

NATIONAL ACADEMY OF ENGINEERING

# Induction Ceremony

October 5, 2025

## Class of 2025

Members and  
International Members



## Dear NAE Class of 2025,

Congratulations on your election to the National Academy of Engineering (NAE)! We are proud to recognize your outstanding achievements and welcome you into our community of engineering leaders dedicated to advancing the nation's welfare. This commemorative program is designed as a lasting keepsake of your induction, accompanying the NAE diploma that we hope you will display with pride.

Induction into the NAE is both a tremendous honor and a responsibility — a call to service at the national level. Together we advance NAE's mission by providing independent, objective, and nonpartisan advice on issues related to engineering and technology, strengthening the profession, and fostering greater public understanding of its impact.

Your engagement is essential to our ability to shape sound policies, inform public opinion, drive the responsible development of technology, and inspire the next generation of engineering leaders. I encourage you to contribute your expertise by:

- Participating in National Academies study committees, roundtables, workshops, writing articles or guest editing *The Bridge*, etc.
- Engaging in our community by participating in NAE activities and events
- Raising awareness and excitement about engineering by participating in NAE education and outreach programs.

As society grows increasingly reliant on technologies created by engineers, and as global challenges become more complex and unpredictable, the role of our work has never been more important — or more urgent. Thank you in advance for your active participation as a valued NAE member. I look forward to all that we will accomplish together!

With warmest felicitations and best regards,

Tsu-Jae Liu  
President, NAE

# Class of 2025: Members

In February 2025, the members of the NAE elected 129 new members and 21 new international members. Election to the NAE is one of the highest professional distinctions conferred on engineers. The main criteria for membership in the National Academy of Engineering are outstanding personal contributions and accomplishments in at least one of the following categories:

- engineering practice, research, or education,
- pioneering of new and developing fields of technology, major advancements in traditional fields of engineering, or development/implementation of innovative approaches to engineering education,
- engineering leadership of one or more major endeavors.

A candidate for membership shall also be recognized by associates and others for professional integrity.

The following pages feature the names, photographs, and election citations of each newly elected member and international member. The numbers following their names denote primary and secondary NAE section affiliations.



**Dr. Alex Acero (5, 7)**

Sr. Distinguished Engineer (retired)  
Apple

For leadership in research and development of spoken language technology.



**Dr. Alexander Apostolov (6)**

Principal Engineer  
OMICRON Electronics

For leadership in the digital transformation of protection and control in electrical power systems.



**Professor Samuel Achilefu (2)**

Professor and Department Chair, Lyda Hill Distinguished University Chair  
The University of Texas Southwestern Medical Center

For contributions and international leadership in the molecular imaging of cancer and molecular nanotherapeutics using biophotonics and nuclear technologies.



**Professor Kyriacos Athens Athanasiou (2)**

Distinguished Professor and Henry Samueli Chair  
University of California, Irvine

For contributions to the understanding and treatment of musculoskeletal afflictions and for leadership in bioengineering.



**Dr. Khalil Amine (9, 3)**

Argonne Distinguished Fellow and Team Leader  
Argonne National Laboratory

For leadership of developments in the materials science of batteries and energy storage devices.



**Dr. Paramvir Bahl (5, 7)**

Technical Fellow - Research  
Microsoft Research

For contributions to wireless networking, indoor localization, and edge computing, and for leadership in the mobile computing community.



**Dr. Marsha Anderson Bomar (4)**

Transportation Strategic Advisor  
GHD, Inc.

For advancing sustainable passenger and freight ground transportation systems and land use development.



**Mr. Gerard Marcel Abel Bailley (3)**

ACS Fellow, AOCS President, Retiree - P&G Senior R&D Vice President  
Retiree – The Procter & Gamble Company

For leadership in creating innovative consumer packaging with enhanced performance, value, consumer satisfaction, and sustainability.

