

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 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. Heilmeyer | 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 |

| | |
|------------------|------|
| Kurt E. Petersen | 2019 |
| Chenming Hu | 2020 |
| Jacob Ziv | 2021 |

| | |
|-----------------------|------|
| Nambirajan Seshadri | 2018 |
| Teresa Huai-Ying Meng | 2019 |
| Rajiv Laroia | 2020 |
| Nicholas M. McKeown | 2021 |

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 |
| Dariussh Divsalar | 2014 |
| Frank Kelly | 2015 |
| Roberto Padovani | 2016 |
| H. Vincent Poor | 2017 |

Frances E. Allen Medal

The IEEE Frances E. Allen Medal was established in 2020 and is presented for innovative work in computing leading to lasting impact on other fields of engineering, technology, or science. The Medal is sponsored by IBM.

Mildred Dresselhaus Medal

The IEEE Mildred Dresselhaus Medal was established in 2019 and is presented for outstanding technical contributions in science and engineering, of great impact to IEEE fields of interest. The Medal is sponsored by Google.

| | |
|---------------------|------|
| Kristina M. Johnson | 2021 |
|---------------------|------|

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. Cisler | 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 |
| Ursula Keller | 2019 |
| Frede Blaabjerg | 2020 |
| Kenichi Iga | 2021 |

(*) 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 |
| Richard Nute | 2019 |
| Ray Corson | 2019 |
| James Gordon Barrick, Jr. | 2019 |
| Nancy Leveson | 2020 |
| Kaushik Rajashekara | 2021 |

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. Heilmeyer | 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 |
| Robin Keith Saxby | 2019 |
| Jen-Hsun Huang | 2020 |
| Henry Samueli | 2021 |

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 Franaszek | 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 |
| David Tse | 2019 |
| Cynthia Dwork | 2020 |
| Raymond W. Yeung | 2021 |

| | |
|----------------------|------|
| 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 |
| Kamil Ugurbil | 2019 |
| Mark S. Humayun | 2020 |
| Ruzena Bajcsy | 2021 |

[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, Inc.

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 |

| | |
|-------------------------|------|
| 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 |
| Alan Willsky | 2019 |
| Ramalingam Chellappa | 2020 |
| Emmanuel Candès | 2021 |
| Terence Tao | 2021 |

[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.

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, and the 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 |
| John G. Webster | 2019 |
| Leah Jamieson | 2020 |
| John D. Cressler | 2021 |

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 Ferguson | 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 |
| Yasuhiko Arakawa | 2019 |
| Pallab Bhattacharya | 2019 |
| Dieter Bimberg | 2019 |
| Paul Daniel Dapkus | 2020 |
| James J. Coleman | 2021 |

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 Intel Corporation.

| | |
|----------------------|------|
| 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 |
| Antun Domic | 2019 |
| Susumu Kohyama | 2020 |
| Lisa Su | 2021 |

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 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 |
| Richard Klemm | 2019 |
| Joseph R. Guerci | 2020 |
| Simon Haykin | 2021 |

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 Industry Applications Society, IEEE Industrial Electronics Society, IEEE Power Electronics Society, and the IEEE Power & 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 |
| Lionel Olav Barthold | 2019 |
| Rik W. De Doncker | 2020 |
| Praveen K. Jain | 2021 |

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 |
| Paul Kaminski | 2015 |
| John P. Lehoczyk | 2016 |
| Ragunathan Rajkumar | 2016 |
| Lui Sha | 2016 |
| John Baras | 2017 |
| Heinz Stoewer | 2018 |
| Harold Lawson | 2019 |
| Byrana N. Suresh | 2020 |
| K. Sivan | 2020 |
| Elisabeth Paté-Cornell | 2021 |

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 |
| Eva Tardos | 2019 |
| Michael I. Jordan | 2020 |
| Jeffrey Adgate Dean | 2021 |

