau	1976
Dan E. Dudgeon	1976
Michael R. Portnoff	1977
David A. Hounshell	1978
Marvin B. Lieberman	1979
Alan S. Willsky	1980
Lawrence H. Goldstein	1981
Sig Skelboe	1982
Daniel S. Kimes	1983

Julie A. Kirchner	1983
John C. Curlander	1984
Douglas MacGregor	1985
David S. Mothersole	1985
John K. Ousterhout	1986
Daniel Welt	1987
Jon Webb	1987
Lothar Thiele	1988
Roberto G. Rojas	1990
Keshab K. Parhi	1991
Bertrand S. Clark	1992
Andrew R. Barron	1992
Ramsey W. Haddad	1993
Anton T. Dahbura	1993
Anup B. Sharma	1993
Oliver M. Collins	1994
No Award	1995
Carl W. Baum	1996
Venugopal V. Veeravalli	1996
Hong-Yi Tzeng	1997
Kai-Yeung (Sunny) Siu	1997

Lihong Wang	2014
Christofer Toumazou	2015
K. Kirk Shung	2016
Bin He	2017
Mark S. Humayun	2018
Matthew O'Donnell	2019

### **Cledo Brunetti Award**

[Award Recipients with Citations](#) (PDF, 59 KB)

The IEEE Cledo Brunetti Award was established in 1975 and is presented for outstanding contributions to nanotechnology and technologies for microsystem miniaturization. The award is funded through a bequest of the Cledo Brunetti family.

## **IEEE STAFF AWARD**

### **Eric Herz Outstanding Staff Member Award**

[Award Recipients with Citations](#) (PDF, 37 KB)

The IEEE Eric Herz Outstanding Staff Member Award was established in 2005 in honor of Eric Herz, for sustained contributions by a present or past full-time staff member. The award may be awarded on an annual basis when a suitable candidate is nominated.

Thomas W. Bartlett	2006
William F. Van Der Vort	2007
Fern E. Katronetsky	2008
Ann Burgmeyer	2009
Julie Cozin	2010
Angela R. Burgess	2011
Judith L. Gorman	2012
Cecelia Jankowski	2013
Fran Zappulla	2014
Susan Hassler	2015
Karen Galuchie	2016
Mary Ward-Callan	2017
Michael Geselowitz	2019

Jack S. Kilby	1978
Robert N. Noyce	1978
Geoffrey W. A. Dummer	1979
Philip J. Franklin	1979
Marcian E. Hoff, Jr.	1980
Donald R. Herriott	1981
Robert H. Dennard	1982
Abe Offner	1983
Harry W. Rubinstein	1984
Alec N. Broers	1985
Richard M. White	1986
Michael Hatzakis	1987
Irving Ames	1988
Francois M. d'Heurle	1988
Richard E. Horstmann	1988
Shun-Ichi Iwasaki	1989
Else Kooi	1990
Hideo Sunami	1991
David A. Thompson	1992
Takafumi Nambu	1993
Mitsuru Ida	1993
Kamon Yoshiyuki	1993
Eiji Takeda	1994
Henry I. Smith	1995
Mitsumasa Koyanagi	1996
Dieter P. Kern	1997
George A. Sai-Halasz	1997
Matthew R. Wordeman	1997
Richard S. Muller	1998
Roger T. Howe	1998
David K. Ferry	1999
Robert E. Fontana, Jr.	2000
R. Fabian W. Pease	2001
Mark Lundstrom	2002
Supriyo Datta	2002
Andrew R. Neureuther	2003
Stephen Y. Chou	2004
William Oldham	2005
Susumu Namba	2006
Sandip Tiwari	2007
Michel Bruel	2008
Burn Jeng Lin	2009
Ghavam Shahidi	2010
Massimo Fischetti	2011
David Frank	2011
Steven Laux	2011
Yan Borodovsky	2012
Sam Sivakumar	2012
Giorgio Baccarani	2013
Martin van den Brink	2014

## **IEEE TECHNICAL FIELD AWARDS**

### **Biomedical Engineering Award**

[Award Recipients with Citations](#) (PDF, 16 KB)

The IEEE Biomedical Engineering Award was established in 2011 and is presented for outstanding contributions to the field of biomedical engineering. The award is sponsored by the IEEE Engineering in Medicine and Biology, Circuits and Systems, and Computational Intelligence Societies.

Robert Plonsey	2013
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Hiroshi Iwai	2015
Akira Toriumi	2016
Guido Groeseneken	2017
Siegfried Selberherr	2018
Daniel C. Edelstein	2019
Alfred Grill	2019
Chao-Kun Hu	2019

### **Electronics Packaging Award**

[Award Recipients with Citations](#) (PDF, 35 KB)

The IEEE Electronics Packaging Award was established in 2002 and awarded for outstanding contributions to advancing components, electronic packaging or manufacturing technologies. The award is sponsored by the IEEE Electronics Packaging Society.

John W. Balde	2004
Yutaka Tsukada	2005
C.P. Wong	2006
Dimitry Grabbe	2007
Karl Puttlitz	2008
Paul A. Totta	2008
George G. Harman	2009
Herbert Riechl	2010
Rao R. Tummala	2011
Mauro Walker	2012
John Lau	2013
Avram Bar-Cohen	2014
Nasser Bozorg-Grayeli	2015
Michael Pecht	2016
Paul S. Ho	2017
King-Ning Tu	2017
William Chen	2018
Ephraim Suhir	2019

### **Control Systems Award**

[Award Recipients with Citations](#) (PDF, 57 KB)

The IEEE Control Systems Award was established in 1980 and is presented for outstanding contributions to control systems engineering, science, or technology. The award is sponsored by the IEEE Control Systems Society.

Howard H. Rosenbrock	1982
Arthur E. Bryson, Jr.	1984
George Zames	1985
Charles A. Desoer	1986
Walter Murray Wonham	1987
Dante C. Youla	1988
Yu-Chi Ho	1989
Karl Johan Astrom	1990
Roger W. Brockett	1991
Harold J. Kushner	1992
Moshe M. Zakai	1993
Elmer G. Gilbert	1994
Petar V. Kokotovic	1995
Vladimir A. Yakubovich	1996
Brian D. O. Anderson	1997
Jan C. Willems	1998
A. Stephen Morse	1999

Sanjoy K. Mitter	2000
Keith Glover	2001
Pravin Varaiya	2002
N. N. Krasovski	2003
John Doyle	2004
Manfred Morari	2005
P.R. Kumar	2006
Lennart Ljung	2007
Mathukumalli Vidyasagar	2008
David Q. Mayne	2009
Graham Clifford Goodwin	2010
Eduardo D. Sontag	2011
Alberto Isidori	2012
Stephen P. Boyd	2013
Tamer Basar	2014
Bruce Francis	2015
Arthur J. Krener	2016
Richard M. Murray	2017
John Tsitsiklis	2018
Pramod Khargonekar	2019

### **Harry Diamond Memorial Award**

[Award Recipients with Citations](#) (PDF, 29 KB)

The IEEE Harry Diamond Memorial Award was presented for outstanding technical contributions in the field of government service in any country, as evidenced by publication in professional society journals. This award was discontinued as an IEEE-level award in 1992, it is currently being offered as an IEEE-USA Technical Achievement Award.