# Class of 2025: Members

## Dr. Osvaldo A. Bascur (11, 8)

Principal  
OSB Digital, LLC

For applying phenomenological modeling techniques in mineral and processing plant performance optimization.



## Dr. Jessica Bian (6)

Principal  
RAS Fusion

For leadership and contributions in electric power system reliability performance metrics, and for advancement of power flow modeling and control.



## Professor Martin Zdenek Bazant (3, 10)

E. G. Roos (1944) Professor of Civil Engineering  
Massachusetts Institute of Technology

For contributions to nonlinear electrochemical and electrokinetic phenomena, including induced charge electroosmosis, shock electro dialysis, capacitive desalination, and energy storage applications.



## Dr. Rodney Dale Welch Bowersox (1)

Regents Professor, Aerospace Engineering;  
Senior Associate Dean for Research, College of Engineering  
Department of Aerospace Engineering  
Texas A&M University

For leadership and contributions in hypersonic aerodynamics and aerothermodynamics through the development of experimental facilities and diagnostic techniques.



## Dr. Gregg T. Beckham (3)

Senior Research Fellow and Group Leader  
National Renewable Energy Laboratory

For leadership in biological and chemical catalysis for the valorization and creation of materials from waste plastics and biomass.



## Dr. Lisa Brannon-Peppas (2)

President and Founder  
PeppChem Consulting

For contributions to the targeted drug delivery of chemotherapeutic agents and contributions to biomaterials swelling, and for biomedical leadership.



## Professor Moshe E. Ben-Akiva (4)

Edmund K. Turner Professor of Civil and Environmental Engineering  
Massachusetts Institute of Technology

For advances in transportation and infrastructure systems modeling and demand analysis.



## Dr. Susan L. Brantley (11)

Atherton Professor and Evan Pugh University  
Professor Emerita of Geosciences  
The Pennsylvania State University – University Park

For elucidating chemical, biological, and physical processes associated with the circulation of aqueous fluids in shallow hydrogeologic settings.



## Dr. Olester Benson Jr. (3, 8)

Corporate Scientist  
3M Company

For advancing microreplication technologies, leading to the commercialization of reflective safety films and brightness-enhancing films for electronics.



## Dr. Robert Clinton Brown (12, 10)

Distinguished Professor and Gary and Donna Hoover Chair in Mechanical Engineering  
Iowa State University

For engineering processes for controlled oxidation of lignocellulosic biomass and plastic wastes into low-carbon-footprint energy, fuels, and chemicals.



# Class of 2025: Members



**Dr. Douglas C. Cameron (2)**

Independent Consultant

For driving the chimerical development of a synthetic, biology-based, environmentally friendly bioprocess for biofuels, food security, and industrial chemicals.



**Mr. Igor Cherepinsky (1)**

Director, Sikorsky Innovations  
Lockheed Martin (from Sikorsky, A Lockheed Martin Company)

For technical achievement and leadership in the development of autonomous systems for vertical takeoff and landing (VTOL) aircraft.



**Dr. Pei Cao (5)**

VP of Engineering  
YouTube Inc.

For contributions to web caching, search engine efficiency, and information quality.



**Dr. Kwok Wai Cheung (6)**

CEO  
KC-Exosia Consulting

For contributions to the design and implementation of energy market management systems in power grid control centers worldwide.



**Dr. Patrick Chapman (6)**

CEO  
Stormentum, Inc.

For the development of reliable inverters enabling large-scale photovoltaic energy system deployment.



**Dr. Jennifer R. Cochran (2, 3)**

Addie and Al Macovski Professor of Bioengineering & Senior Associate Vice Provost for Research  
Stanford University

For biopharmaceutical protein discovery and development, biotechnology entrepreneurship, and leadership in academic bioengineering.



**Professor Long-Qing Chen (9)**

Donald W. Hamer Professor of Materials Science and Engineering  
The Pennsylvania State University

For making the phase-field method the most powerful tool for predicting the mesoscopic microstructure and properties of engineering materials.