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- Vinentelli | 2009 |
| Amar G. Bose | 2010 |
| Marcian Edward Hoff | 2011 |
| Gerhard Sessler | 2012 |
| Richard M. White | 2013 |
| Richard S. Muller | 2013 |
| David Neil Payne | 2014 |
| Lynn Conway | 2015 |
| Geoffrey Hinton | 2016 |
| No Award | 2017 |
| Thomas Bryn Haug | 2018 |
| Philippe Dupuis | 2018 |
| David Flynn | 2019 |
| David Jaggar | 2019 |
| No Award | 2020 |
| Evelyn Lynn Hu | 2021 |

| | |
|--|------|
| No Award | 2004 |
| Dean Kamen | 2005 |
| Vladimir Rokhlin | 2006 |
| Ian C. McRae | 2007 |
| Tsatae 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 |
| Telle Whitney | 2019 |
| Borys Paton | 2020 |
| Edward C. Stone | 2021 |

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 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 |

IEEE THEODORE W. HISSEY OUTSTANDING YOUNG PROFESSIONAL AWARD

[Award Recipients with Citations](#) (PDF, 78 KB)

The IEEE Theodore W. Hissey Outstanding Young Professional Award, established in 2017, may be awarded to a young professional for contributions to the technical community and IEEE fields of interest. The Award is sponsored by IEEE.

| | |
|----------------------------|------|
| Mario Milicevic | 2019 |
| Sampathkumar Veeraraghavan | 2020 |
| Kartik Kulkarni | 2021 |

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 the IEEE Technical Activities Board.

| | |
|-------------------------|------|
| 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 |
| Marcel Keschner | 2019 |
| John Vig | 2020 |
| Lewis Terman | 2021 |

| | |
|---------------------|------|
| 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 |
| David Green | 2019 |
| Mary Ellen Randall | 2020 |
| Evelyn H. Hirt | 2021 |

(*) 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.

[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* |
| 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 |

| | |
|--|------|
| 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 |
| Bose Corporation | 2019 |
| Apple, Inc. | 2020 |
| Taiwan Semiconductor Manufacturing Company, Ltd. | 2021 |

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 |
| 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 |

| | |
|-------------------------|------|
| 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 |

IEEE PRIZE PAPER AWARDS

| | |
|-----------------------|------|
| 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 Baltés | 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. Randals | 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 |

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 | 2018 |
| Jonathan Dahl | 2019 |
| Patrick Ryan | 2020 |

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, the IEEE Circuits and Systems Society, and the IEEE Signal Processing Society

| | |
|----------------------|------|
| Robert Plonsey | 2013 |
| Lihong Wang | 2014 |
| Christofer Toumazou | 2015 |
| K. Kirk Shung | 2016 |
| Bin He | 2017 |
| Mark S. Humayun | 2018 |
| Matthew O'Donnell | 2019 |
| F. Stuart Foster | 2020 |
| Katherine W. Ferrara | 2021 |

[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.

| | |
|------------------------|------|
| 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 |
| Hiroshi Iwai | 2015 |
| Akira Toriumi | 2016 |
| Guido Groeseneken | 2017 |
| Siegfried Selberherr | 2018 |
| Daniel C. Edelstein | 2019 |
| Alfred Grill | 2019 |
| Chao-Kun Hu | 2019 |
| James H. Stathis | 2020 |
| Ernest Yue Wu | 2020 |
| Jesus del Alamo | 2021 |

[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 |
| Mitsumasa Koyanagi | 2020 |
| Peter Ramm | 2020 |
| Chin C. Lee | 2021 |

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 |
| Anders Lindquist | 2020 |
| Hidenori Kimura | 2021 |

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 |

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 Taflov | 2014 |
| Donald Wilton | 2015 |
| Giorgio Franceschetti | 2016 |
| Weng Cho Chew | 2017 |
| Tatsuo Itoh | 2018 |
| Richard W. Ziolkowski | 2019 |
| Tapan Kumar Sarkar | 2020 |
| Constantine A. Balanis | 2021 |