A. V. Haeff	1950
M. J. E. Golay	1951
Newbern Smith	1952
R. M. Page	1953
Harold Zahl	1954
Bernard Salzberg	1955
W. S. Hinman, Jr.	1956
Georg Goubau	1957
E. W. Allen, Jr.	1958
J. W. Herbstreit	1959
K. A. Norton	1960
H. L. Brueckmann	1961
William Culshaw	1962
Allen H. Schooley	1963
James R. Wait	1964
George J. Thaler	1965
John J. Egli	1966
Rudolf A. Stampfl	1967
Harry I. Davis	1968
Maurice Apstein	1969
Allen V. Astin	1970
Arthur H. Guenther	1971
William B. McLean	1972
Harold Jacobs	1973
Chester H. Page	1974
Louis Costrell	1975
Maxime A. Faget	1976
Jacob Rabinow	1977
David M. Kerns	1978
Henry P. Kalmus	1979
Martin Greenspan	1980
George Abraham	1981
Jules Aarons	1982
Merrill I. Skolnik	1983

Sydney R. Parker	1984
Howard S. Jones, Jr.	1985
Thomas G. Giallorenzi	1986
Carl E. Baum	1987
Richard J. Doviak	1988
Dusan S. Zmic	1988
William F. Utlaut	1989
Robert E. Hebner, Jr.	1990
Harold L. Hughes	1991
Robert J. Mailloux	1992

Sadaoki Furui	2010
Julia Hirschberg	2011
James Baker	2012
Janet Baker	2012
Victor Zue	2013
Biing-Hwang Juang	2014
Stephen John Young	2015
Takehiro Moriya	2016
Mark Yoffee Liberman	2017
Mari Ostendorf	2018
Hermann Ney	2019

### **Electromagnetics Award**

[Award Recipients with Citations](#) (PDF, 39 KB)

The IEEE Electromagnetics Award was established in 1996 and is presented for outstanding contributions to the theory and/or application of electromagnetics. The award is sponsored by the IEEE Antennas and Propagation, Microwave Theory and Techniques, Geoscience and Remote Sensing, and Electromagnetic Compatibility Societies.

Robert E. Collin	1999
Roger F. Harrington	2000
Fawwaz T. Ulaby	2001
Robert C. Hansen	2002
Leopold B. Felsen	2003
Jin Au Kong	2004
Clayton R. Paul	2005
Raj Mittra	2006
Carl Edward Baum	2007
Werner Wiesbeck	2008
Kenneth K. Mei	2009
Thomas B. A. Senior	2010
Yahya Rahmat-Samii	2011
Nader Engheta	2012
Leung Tsang	2013
Allen Taflove	2014
Donald Wilton	2015
Giorgio Franceschetti	2016
Weng Cho Chew	2017
Tatsuo Itoh	2018
Richard W. Ziolkowski	2019

### **James L. Flanagan Speech and Audio Processing Award**

[Award Recipients with Citations](#) (PDF, 17 KB)

The IEEE James L. Flanagan Award was established in 2002 and is presented for an outstanding contribution to the advancement of speech and/or audio signal processing. The award is sponsored by IEEE Signal Processing Society.

Gunnar Fant	2004
Kenneth N. Stevens	2004
Frederick Jelinek	2005
James D. Johnston	2006
Allen Gersho	2007
Raj Reddy	2008
John Makhoul	2009

### **Fourier Award for Signal Processing**

[Award Recipients with Citations](#) (PDF, 13 KB)

The IEEE Fourier Award was established in 2012 and is presented for an outstanding contribution to the advancement of signal processing, other than in the areas of speech and audio processing. The award is sponsored by the IEEE Signal Processing Society and the IEEE Circuits and Systems Society.

Georgios B. Giannakis	2015
Bede Liu	2016
Russ Mersereau	2017
Peter Stoica	2018
Alan C. Bovik	2019

### **Andrew S. Grove Award**

[Award Recipients with Citations](#) (PDF, 39 KB)

The IEEE Andrew S. Grove Award was established in 1999 and is presented for outstanding contributions to solid-state devices and technology. The award is sponsored by the IEEE Electron Devices Society.

Wolfgang Fichtner	2000
Al F. Tasch	2001
Dimitri A. Antoniadis	2002
Mark T. Bohr	2003
Krishna C. Saraswat	2004
T. P. Ma	2005
Chang-Gyu Hwang	2006
James D. Plummer	2007
Stefan K. Lai	2008
Eric Fossum	2009
Bijan Davari	2010
Judy Hoyt	2011
Eugene A. Fitzgerald	2011
Jean-Pierre Colinge	2012
Shinichi Takagi	2013
Sanjay Banerjee	2014
Masayoshi Esashi	2015
Carlos Hernando Diaz	2016
Sorin Cristoloveanu	2017
Gurtej S. Sandhu	2018
Digh Hisamoto	2019

### **William M. Habirshaw Award**

[Award Recipients with Citations](#) (PDF, 39 KB)

The William M. Habirshaw Award was presented

for outstanding contributions in the field of the transmission and distribution of electric power. This award was discontinued after the 1986 Award and replaced by the [IEEE Herman Halperin Electric Transmission and Distribution Award](#).

William A. Del Mar	1959
Selden B. Crary	1960
Samuel B. Griscom	1961
Herman Halperin	1962
L. M. Robertson	1963
C. S. Schifreen	1964
Wilfred F. Skeats	1965
I. Birger Johnson	1966
Robert J. Wiseman	1967
Eugene C. Starr	1968
James A. Rawls	1969
Fred J. Vogel	1970
Gunnar Jancke	1971
Lionel Cahill	1972
J. J. Archambault	1972
Eugene W. Boehne	1973
Herbert R. Stewart	1974
Everett J. Harrington	1975
Francis J. Lane	1976
Schedule revised	1977*
Martin H. McGrath	1978
Howard C. Barnes	1979
Theodore J. Nagel	1979
Edward W. Kimbark	1980
William R. Johnson	1981
Peter L. Bellaschi	1982
Andrew F. Corry	1983
Ralph S. Gens	1984
Harry M. Ellis	1985
Harold N. Scherer, Jr.	1986

(\*) Date of selection changed to date of presentation.

**[Herman Halperin Electric Transmission and Distribution Award](#)**  
[Award Recipients with Citations](#) (PDF, 48 KB)

The IEEE Herman Halperin Electric Transmission and Distribution Award was established in 1986 and is awarded for outstanding contributions to electric transmission and distribution. The award is sponsored by the Robert and Ruth Halperin Foundation, in memory of the late Herman & Edna Halperin, and the IEEE Power and Energy Society.

Robert F. Lawrence	1987
Luigi Paris	1988
John J. Daugherty	1989
John A. Casazza	1990
John G. Anderson	1991
Andrew R. Hileman	1992
Mat Darveniza	1993
Abdel-Aziz A Fouad	1994
Vernon L. Chartier	1995
Farouk A. M. Rizk	1996
B. Don Russell	1997
Vincent T. Morgan	1998

Charles L. Wagner	1999
Arun G. Phadke	2000
Arthur C. Westrom	2001
John J. Vithayathil	2002
Sarma Maruvada	2003
Andrew J. Eriksson	2004
James J. Burke	2005
Anjan Bose	2006
Eric B. Forsyth	2007
Robert C. Degeneff	2008
Carson W. Taylor	2009
Carlos Katz	2010
John H. Brunke	2011
Michel Duval	2012
Vijay Vittal	2013
Willem Boone	2014
Wolfram Boeck	2015
George Anders	2016
George Dorwart Rockefeller	2017
Jinliang He	2018
Steven Boggs	2019

**[Masaru Ibuka Consumer Electronics Award](#)**  
[Award Recipients with Citations](#) (PDF, 48 KB)

The IEEE Masaru Ibuka Consumer Electronics Award was established in 1987 and is presented for outstanding contributions in the field of consumer electronics technology. The award is sponsored by Sony Corporation.