**Mr. Robert C. Cohen (8)**

Vice-President, Innovation and Technology,  
Orthopaedics Group  
Stryker Corporation

For design contributions to orthopedic surgical procedures and devices and for additive manufacturing leadership.



**Dr. Tze-Chiang Chen (9, 7)**

VP of Strategy, Science and Technology  
Research Division  
IBM Research

For technical contributions and leadership in materials development and the implementation of logic and memory technologies.



**Dr. Victoria Coleman (8, 5)**

CEO Acubed and Head of Research & Technology North America  
Airbus Americas, Inc

For innovations in software operations related to national and cyber security and consumer electronics.

# Class of 2025: Members

## Dr. Dorin Comaniciu (5)

Senior Vice President Artificial Intelligence and Digital Innovation  
Siemens Healthineers

For contributions to diagnostic imaging and image-guided therapy, leading to better diagnosis and treatment for numerous patients.



## Professor Scott Alan Diddams (7, 12)

Professor and Robert H. Davis Endowed Chair  
Electrical Computer and Energy Engineering  
University of Colorado Boulder

For contributions to optical frequency combs and their applications.



## Professor Charles L. Cooney (2, 3)

Robert T. Haslam Professor of Chemical Engineering, Emeritus  
Chemical Engineering  
Massachusetts Institute of Technology

For contributions to biochemical and pharmaceutical manufacturing that propelled the establishment and growth of the global biotechnology industry.



## Dr. Christopher R. Doerr (7)

CEO  
Aloe Semiconductor, Inc.

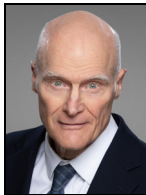
For contributions to integrated photonic circuits for telecommunications.



## Dr. Charles Brian Crouse (4)

Principal Engineer  
AECOM

For contributions to public safety and infrastructure resilience through leadership in transferring research advances into seismic design practice.



## Dr. James H. Dooley (12, 3)

Chief Technology Officer  
Forest Concepts, LLC

For engineering achievements in the design of innovative wood products, biomass processes, and processing equipment.



## Dr. Alexa Ann Dembek (9)

Chief Technology and Sustainability Officer  
DuPont

For leadership in the development of light-weight protective fiber technologies and value creation through innovation, product stewardship, and sustainability.



## Mr. Martin Forest Eberhard (12)

Founder, CEO (retired)  
Tesla Motors Inc.

For leadership in the development of electric vehicles and entrepreneurship in transportation.



## Dr. Nance Katherine Dicciani (3, 2)

CEO  
RTM Vital Signs, LLC

For technical leadership driving innovation in medical devices, materials, and chemical processes.



## Dr. Julie Sheridan Eng (7)

Chief Technology Officer  
Coherent

For contributions to high-speed optoelectronic devices and modules.



# Class of 2025: Members



**Dr. Arthur Guy Erdman (10)**

Morse Alumni Distinguished Teaching Professor  
Department of Mechanical Engineering  
University of Minnesota

For contributions to kinematics, mechanical design education, and applications for machines and products.



**Ms. Thea Feyereisen (1)**

Distinguished Technical Fellow  
Honeywell Aerospace

For cockpit innovations, including synthetic vision systems, runway overrun awareness, and moving maps.



**Dr. David Estell (2)**

Laureate and Vice President, Innovation  
Genencor Technical Center IFF

For the development of protein engineering technologies that resulted in products for human health, animal health, food, and personal care.



**Dr. Yoel Fink (9)**

Professor  
Department of Materials Science and Engineering  
Massachusetts Institute of Technology

For the design and production of structured photonic fibers, enabling surgeries and the invention of fabrics that sense and communicate.



**Ms. Judith L. Estrin (5)**

CEO  
JLabs, LLC

For contributions to the early development and adoption of networking technologies, products, and services, and for leadership that advanced innovation.