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 |
| 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 |
| Hynek Hermansky | 2020 |
| David Nahamoo | 2021 |

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 |
| Alfred O. Hero, III | 2020 |
| K. J. Ray Liu | 2021 |

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 |
| Evelyn L. Hu | 2020 |
| Hideaki Aochi | 2021 |
| Ryota Katsumata | 2021 |
| Masaru Kito | 2021 |

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 |
| Dusan Povh | 2020 |
| Brian Stott | 2021 |

[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 |
| Eben C. Upton | 2020 |
| Steve Wozniak | 2021 |

(*) 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.

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 |

| | |
|------------------------|------|
| 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 |
| Stephen L. Casner | 2020 |
| Eve M. Schooler | 2020 |

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 |
| Kouki Matsuse | 2020 |
| Stephen D. J. McArthur | 2021 |

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 |
| Dario Petri | 2020 |
| Eric W. Strid | 2021 |
| Reed K. Gleason | 2021 |

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. Shannon | 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 W. Martin | 2019 |
| Martin Hasler | 2020 |
| Thomas Lee | 2021 |

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 |
| Ronald 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 |
| K.J. Ray Liu | 2016 |
| Chung-Chieh Jay Kuo | 2017 |
| Mark S. Lundstrom | 2018 |
| Gregory Wornell | 2019 |
| Shu Lin | 2020 |
| Andrea Goldsmith | 2021 |

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 Chandy | 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 |
| Balaji Prabhakar | 2020 |
| Hari Balakrishnan | 2021 |

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.

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

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 |
| 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](#).

| | |
|---------------------|------|
| 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. Rupprecht | 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 |
| Ivo Barbi | 2020 |
| Robert W. Erickson | 2021 |

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. Nicoletis | 2017 |
| Rajiv V. Joshi | 2018 |
| Thomas Kenny | 2019 |
| Miroslav Micovic | 2020 |

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 |
| Klaas Bult | 2020 |
| A. Paul Brokaw | 2021 |

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 |
| Kazuo Yano | 2020 |

(*) 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 |
| Christopher R. Doerr | 2020 |
| Jack Jewell | 2021 |

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 |

| | |
|-------------------|------|
| Stephen Grossberg | 2017 |
| Enrique Ruspini | 2018 |
| Erkki Oja | 2019 |
| Xin Yao | 2020 |
| James M. Keller | 2021 |

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 Hilsum | 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 |

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 |
| Frank Wang | 2019 |
| Vijay Kumar | 2020 |
| Tomas Lozano-Perez | 2021 |
| Jean-Claude Latombe | 2021 |

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 |

| | |
|----------------------------|------|
| 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 |

| | |
|--------------------|------|
| Gregory Hogan | 2019 |
| Masaru Kitsuregawa | 2020 |
| Elisa Bertino | 2021 |

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.

Marie Sklodowska-Curie Award
Award Recipients with Citations (PDF, 13 KB)

The IEEE Marie Sklodowska-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 |
| Michael A. Lieberman | 2020 |
| Michel Defrise | 2021 |

| | |
|------------------------|------|
| 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 |
| Solveig M. Ward | 2020 |
| Haran C. Karmaker | 2021 |

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 |

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 |
| Theodore S. Rappaport | 2020 |
| En-Hui Yang | 2021 |

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. Slemmon | 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 |
| Akira Chiba | 2020 |
| Zi-Qiang Zhu | 2021 |

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 |
| Andrea Alù | 2020 |
| Zhu Han | 2021 |

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 |
| Markos Papageorgiou | 2020 |
| Philip T. Krein | 2021 |

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 |
| Rajesh Kannan Megalingam | 2020 |
| Cristiane Agra Pimentel | 2021 |

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 |

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https://ethw.org/IEEE_Awards