Heitaro Nakajima	1989
Johannes Petrus Sinjou	1989
Norman L. Stauffer	1990
Gilbert F. Amelio	1991
Isamu Washizuka	1992
George L. Brantingham	1993
Paul S. Breedlove	1993
Richard H. Wiggins	1993
Carl G. Eilers	1994
Irving S. Reed	1995
Gustave Solomon	1995
Kees A. Schouhamer Immink	1996
Ray M. Dolby	1997
Jerrold A. Heller	1998
Leonardo Chiariglione	1999
Marvin H. White	2000
Ulrich Reimers	2001
Takashi Fujio	2002
Kozo Hayashi	2002
Masao Sugimoto	2002
Masahiko Morizono	2002
Yuichi Ninomiya	2002
Richard H. Small	2003
Neville Thiele	2003
Karl Heinz Brandenburg	2004
No Award	2005
Wayne Bretl	2006
Richard Citta	2006
Wayne Luplow	2006
Tomlinson Holman	2007
Ralph H. Baer	2008
Eugene J. Polley	2009
James Barton	2010
Joan Laverne Mitchell	2011
Gisle Bjontegaard	2012
Gary J. Sullivan	2012
Thomas Wiegand	2012



Martin Dietz	2013
Kristofer Kjörling	2013
Lars Liljeryd	2013
No award	2014
Martin Cooper	2015
Steven Sasson	2016
John O'Sullivan	2017
David Skellern	2017
Terence Pericival	2017
Linus Benedict Torvalds	2018
Tomonori Aoyama	2019
Takashi Hayasaka	2019

**Award in International Communication**  
[Award Recipients with Citations](#) (PDF, 39 KB)

The IEEE Award in International Communication was established in 1966 and is awarded for outstanding contributions to international communication. The award was discontinued in November 2007.

E. Maurice Deloraine	1966
Leonard Jaffe	1967
Edward W. Allen	1968
Henri Busignies	1969
Herre Rinia	1970
Eugene F. O'Neill	1971
Johannes A. Greefkes	1972
Frank de Jager	1972
Vladimir A. Kotelnikov	1973
Leslie H. Bedford	1974
John G. Puente	1975
Sidney Metzger	1976
No Award	1977*
F. Louis H. M. Stumpers	1978
A. Nejat Ince	1979
Armig B. Kandoian	1980
Richard C. Kirby	1981
Hiroshi Inose	1982
Lynn W. Ellis	1983
No Award	1984
Frederick T. Andrews, Jr.	1985
Richard B. Nichols	1986
Ken-Ichi Miya	1987
John S. Ryan	1988
Theodor Irmer	1989
Samuel J. Campanella	1990
Jack M. Sipress	1991
Francesco Carassa	1992
Pekka J. Tarjanne	1993
Stephen Robin Temple	1994
David D. Clark	1995
Kunishi Nosaka	1996
Maurizio Decina	1997
No Award	1998
Hisashi Kaneko	1999
No Award	2000
Sogo Okamura	2001
Karl Heinz Rosenbrock	2002
No Award	2003
Victor B. Lawrence	2004
Lawrence H. Landweber	2005
Yasuo Hirata	2006

(\*) Date of selection changed to date of presentation.

**[Internet Award](#)**  
[Award Recipients with Citations](#) (PDF, 19 KB)

The IEEE Internet Award was established in 1999 and is presented for exceptional contributions to the advancement of Internet technology for network architecture, mobility and/or end-use applications. The award is sponsored by Nokia Corporation.

Paul Baran	2000
Donald W. Davies	2000
Leonard Kleinrock	2000
Lawrence G. Roberts	2000
Louis Pouzin	2001
Stephen D. Crocker	2002
Paul V. Mockapetris	2003
Raymond Tomlinson	2004
David H. Crocker	2004
Sally Floyd	2005
Scott Shenker	2006
No Award	2007
Michael (Mike) Brescia	2008
Virginia Travers	2008
Robert M. Hinden	2008
Lixia Zhang	2009
Stephen Deering	2010
Jun Murai	2011
Mark Handley	2012
David Mills	2013
Jon Crowcroft	2014
KC Claffy	2015
Vern Paxson	2015
Henning Schulzrinne	2016
Deborah Estrin	2017
Ramesh Govindan	2018
Jennifer Rexford	2019

**Reynold B. Johnson Data Storage Device Technology Award**  
[Award Recipients with Citations](#) (PDF, 12 KB)

The IEEE Reynold B. Johnson Data Storage Device Technology Award was established in 2004 and is presented for outstanding contributions to the advancement of information storage with emphasis on technical contributions in computer data storage device technology. The award was discontinued in February 2011.

Eliyahou Harari	2006
Sanjay Mehrotra	2006
Jack Yuan	2006
Mason L. Williams	2007
Stanley H. Charap	2008
Kinam Kim	2009
David B. Bogy	2010
No Award	2011

**[Reynold B. Johnson Information Storage Systems Award](#)**  
[Award Recipients with Citations](#) (PDF, 20 KB)

The IEEE Reynold B. Johnson Information Storage Systems Award was established in 1992 and is presented for outstanding contributions to information storage, with emphasis on computer storage systems. The award is sponsored by the IEEE Reynold B. Johnson Information Storage Systems Award Fund. The award was discontinued in 2016.

John M. Harker	1993
C. Denis Mee	1994
James U. Lemke	1995
Nobutake Imamura	1996
Alan F. Shugart	1997
Jean-Pierre Lazzari	1998
David Patterson	1999
Randy Katz	1999
Garth Gibson	1999
Mark H. Kryder	2000
Tu Chen	2001
Christopher H. Bajorek	2002
H. Neal Bertram	2003
Virgil S. Speriosu	2004
Bruce A. Gurney	2004
Francois Dolivo	2005
Jaishankar M. Menon	2006
Dave Hitz	2007
James Lau	2007
Alan Jay Smith	2008
Marshall Kirk McKusick	2009
Moshe Yanai	2010
No Award	2011
Naoya Takahashi	2012
Michael Kazar	2013
John K. Ousterhout	2014
Mendel Rosenblum	2014
Dov Moran	2015
Amir Ban	2015
Simon Litsyn	2015

### **Richard Harold Kaufmann Award**

[Award Recipients with Citations](#) (PDF, 25 KB)

The IEEE Richard Harold Kaufmann Award was established in 1986 and is presented for outstanding contributions in industrial systems engineering. The award is sponsored by the IEEE Industry Applications Society.