**Dr. Dan M. Frangopol (4, 12)**

Inaugural Fazlur R. Khan Endowed Chair of Structural Engineering and Architecture Emeritus  
Lehigh University

For contributions to life-cycle civil engineering and leadership in its global development and adoption.



**Dr. Lorne G. Everett (11)**

CEO and Chairman of the Board (Em.)  
LEA Environmental, Inc

For establishing EPA-endorsed monitoring and cleanup methodologies for contaminated soil and groundwater.



**Professor Marcelo Horacio Garcia (4, 11)**

Professor and M.T. Geoffrey Yeh Endowed Chair in Civil Engineering  
Civil and Environmental Engineering  
University of Illinois Urbana-Champaign

For research on sediment transport and river and marine morphodynamics, and for advancing hydraulics and sedimentation engineering.



**Dr. Antonio Facchetti (9, 3)**

Hightower Professor  
Materials Science and Engineering  
Georgia Institute of Technology

For contributions to the engineering of commercially viable electronic materials and devices.



**Dr. Suresh V. Garimella (10, 12)**

President and University Distinguished Professor  
Office of the President  
University of Arizona

For contributions to microscale heat and mass transport, academic leadership, and service to the nation.

# Class of 2025: Members

**Dr. Marian E. Gindy (3)**

Vice President, Science and Technology  
Merck

For pharmaceutical product innovation and for transforming new technology concepts into robust platforms, processes, and products.

**Ms. Marillyn A. Hewson (12, 1)**

Chairman, President and CEO (Retired)  
Lockheed Martin Corporation

For the development and delivery of breakthrough innovations and technology programs of critical importance to global security and space exploration.

**Dr. Justin Hanes (2, 3)**

Lewis J Ort Professor  
Johns Hopkins University

For developing innovative technologies that improve drug and gene delivery, resulting in multiple approved products.

**Ms. Stephanie C. Hill (12)**

President  
Lockheed Martin Rotary & Mission Systems

For leadership of aerospace and defense systems in cyber security, rotary wing systems, and unmanned aerial vehicles.

**Dr. Elizabeth A. Hausler (4, 12)**

Founder and Former CEO  
Build Change

For transformational impact as an international social entrepreneur, saving lives by building sustainable communities with natural hazard resilience.

**Professor Elizabeth Ann Holm (9, 10)**

R. F. and E. A. Towner Professor of Engineering and Chair of Materials Science and Engineering  
University of Michigan

For achievements in the development and application of computational methods for understanding microstructural evolution and integrated computational materials engineering.

**Professor Robert Wendell Heath Jr. (7)**

Charles Lee Powell Chair in Wireless Communication  
Department of Electrical and Computer Engineering  
University of California, San Diego

For contributions to the theory and practice of wireless communication.

**Dr. Philip John Holmes (10)**

Emeritus Professor  
Princeton University

For the application of methods of nonlinear analysis and chaotic dynamics to engineering systems.

**Dr. Hooshang Heshmat (10, 12)**

CEO & President / Technical Director (retired)  
Mohawk Innovative Technology, Inc.

For contributions to tribology, oil-free turbomachinery, and gas foil bearings.

**Mr. Charles W. Hull (8)**

Chief Technology Officer Regenerative Medicine  
3D Systems Corporation

For the invention of 3D printing and the subsequent development of the additive manufacturing industry.



# Class of 2025: Members



**Dr. Joseph G. Jacangelo (4)**  
Vice President and Director of Research  
Stantec

For advancing low-pressure membrane filtration for potable water treatment and wastewater reuse.



**Dr. Abhay Joshi (2, 3)**  
Independent Consultant

For taking botulinum toxin medicines from initial lab-scale production to global commercialization and distribution.



**Mr. Andy Jassy (5)**  
President and CEO  
Amazon

For driving the cloud computing revolution by envisioning, launching, leading, and growing Amazon Web Services.



**Dr. Mohan Kalkunte (7)**  
Vice President  
Broadcom Inc.

For contributions to ethernet switching for data networks.