Walter C. Huening, Jr.	1988
Bernard W. Whittington	1989
Rene Castenschild	1990
John R. Dunki-Jacobs	1991
Kao Chen	1992
George W. Walsh	1993
Daniel J. Love	1994
N. Shan Griffith	1995
Marcus O. Durham	1996
Thomas E. Sparling	1997
James A. Oliver	1998
Baldwin Bridger, Jr.	1999
Alton Dewitt Patton	2000
Louie J. Powell	2001
H. Landis Floyd, II	2002
Edward L. Owen	2003

Richard L. Nailen	2004
A. P. Meliopoulos	2005
George Younkin	2006
Md. Azizur Rahman	2007
Hirofumi Akagi	2008
Ronald G. Harley	2009
Gerald T. Heydt	2010
David Doyle	2011
John Nelson	2012
Kaushik Rajashekara	2013
Robert D. Lorenz	2014
Charles J. Mozina	2015
G.S. Peter Castle	2016
Erling Hesla	2017
Greg Charles Stone	2018
Susumu Tadakuma	2019

### **Joseph F. Keithley Award in Instrumentation and Measurement** [Award Recipients with Citations](#) (PDF, 22 KB)

The IEEE Joseph F. Keithley Award in Instrumentation and Measurement was established in 2000 for outstanding contributions in electrical measurement. The award is sponsored by Keithley Instruments, a Tektronix company and the IEEE Instrumentation and Measurement Society.

No Award	2003
Henry P. Hall	2004
Clark A. Hamilton	2005
Alessandro M. Ferrero	2006
Douglas Kent Rytting	2007
Robert G. Fulks	2008
Bryan P. Kibble	2009
No Award	2010
Reza Zoughi	2011
Rik Pintelton	2012
Dylan Forrest Williams	2013
Thomas E. Linnenbrink	2014
Jean-Charles Bolomey	2015
Samuel Benz	2016
Jerome John Blair	2017
David Wayne Allan	2018
Alan S. Finkel	2019

### **Mervin J. Kelly Award**

The IEEE Mervin J. Kelly Award was bestowed in recognition of outstanding contributions in the field of telecommunication. This award was discontinued in 1975.

Mervin J. Kelly	1960
Harry Nyquist	1961
Claude E. Shanon	1962
W. L. Everitt	1963
Harald T. Friis	1964
Stephen O. Rice	1965
Murray G. Crosby	1966
Harry F. Olson	1967
William R. Bennett	1968
Hendrik C. A. Van Duuren	1969
David A. McLean	1970

Harold A. Rosen	1971
Roger A. Sykes	1972
Leon S. Nergaard	1973
Harold M. Barlow	1974
Alton C. Dickieson	1975

**Gustav Robert Kirchhoff Award**

[Award Recipients with Citations](#) (PDF, 17 KB)

The IEEE Gustav Robert Kirchhoff Award was established in 2003 and is presented for outstanding contribution to the fundamentals of any aspect of electronic circuits and systems that has a long-term significance or impact. The award is sponsored by the IEEE Circuits and Systems Society.

Leon O. Chua	2005
Gabor Temes	2006
Yannis P. Tsividis	2007
Alfred Fettweis	2008
Ernest S. Kuh	2009
Hitoshi Watanabe	2010
Charles A. Desoer	2011
Ronald A. Rohrer	2012
Sanjit Kumar Mitra	2013
Chung Laung Liu	2014
Yosiro Oono	2015
P.P. Vaidyanathan	2016
Marcel Pelgrom	2017
Alan Willson, Jr.	2018
Kenneth Martin	2019

**Leon K. Kirchmayer Graduate Teaching Award**

[Award Recipients with Citations](#) (PDF, 25 KB)

The IEEE Leon K. Kirchmayer Graduate Teaching Award was established in 1990 and is awarded for inspirational teaching of graduate students in the IEEE fields of interest. The award was renamed in 2002 in honor of Leon K. Kirchmayer. The award is sponsored by the Leon K. Kirchmayer Memorial Fund.

James H. Mulligan, Jr.	1992
Rudolf Saal	1993
Thomas K. Gaylord	1994
Alberto Sangiovanni-Vincentelli	1995
Sung-Mo (Steve) Kang	1996
Ronold W. P. King	1997
Gabor C. Temes	1998
Lester Fuess Eastman	1999
Weng Cho Chew	2000
H. Vincent Poor	2001
Vijay K. Bhargava	2002
Robert G. Meyer	2003
Simon Haykin	2004
Jagdishkumar Aggarwal	2005
Toby Berger	2006
Michael Shur	2007
Supriyo Datta	2008
Roger W. Brockett	2009
Alan N. Willson, Jr.	2010

John D. Cressler	2011
Anthony Constantinides	2012
Hidenori Akiyama	2013
John Mathew Cioffi	2014
Daniel J. Costello	2015
R.J. Ray Liu	2016
Chung-Chieh Jay Kuo	2017
Mark S. Lundstrom	2018
Gregory Wornell	2019

**Koji Kobayashi Computers and Communications Award**

[Award Recipients with Citations](#) (PDF, 27 KB)

The IEEE Koji Kobayashi Computers and Communications Award was established in 1986 and is awarded for outstanding contributions to the integration of computers and communications. The award is sponsored by NEC Corporation.

Stuart Wecker	1988
Alexander G. Fraser	1989
Elwyn R. Berlekamp	1990
Stephen S. Lavenberg	1991
Martin Reiser	1991
Vinton G. Cerf	1992
Robert E. Kahn	1992
Gottfried Ungerboeck	1993
Jonathan Shields Turner	1994
Norman Abramson	1995
K. Mani Chandu	1996
Tim Berners-Lee	1997
Jack Keil Wolf	1998
Whitfield Diffie	1999
Martin E. Hellman	1999
Ralph Charles Merkle	1999
Ronald L. Rivest	2000
Adi Shamir	2000
Leonard Adleman	2000
John M. Cioffi	2001
Van Jacobson	2002
Bruce Hajek	2003
No Award	2004
Frank Kelly	2005
Nicholas F. Maxemchuk	2006
Donald F. Towsley	2007
Don Coppersmith	2008
Nick McKeown	2009
Larry Peterson	2010
Thomas J. Richardson	2011
Rüdiger L. Urbanke	2011
Jean Walrand	2012
Thomas Edward Anderson	2013
George Varghese	2014
Albert Greenberg	2015
Leandros Tassioulas	2016
Kannan Ramchandran	2017
Victor Bahl	2018
Rayadurgam Srikant	2019

**Eli Lilly Award in Medical and Biological Engineering**

[Award Recipients with Citations](#) (PDF, 12 KB)

The IEEE Eli Lilly Medical and Biological Engineering Award was established in 1992 and

is presented for outstanding achievement in, and contribution to, the field of medical and biological engineering. The award was discontinued in 2000.

No Award

1999

Max Anliker	1993
Earl E. Bakken	1994
No Award	1995
No Award	1996
No Award	1997
No Award	1998
No Award	1999

**Morris N. Liebmann Memorial Award**  
[Award Recipients with Citations](#) (PDF, 54 KB)

The IEEE Morris N. Liebmann Memorial Award was established in 1919 and is awarded for important contributions to emerging technologies recognized within recent years. This award was discontinued after the 2000 award and replaced by the [IEEE Daniel E. Noble Award for Emerging Technologies](#).

**Morris E. Leeds Award**  
[Award Recipients with Citations](#) (PDF, 40 KB)

The IEEE Morris E. Leeds Award was established in 1958 and is presented for outstanding contributions in the field of electrical measurement. Special consideration is given to contributions made before the candidate's thirty-sixth birthday. The award was discontinued in 2000.

Herbert B. Brooks	1959
Perry A. Borden	1960
Theodore A. Rich	1961
Bernard E. Lenehan	1962
Francis B. Silsbee	1963
John G. Ferguson	1964
Harold E. Edgerton	1965
William W. Mumford	1966
Henry R. Chope	1967
Albert J. Williams, Jr.	1968
Harry W. Houck	1969
Harold I. Ewen	1970
Martin E. Packard	1971
Forest K. Harris	1972
C. Howard Vollum	1973
Norbert L. Kusters	1974
No Award	1975
Francis L. Hermach	1976
Arthur M. Thompson	1977
Thomas M. Dauphinee	1978
Robert D. Cutkosky	1979
Wallace H. Coulter	1980
Frank C. Creed	1981
Lothar Rohde	1982
Erich P. Ippen	1983
Charles V. Shank	1983
Leonard S. Cutler	1984
Donald C. Cox	1985
Ian Kay Harvey	1986
William J. Moore	1987
David V. Lang	1988
Ray Bartnikas	1989
Ryszard A. Malewski	1990
David H. Auston	1991
H. Kumar Wickramasinghe	1992
No Award	1993
Oliver C. Wells	1994
Roger B. Marks	1995
Dylan F. Williams	1995
Mark B. Ketchen	1996
Malvin C. Teich	1997
No Award	1998

L. F. Fuller	1919
R. A. Weagant	1920
R. A. Heising	1921
C. S. Franklin	1922
H. H. Beverage	1923
J. R. Carson	1924
Frank Conrad	1925
Ralph Bown	1926
A. H. Taylor	1927
W. G. Cady	1928
E. V. Appleton	1929
A. W. Hull	1930
Stuart Ballantine	1931
Edmond Bruce	1932
Heinrich Barkhausen	1933
V. K. Zworykin	1934
F. B. Llewellyn	1935
B. J. Thompson	1936
W. H. Doherty	1937
G. C. Southworth	1938
H. T. Friis	1939
H. A. Wheeler	1940
P. T. Farnsworth	1941
S. A. Schelkunoff	1942
W. L. Barrow	1943
W. H. Hansen	1944
P. C. Goldmark	1945
Albert Rose	1946
J. R. Pierce	1947
S. W. Seeley	1948
C. E. Shannon	1949
O. H. Schade	1950
R. B. Dome	1951
William Shockley	1952
J. A. Pierce	1953
R. R. Warnecke	1954
A. V. Loughren	1955
Kenneth Bullington	1956
O. G. Villard, Jr.	1957
E. L. Ginzton	1958
Nicolaas Bloembergen	1959
C. H. Townes	1959
J. A. Rajchman	1960
Leo Esaki	1961
Victor H. Rumsey	1962
Ian Munro Ross	1963
Arthur L. Schawlow	1964
William R. Bennett, Jr.	1965
Paul K. Weimer	1966
No Award	1967
Emmett N. Leith	1968
John B. Gunn	1969
John A. Copeland	1970
Martin Ryle	1971
Stewart E. Miller	1972

Nick Holonyak, Jr.	1973
Willard S. Boyle	1974
George E. Smith	1974
A. H. Bobeck	1975
P. C. Michaelis	1975
H. E. D. Scovil	1975
Herbert J. Shaw	1976
Horst H. Berger	1977
Siegfried K. Wiedmann	1977
Kuen C. Kao	1978
Robert D. Maurer	1978
John B. MacChesney	1978
Ping King Tien	1979
A. J. DeMaria	1980
Calvin F. Quate	1981
John R. Arthur, Jr.	1982
Alfred Y. Cho	1982
Robert W. Brodersen	1983
Paul R. Gray	1983
David A. Hodges	1983
David E. Carlson	1984
Christopher R. Wronski	1984
Russell D. Dupuis	1985
Harold M. Manasevit	1985
Bishnu S. Atal	1986
Fumitada Itakura	1986
No Award	1987
James R. Boddie	1988
Richard A. Pedersen	1988
Takanori Okoshi	1989
Satoshi Hiyamizu	1990
Takashi Mimura	1990
Morton B. Panish	1991
Praveen Chaudhari	1992
Jerome J. Cuomo	1992
Richard J. Gambino	1992
B. Jayant Baliga	1993
Lubomyr T. Romankiw	1994
M. George Craford	1995
Seiki Ogura	1996
Fujio Masuoka	1997
Naoki Yokoyama	1998
No Award	1999
James S. Harris	2000

### **Jack A. Morton Award**

[Award Recipients with Citations](#) (PDF, 36 KB)

The IEEE Jack A. Morton Award was established in 1974 and is presented for outstanding contributions in the field of solid-state devices. This award was discontinued after the 1999 Award and replaced by the [IEEE Andrew S. Grove Award](#).

Robert N. Hall	1976
Morgan Sparks	1977
Juri Matisoo	1978
Martin P. Lepselter	1979
James F. Gibbons	1980
Nick Holonyak, Jr.	1981
D. Frohman-Bentchkowsky	1982
Jun-ichi Nishizawa	1983
Hans S. Rupperecht	1984
Jerry M. Woodall	1984
Robert D. Burnham	1985
Donald Scifres	1985
William Streifer	1985

Herbert Kroemer	1986
Dennis D. Buss	1987
Richard A. Chapman	1987
Michael A. Kinch	1987
Frank Stern	1988
Chi-Tang Sah	1989
Gregory E. Stillman	1990
Charles M. Wolfe	1990
Tak H. Ning	1991
Hwa N. Yu	1991
Takuo Sugano	1992
Toshihisa Tsukada	1993
Robert E. Kerwin	1994
Donald E. Klein	1994
John C. Sarace	1994
Yoshio Nishi	1995
Robert W. Dutton	1996
Chenming Hu	1997
Isamu Akasaki	1998
Shuji Nakamura	1998
Charles H. Henry	1999

### **William E. Newell Power Electronics Award** [Award Recipients with Citations](#) (PDF, 13 KB)

The IEEE William E. Newell Power Electronics Award was established in 2005 and is awarded for outstanding contributions to power electronics. The award is sponsored by the IEEE Power Electronics Society.

Deepakraj M. Divan	2006
Dushan Boroyevich	2007
Istvan Nagy	2008
Tadashi Fukao	2009
Akio Nakagawa	2010
Praveen Jain	2011
Leo Lorenz	2012
Rik W. De Doncker	2013
Frede Blaabjerg	2014
Shu Yuen Ron Hui	2015
Johann W. Kolar	2016
Seung-Ki Sul	2017
Rainer Marquardt	2018
Patrizio Vinciarelli	2019

### **Daniel E. Noble Award for Emerging Technologies**

[Award Recipients with Citations](#) (PDF, 19 KB)

The IEEE Daniel E. Noble Award for Emerging Technologies was established in 2000 and is awarded for outstanding contributions to emerging technologies recognized within recent years. The award is sponsored by the IEEE Daniel E. Noble Award fund.