**Dr. Russell Taylor Johns (11, 4)**  
Professor (retired)  
The Pennsylvania State University

For developing thermodynamically rigorous algorithms for modeling hydrocarbon recovery processes.



**Dr. Katalin Karikó (2)**  
Professor  
University of Szeged

For the development of nucleoside-modified mRNA used in the world's leading COVID-19 lipid nanoparticle vaccines.



**Ms. Denise C. Johnson (11)**  
Group President  
Caterpillar Inc.

For overseeing the development of zero-emission and autonomous mining equipment.



**Prof. Lydia E. Kavradi (7, 5)**  
Kenneth and Audrey Kennedy Professor of Computing  
Department of Computer Science  
Rice University

For developing randomized motion-planning algorithms for robotics and robotics-inspired methods in biomedicine.



**Dr. Wayne Robert Johnson (1)**  
Engineer  
National Aeronautics and Space Administration

For contributions to rotorcraft comprehensive analysis, tiltrotor aircraft development, emerging electric aircraft, and the Mars Helicopter development.



**Dr. Dale E. Klein (6)**  
Professor  
University of Texas at Austin

For leadership in the development of programs that enhance the safety of nuclear power plants worldwide.

# Class of 2025: Members

**Professor Nicholas A. Kotov (9, 3)**

Irving Langmuir Distinguished Professor of Chemical Sciences and Engineering  
University of Michigan

For scalable methods for the self-assembly of anisotropic nanoparticles and multifunctional nanocomposites that led to commercially viable advanced materials.

**Mrs. Maria C. Lehman (4, 12)**

Director U.S. Infrastructure  
GHD

For leadership in public service and business engineering management focused on the sustainability and resilience of critical civil infrastructure.

**Dr. Michael R. Krames (7, 9)**

President  
Arkesso, LLC

For contributions to high-brightness, visible-spectrum light-emitting diodes.

**Dr. Don Mark Lipkin (9)**

Professor  
Texas A&M University

For innovations of coatings and rhenium recovery that contributed to higher efficiency and sustainability of jet engines and gas turbines.

**Mr. Raymond Arthur Kreig (11)**

President  
R.A. Kreig & Associates

For developing the geotechnical engineering system used for the site selection and design of the Trans-Alaska Pipeline.

**Dr. Michal Lipson (7)**

Eugene Higgins Professor  
Department of Electrical Engineering, School of Electrical Engineering  
Columbia University

For the development, fabrication, and implementation of building blocks of silicon photonics.

**Dr. Concetta La Marca (3)**

Senior Principal Consultant  
Chemours

For contributions to the commercial development and manufacturing of advanced, non-ozone-depleting, low-global-warming-potential refrigerants.

**Professor Yueh-Lin Loo (3, 9)**

Theodora D. '78 & William H. Walton III '74  
Professor in Engineering  
Princeton University

For contributions in developing processing-structure-property relationships in organic, polymer, and hybrid electronic materials, and leadership in decarbonizing shipping.

**Mr. Robert Lee (10)**

Vice President, Powertrain Engineering and Head of Global Powertrain Coordination (retired)  
Fiat Chrysler Automobiles

For leadership in automotive propulsion systems for conventional internal combustion hybrid and electric vehicles.

**Professor Tomas Lozano-Perez (5)**

School of Engineering Professor of Teaching Excellence  
Department of Electrical Engineering and Computer Science  
Massachusetts Institute of Technology

For contributions to robot motion planning and molecular design.



# Class of 2025: Members

**Dr. Subbaiah Venkata Malladi (10)**

Chief Technical Officer and Principal Engineer  
Exponent

For contributions to critical national-transportation-safety-related investigations and safety regulation enforcement.

**Dr. William E. Mickols (3, 9)**

President  
Mickols Consulting LLC

For the discovery, development, and implementation of next-generation desalination membranes and related water filtration systems.