Katsutoshi Izumi	2001
Masataka Nakazawa	2002
Kenichi Iga	2003
Larry J. Hornbeck	2004
David L. Harame	2005
Carlos A. Paz de Araujo	2006
Stephen R. Forrest	2007
Richard H. Friend	2007

Ching Tang	2007
James M. Daughton	2008
Stuart Parkin	2008
Saied Tehrani	2008
Larry F. Weber	2009
Shinichi Abe	2010
Shoichi Sasaki	2010
Takehisa Yaegashi	2010
Mark Burgener	2011
Ronald E. Reedy	2011
Subramanian S. Iyer	2012
Jan P. Allebach	2013
Gabriel Michel Rebeiz	2014
Khalil Najafi	2015
Mark G. Allen	2016
Miguel A. L. Nicolelis	2017
Rajiv V. Joshi	2018
Thomas Kenny	2019

**Donald O. Pederson Award in Solid-State Circuits**

[Award Recipients with Citations](#) (PDF, 26 KB)

The IEEE Solid-State Circuits Award was established in 1987 and is presented for outstanding contributions to solid-state circuits. The award was renamed in 2005 in honor of Donald O. Pederson. The award is sponsored by the IEEE Solid-State Circuits Society.

James D. Meindl	1989
Toshiaki Masuhara	1990
Frank Wanlass	1991
Barrie Gilbert	1992
Kiyoo Itoh	1993
Paul R. Gray	1994
Lewis M. Terman	1995
Rudy J. van de Plassche	1996
Robert W. Brodersen	1997
Nicky C. Lu	1998
Kensall D. Wise	1999
Robert H. Krambeck	2000
Hung-Fai (Stephen) Law	2000
No Award	2001
Chenming Calvin Hu	2002
Ping-Keung Ko	2002
Daniel Dobberpuhl	2003
Eric A. Vittoz	2004
Bruce A. Wooley	2005
Mark A. Horowitz	2006
Hugo De Man	2007
Asad A. Abidi	2008
Teresa S. Meng	2009
Takayasu Sakurai	2010
Willy Sansen	2011
Behzad Razavi	2012
Anantha P. Chandrakasan	2013
Robert G. Meyer	2014
Robert Whitlock Adams	2015
Miles Alexander Copeland	2016
Takao Nishitani	2017
John S. Thompson	2017
William S. Carter	2018
Stephen M. Trimberger	2018
Laurence W. Nagel	2019

**Frederik Philips Award**  
[Award Recipients with Citations](#) (PDF, 33 KB)

The IEEE Frederik Philips Award was established in 1971 and is awarded for outstanding accomplishments in the management of research and development resulting in effective innovation in the electrical and electronics industry. The award is sponsored by Philips Electronics N. V.

Frederik J. Philips	1971
William O. Baker	1972
John H. Dessauer	1973
Chauncey Guy Suits	1974
C. Lester Hogan	1975
Koji Kobayashi	1976
No Award/schedule revised	1977*
William E. Shoupp	1978
Gordon E. Moore	1979
William M. Webster	1980
Dean A. Watkins	1981
Werner J. Kleen	1982
Allen E. Puckett	1983
John K. Galt	1984
George Heilmeyer	1985
William Hittinger	1986
Solomon J. Buchsbaum	1987
George F. Smith	1988
Klaus D. Bowers	1989
Rajinder J. Khosla	1990
Gene Strull	1991
Alan Gerald Chynoweth	1992
Max Tibor Weiss	1993
Minoru Nagata	1994
James C. McGroddy	1995
Michiyuki Uenohara	1996
Roland P. O. Hüber	1997
Larry W. Sumney	1998
William C. Holton	1998
Robert M. Burger	1998
Roger J. Van Overstraeten	1999
Gerald M. Borsuk	2000
Arun N. Netravali	2001
Toshiharu Aoki	2002
Thomas Rowbotham	2003
Youssef El-Mansy	2004
Hiroyoshi Komiya	2005
Louis C. Parrillo	2006
Yong-Kyung (Kenneth) Lee	2007
Gilbert J. Declerck	2008
Shojiro Asai	2009
John E. Kelly III	2010
Dim-Lee Kwong	2011
Chih-Yuan (C.Y.) Lu	2012
William M. Holt	2013
Henry T. Nicholas, III	2014
Benedetto Vigna	2015
Kelin Jo Kuhn	2016
Gary L. Patton	2017
Ian. A. Young	2018
Asad M. Madni	2019

(\* ) Date of Selection changed to date of presentation.

## **Photonics Award**

[Award Recipients with Citations](#) (PDF, 15 KB)

The IEEE Photonics Award was established in 2002 and awarded for outstanding achievement(s) in photonics. The award is sponsored by the IEEE Photonics Society.

Tingye Li	2004
Rod C. Alferness	2005
Frederick J. Leonberger	2006
David Neil Payne	2007
Joe C. Campbell	2008
Robert L. Byer	2009
Ivan Kaminow	2010
Amnon Yariv	2011
Eli Yablonovitch	2012
Peter F. Moulton	2013
James Fujimoto	2014
Philip St. John Russell	2015
Mark Thompson	2016
John Bowers	2017
Ursula Keller	2018
Michal Lipson	2019

## **Emanuel R. Piore Award**

[Award Recipients with Citations](#) (PDF, 31 KB)

The IEEE Emanuel R. Piore Award was established in 1976 and is presented for outstanding contributions in the field of information processing in relation to computer science. The award was discontinued in 2013.

George R. Stibitz	1977
J. Presper Eckert	1978
John W. Mauchly	1978
Richard W. Hamming	1979
Lawrence R. Rabiner	1980
Ronald W. Schafer	1980
No Award	1981
Kenneth L. Thompson	1982
Dennis M. Ritchie	1982
Niklaus Wirth	1983
Harvey G. Cragon	1984
Azriel Rosenfeld	1985
David C. Evans	1986
Ivan E. Sutherland	1986
David J. Kuck	1987
Grace M. Hooper	1988
Peter A. Franaszek	1989
Allen Newell	1990
Joseph F. Traub	1991
Harold S. Stone	1992
Makota Nagao	1993
John L. Hennessy	1994
Yale N. Patt	1995
Edward J. McCluskey	1996
Shun-ichi Amari	1997
Janak H. Patel	1998
Narendra Ahuja	1999
William M. (Velvel) Kahan	2000
Ravishanker K. Iyer	2001
Brian Randell	2002
Giovanni De Micheli	2003
Leslie Lamport	2004

Jacob A. Abraham	2005
Robert K. Brayton	2006
Randal E. Bryant	2007
Richard F. Rashid	2008
David J. Dewitt	2009
Nancy Ann Lynch	2010
Shafi Goldwasser	2011
Fred B. Schneider	2012
No award	2013

## **Judith A. Resnik Award**

[Award Recipients with Citations](#) (PDF, 23 KB)

The IEEE Judith A. Resnik Award was established in 1986 and is awarded for outstanding contributions to space engineering, within the fields of interest of the IEEE. The award was discontinued in 2013.

Peter Michael Bay	1989
Douglas K. Waione	1990
Leslie J. Deutsch	1991
No Award	1992
Bonnie J. Dunbar	1993
Johannes Dietrich	1994
Leandre Pourcelot	1995
Paul G. Steffes	1996
Rodney S. Rougelot	1997
Oliver M. Collins	1998
Christopher S. Ruf	1999
No Award	2000
No Award	2001
Yvonne C. Brill	2002
Suresh M. Joshi	2003
Anthony W. England	2004
Marcos A. Bergamo	2005
Kim M. Ess	2006
Daniele Mortari	2007
Meyya Meyyappan	2008
Sudhakar Rao	2009
Surendra Pal	2010
Kamal Sarabandi	2011
Pramod Kumar Varshney	2012
No award	2013

## **Robotics and Automation Award**

[Award Recipients with Citations](#) (PDF, 15 KB)

The IEEE Robotics & Automation Award was established in 2002 and awarded for outstanding contributions to robotics and automation. The award is sponsored by the IEEE Robotics and Automation Society.

Joseph F. Engelberger	2004
Seiuemon Inaba	2005
George A. Bekey	2006
Gerd Hirzinger	2007
Paul G. Backes	2008
Larry H. Matthies	2008
Eric T. Baumgartner	2008
Antal Bejczy	2009
Toshio Fukuda	2010
Hirochika Inoue	2011
Bernard Roth	2012

Ruzena Bajcsy	2013
Shigeo Hirose	2014
Rodney Allen Brooks	2015
Raffaello D'Andrea	2016
Oussama Khatib	2017
Matthew T. Mason	2018
Zexiang Li	2019
Tao Wang	2019

### **Frank Rosenblatt Award**

[Award Recipients with Citations](#) (PDF, 13 KB)

The IEEE Frank Rosenblatt Award was established in 2004 and awarded for outstanding contributions to biologically and linguistically motivated computational paradigms and systems. The award is sponsored by the IEEE Computational Intelligence Society.

Lawrence J. Fogel	2006
James C. Bezdek	2007
Teuvo Kohonen	2008
John J. Hopfield	2009
Michio Sugeno	2010
Hans-Paul Schwefel	2011
Vladimir Vapnik	2012
Terrence J. Sejnowski	2013
Geoffrey E. Hinton	2014
Marco Dorigo	2015
Ronald R. Yager	2016
Stephen Grossberg	2017
Enrique Ruspini	2018
Erkki Oja	2019

### **David Sarnoff Award**

[Award Recipients with Citations](#) (PDF, 45 KB)

The IEEE David Sarnoff Award was established in 1959 and is presented for exceptional contributions to electronics. The award is sponsored by the IEEE Sarnoff Fund. This award is discontinued after 2016.

David Sarnoff	1959
Rudolf Kompfner	1960
Charles H. Townes	1961
Harry B. Smith	1962
Robert H. Hall	1963
Henri G. Busignies	1964
Jack A. Morton	1965
Jack S. Kilby	1966
James Hillier	1967
Walter P. Dyke	1968
Robert H. Rediker	1969
John B. Johnson	1970
Alan L. McWhorter	1971
Edward G. Ramberg	1972
Max V. Mathews	1973
F.L. J. Sangster	1974
Bernard C. DeLoach, Jr.	1975
George H. Heilmeyer	1976
Jack M. Manley	1977
Harrison E. Rowe	1977
Stephen E. Harris	1978

A. Gardner Fox	1979
Tingye Li	1979
Marshall I. Nathan	1980
Cyril Hilsun	1981
Nobutoshi Kihara	1982
Hermann K. Gummel	1983
Alan D. White	1984
Jameson Dane Rigden	1984
Henry Kressel	1985
Yasuharu Suematsu	1986
Frank F.	1987
Alan B. Fowler	1987
Izuo Hayashi	1988
Herwig Kogelnik	1989
Charles V. Shank	1989
Leroy L. Chang	1990
Federico Capasso	1991
Jim Hsieh	1992
Rao R. Tummala	1993
Won-Tien Tsang	1994
Karl Hess	1995
Hiroyuki Sakaki	1996
Milton Feng	1997
Tatsuo Izawa	1998
Gerard Albert Mourou	1999
Alastair Malcolm Glass	2000
P. Daniel Dapkus	2001
Young-Kai Chen	2002
Peter Asbeck	2003
Frederick A. Kish, Jr.	2004
Pierre Tournois	2005
Mau-Chung F. Chang	2006
Umesh K. Mishra	2007
James J. Coleman	2008
Yasuhiko Arakawa	2009
Kam-Yin Lau	2009
Kerry J. Vahala	2009
Mark Rodwell	2010
Constance J. Chang-Hasnain	2011
Hideo Ohno	2012
Sajeev John	2013
Larry A. Coldren	2014
Pallab Bhattacharya	2015

### **Marie Skłodowska-Curie Award**

[Award Recipients with Citations](#) (PDF, 13 KB)

The IEEE Marie Skłodowska-Curie Award was established in 2008 and is presented for outstanding contributions to the field of nuclear and plasma sciences and engineering. The award is sponsored by the IEEE Nuclear and Plasma Sciences Society. The award is discontinued after 2016.

Charles Kennedy	2011
Gennady Andreevich	2012
Veljko Radeka	2013
Malcolm H. Hudson	2014
Brian F. Hutton	2014
Lawrence A. Shepp	2014
Glenn Knoll	2015
Simon Cherry	2016
Chandrashekhar Joshi	2017
David Robert Nygren	2018
Sanjiv Gambhir	2019



## **Innovation in Societal Infrastructure Award**

[Award Recipients with Citations](#) (PDF, 13 KB)

The IEEE Innovation in societal Infrastructure Award was established in 2011 and is presented for significant technological achievements and contributions to the establishment, development, and proliferation of innovative societal infrastructure systems through the application of information technology with an emphasis on distributed computing systems. The award is sponsored by Hitachi, Ltd. and the IEEE Computer Society.

Balaji Prabhakar	2014
Takemochi Ishii	2015
Hirokazu Ihara	2015
Atsunobu Ichikawa	2015
William H. Sanders	2016
Antonello (Anto) Monti	2017
David F. Ferraiolo	2018
D. Richard Kuhn	2018
Ravi Sandu	2018
Andy Vidan	2019
Paul Breimyer	2019
Gregory Hogan	2019

## **Charles Proteus Steinmetz Award**

[Award Recipients with Citations](#) (PDF, 29 KB)

The IEEE Charles Proteus Steinmetz Award was established in 1979 and is presented for exceptional contributions to the development and/or advancement of standards in electrical and electronics engineering. The award is sponsored by the IEEE Standards Association.

Leon Podolsky	1980
No Award	1981
Ralph M. Showers	1982
William A. McAdams	1983
H. Baron Whitaker	1984
Charles L. Wagner	1985
Chester H. Page	1986
Bruce B. Barrow	1987
Joseph L. Koepfinger	1989
Warren H. Cook	1990
Fletcher J. Buckley	1991
Donald C. Fleckenstein	1992
Ivan G. Easton	1993
Clayton H. Griffin	1994
L. Bruce McClung	1995
Marco W. Migliaro	1996
Donald N. Heirman	1997
L. John Rankine	1997
William J. McNutt	1998
Dennis Bodson	1999
Hiroshi Yasuda	2000
Stanley Baron	2001
Ben C. Johnson	2002
Donald C. Loughry	2003
Julian Forster	2004
Wallace S. Read	2005
Steven Mark Halpin	2006

Vic Hayes	2007
Roy Billinton	2008
James Thomas Carlo	2009
Richard DeBlasio	2010
James W. Moore	2011
Daleep C. Mohla	2012
Mohindar Sachdev	2013
Mark McGranaghan	2014
Steven Mills	2015
Hermann Koch	2016
David John Law	2017
Craig M. Wellman	2018
Innocent Kamwa	2019

## **Eric E. Sumner Award**

[Award Recipients with Citations](#) (PDF, 21 KB)

The IEEE Eric E. Sumner Award was established in 1995 and is presented for outstanding contributions to communications technology. The award is sponsored by Nokia Bell Labs.