**Dr. John L. Manferdelli (5, 7)**

Independent Consultant

For contributions and leadership in the field of trusted and confidential computing.

**Dr. Leslie A. Momoda (9)**

Executive Vice President  
HRL Laboratories, LLC

For delivering materials innovation and application of advanced technologies across diverse industry sectors, ranging from hypersonics to high performance electronics.

**Professor Christopher David Manning (5)**

Thomas M. Siebel Professor in Machine Learning, Professor of Linguistics and of Computer Science  
Stanford University

For the development and dissemination of natural language processing methods.

**Dr. Radhakrishnan L. Nagarajan (7)**

Senior Vice President and Chief Technology Officer, Optical Engineering  
Marvell Technology Inc.

For advances in high-speed lasers and photonic integration technologies.

**Professor Maja Mataric (5)**

Chaired & Distinguished Professor of Computer Science  
Thomas Lord Department of Computer Science  
University of Southern California

For contributions to human-robot interaction and socially assistive robotics.

**Dr. Alison Nordt (1, 10)**

Director Space Science and Instrumentation  
Lockheed Martin Corporation

For contributions to aerospace and space science through development of novel instruments and space missions, extending understanding of the universe.

**Ms. Karen McKee (3)**

Former President  
ExxonMobil Product Solutions

For leadership and innovation in growing sustainable global petrochemical businesses.

**Dr. Aydogan Ozcan (7, 2)**

Professor  
University of California, Los Angeles

For contributions to mobile sensing and telepathology for medical diagnostics.

## Class of 2025: Members

### **Mr. Mark Papermaster (7)**

Chief Technology Officer & Executive Vice President  
AMD

For leadership in the design and production of complex integrated circuit processors.



### **Professor Kristala L. J. Prather (2, 3)**

Arthur D. Little Professor and Department Head  
Department of Chemical Engineering  
Massachusetts Institute of Technology

For the development of innovative approaches to regulate metabolic flux in engineered microorganisms with applications to specialty chemicals production.



### **Dr. Beth Louise Parker (11, 4)**

Professor and Director of Morwick G360  
Groundwater Research Institute  
Water Resources Engineering  
College of Engineering, University of Guelph

For developing field methods to monitor, understand, and remediate groundwater contaminant occurrence, fate, and transport in fractured rock aquifers.



### **Dr. Madhusudan Raghavan (10)**

Senior Technical Fellow and Research Program Lead  
General Motors Research and Development

For contributions to kinematic analysis applied to conventional, hybrid, and electric vehicle powertrain designs.



### **Mr. John Joseph Paserba Jr. (6)**

President and CEO  
Southern States, LLC

For advancing the application of power electronic controllers to improve power system performance and grid reliability.



### **Dr. Ellen Rathje (4)**

Janet S. Cockrell Centennial Chair in Engineering  
University of Texas

For contributions to seismic slope assessment and site response analysis and the development of cyberinfrastructure for natural hazards engineering.



### **Dr. Fang Zheng Peng (6, 12)**

RK Mellon Endowed Chair Professor  
University of Pittsburgh

For contributions to the development of high-power electronics technologies for advanced power grid control and energy conversion.



### **Dr. Eric J. Rignot (12, 11)**

Professor  
Department of Earth System Science  
University of California, Irvine

For contributions to modeling and analysis of the effects of global climate change on polar ice sheets using radar interferometry.



### **Dr. Kristin A. Persson (9, 3)**

Professor  
Department of Materials Science and Engineering  
UC Berkeley

For pioneering data-driven materials design through the creation and stewardship of open materials databases and associated data-mining algorithms.



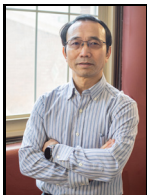
### **Dr. Mary M. Roybal (1, 10)**

Sr. Principal Engineering Fellow (Retired)  
Raytheon

For contributions to the structural integrity and producibility of some of the world's most advanced missile systems.