Jean-Pierre Coudreuse	1997
Donald L. Duttweiler	1998
Debasis Mitra	1998
Man Mohan Sondhi	1998
Howard Frank	1999
Ivan T. Frisch	1999
No Award	2000
No Award	2001
John E. Midwinter	2002
Tsuneo Nakahara	2002
Werner Bux	2003
Hans R. Mueller	2003
Gerard J. Foschini	2004
Krishan Sabnani	2005
Robert A. Scholtz	2006
Moe Z. Win	2006
Michael G. Luby	2007
Amin Shokrollahi	2007
Thomas L. Koch	2008
Roberto Padovani	2009
Reinaldo Valenzuela	2010
H. Vincent Poor	2011
Jack H. Winters	2012
Andreas F. Molisch	2012
Siavash Alamouti	2013
Hamid Jafarkhani	2013
Vahid Tarokh	2013
Alan Eli Willner	2014
Sanjoy Mitter	2015
Shuo-Yen Robert Li	2016
Raymond W. Yeung	2016
Ning Cai	2016
William C. Lindsey	2017
Peter W. Shor	2018
Andrea J. Goldsmith	2019

## **Nikola Tesla Award**

[Award Recipients with Citations](#) (PDF, 33 KB)

The IEEE Nikola Tesla Award was established in 1975 and is presented for outstanding contributions to the generation and utilization of electric power. The award is sponsored by The Grainger Foundation and the IEEE Power and

## Energy Society.

Leon T. Rosenberg	1976
Cyril G. Veinott	1977
Charles H. Holley	1978
John W. Batchelor	1979
Philip H. Trickey	1980
Dean B. Harrington	1981
Sakae Yamamura	1982
No Award	1983
Herbert H. Woodson	1984
Eugene C. Whitney	1985
Eric R. Laithwaite	1986
J. Coleman White	1987
Edward I. King	1988
Dietrich R. Lambrecht	1989
Gordon R. Slemon	1990
Michel E. Poloujadoff	1991
Thomas H. Barton	1992
Madabushi V. K. Chari	1993
Carl Flick	1994
Thomas A. Lipo	1995
John A. Tegopoulos	1996
Prabha Kundur	1997
Paul L. Dandeno	1998
Nabeel Aly Omar Demerdash	1999
Syed A. Nasar	2000
Steve Williamson	2001
James L. Kirtley	2002
Austin H. Bonnett	2003
Sheppard J. Salon	2004
Thomas M. Jahns	2005
Konrad Reichert	2006
Thomas W. Nehl	2007
T. J. E. Miller	2008
Donald Wayne Novotny	2009
Paul C. Krause	2010
Nady Boules	2011
Manoj R. Shah	2012
Norio Takahashi	2013
Hamit A. Toliyat	2014
Ion Georghe Boldea	2015
Bruno Lequesne	2016
Adel Razek	2017
Longya Xu	2018
Tomy Sebastian	2019

### **Kiyo Tomiyasu Award**

[Award Recipients with Citations](#) (PDF, 16 KB)

The IEEE Kiyo Tomiyasu Award was established in 2000 and is awarded for outstanding early to mid-career contributions to technologies holding the promise of innovative applications. The award is sponsored by the Kiyo Tomiyasu Fund, and the IEEE Geoscience and Remote Sensing and Microwave Theory and Techniques Societies.

Casimer De Cusatis	2002
Keshab K. Parhi	2003
David B. Fogel	2004
Chai K. Toh	2005
Muhammad A. Alam	2006
Alberto Moreira	2007
George V. Eleftheriades	2008

Shih-Fu Chang	2009
Tsu-Jae King Liu	2010
Moe Z. Win	2011
Mung Chiang	2012
Carlos A. Coello Coello	2013
George Chrisikos	2014
Kaustav Banerjee	2015
Vivek Subramanian	2015
Yonina Eldar	2016
Emilio Frazzoli	2017
Nicholas Laneman	2018
Robert W. Heath, Jr.	2019
Jeffrey G. Andrews	2019

### **Transportation Technologies Award** [Award Recipients with Citations](#) (PDF, 13 KB)

The IEEE Transportation Technologies Award was established in 2011 and is awarded for advances in technologies within the fields of interest to the IEEE as applied in transportation systems. The award is sponsored by IEEE Industry Applications Society, IEEE Industrial Electronics Society, IEEE Intelligent Transportation Systems Society, IEEE Microwave Theory and Techniques Society, IEEE Power Electronics Society, IEEE Power & Energy Society, and the IEEE Vehicular Technology Society.

Linos J. Jacovides	2014
Robert Dean King	2015
Petros Ioannou	2016
Claire Tomlin	2017
James C.C. Chan	2018
Hao Huang	2019

### **Undergraduate Teaching Award** [Award Recipients with Citations](#) (PDF, 23 KB)

The IEEE Undergraduate Teaching Award was established in 1990 and is presented for inspirational teaching of undergraduate students in the field of interest of IEEE. The award is sponsored by the IEEE Education Society.

James W. Nilsson	1992
Ronald G. Hoelzeman	1993
N. Narayana Rao	1994
David G. Meyer	1995
David A. Patterson	1996
Karan L. Watson	1996
Chand R. Viswanathan	1997
J. David Irwin	1998
Michael G. Pecht	1999
Haniph A. Lachman	2000
No Award	2001
No Award	2002
Mehrdad Ehsani	2003
Richard C. Jaeger	2004
Yannis Tsividis	2005
John B. Peatman	2006

Clayton R. Paul	2007
Muhammad Harunur Rashid	2008
John C. Bean	2009
Ned Mohan	2010
Raghunath K. Shevgaokar	2011
Santosh K. Kurinec	2012
Charles K. Alexander	2013
Hsi-Tseng Chou	2014
Branislav M. Notaros	2015
Terri Fiez	2016
Bonnie Heck Ferri	2017
Susan M. Lord	2018
Lisa Gresham Huettel	2019

### **Vladimir K. Zworykin Award**

[Award Recipients with Citations](#) (PDF, 12 KB)

The IEEE Vladimir K. Zworykin Award was presented for outstanding technical contributions in the field of electronic television. The award was discontinued in 1986.

B. D. Loughlin	1952
Frank Gray	1953
A. V. Bedord	1954
H. B. Law	1955
F. J. Bingley	1956
Donald Richman	1957
C. P. Ginsburg	1958
P. K. Weimer	1959
P. C. Goldmark	1961
G.A. Morton	1962
P.J. Rice, Jr.	1963
W. E. Evans, Jr.	1964
Norman F. Fyler	1965
Ray D. Kell	1966
Keiji Suzuki	1967
Kurt Schlesinger	1968
Otto H. Schade	1969
Charles H. Coleman	1970
Alfred C. Schroeder	1971
Robin E. Davies	1972
Albert Macovski	1973
Senri Miyaoka	1974
Eugene I. Gordon	1975
Ralph E. Simon	1975
Dalton H. Pritchard	1977
Sam Kaplan	1978
Albert M. Morrell	1979
Walter Bruch	1980
Naohiro Goto	1981
Jon K. Clemens	1983
Eugene O. Keizer	1983
Takehiro Kakizaki	1984
Yasuharu Kubota	1984
No award	1985
Norikazu Sawazaki	1986