# Class of 2025: Members

**Dr. Rongsheng Roger Ruan (12)**

Professor and Director  
University of Minnesota

For scientific and entrepreneurial contributions to the sustainable development of the circular economy within food and agricultural systems.

**Professor David V. Schaffer (2, 3)**

Professor and Director  
Department of Chemical and Biomolecular Engineering  
University of California, Berkeley

For the application of fundamental molecular and cellular engineering principles to enable the clinical success of gene and cell therapies.

**Dr. Stuart J. Russell (5)**

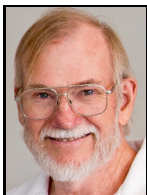
Distinguished Professor of Computer Science and Computational Precision Health  
University of California, Berkeley

For contributions to developments in artificial intelligence, including reasoning, probabilistic modeling, planning, safety, and education.

**Professor Hanspeter Schaub (1)**

Glenn L. Murphy Endowed Chair & Distinguished Professor  
University of Colorado Boulder

For contributions to the control of satellite formations and relative orientations utilizing natural forces, including the use of electrostatics.

**Dr. Richard Sandstrom (12)**

Co-Founder, Senior Technical Advisor  
Cymer, an ASML company

For contributions and leadership in the development of commercial quality microlithography EUV lasers, enabling nanoscale chip manufacturing.

**Ms. SawTeen See (4)**

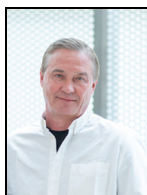
President  
See Robertson Structural Engineers, LLC

For leadership in managing the innovative structural design of tall, super-tall, and other buildings.

**Dr. Mahadev Satyanarayanan (5)**

Jaime Carbonell University Professor of Computer Science  
Carnegie Mellon University

For contributions to distributed file systems, edge computing, and mobile computing.

**Professor Vladimir M. Shalaev (7)**

Bob and Anne Burnett Distinguished Professor of Electrical and Computer Engineering  
Purdue University

For contributions to negative-refractive-index material at optical frequencies and metamaterial applications for national security.

**Dr. Linda S. Schadler Feist (9)**

Interim Provost and Senior Vice President  
University of Vermont

For contributions to the fundamental understanding, property control, and commercial application of polymer nanocomposites

**Dr. Robert Smilowitz (4)**

Senior Principal  
Thornton Tomasetti

For protecting lives from acts of terrorism through vulnerability assessment, threat mitigation, and building standards development.

# Class of 2025: Members

**Dr. Alice Elaine Smith (8)**

Joe W. Forehand, Jr. Distinguished Professor  
Auburn University

For advancements in computational intelligence as applied to modeling and optimization of complex systems.

**Mr. Thomas E. Taylor (1, 7)**

Chief Engineer and Technical Director  
Northrop Grumman Corporation

For technical leadership and innovations in the development of intelligence collection systems of great value to the United States.

**Dr. Richard W. Spinrad (12, 11)**

Emeritus Professor  
Oregon State University

For leadership in the development and execution of national and international programs in ocean science and technology.

**Dr. Margaret Susan Torn (11, 12)**

Senior Scientist  
Berkeley Lab

For contributions to the understanding of soil carbon dynamics and sustained leadership of the long-term monitoring of climate change.

**Mr. Eric Swanson (2)**

Affiliate of the Research Laboratory of Electronics  
Massachusetts Institute of Technology

For contributions and entrepreneurship in biomedical imaging and optical communications.

**Ms. Janeen Uzzell (2)**

CEO  
National Society of Black Engineers

For providing access to health information and healthcare outcomes globally, and increasing racial, gender, and community engagement in engineering practice.

**Dr. F. Don Tan (6, 1)**

Founder and CTO  
E2 Systems

For contributions to advances in power electronics technologies for space applications.

**Dr. John Charles Vassberg (1)**

Chief Design Officer  
JetZero

For advancing aircraft capabilities and efficiency through inventions, developments, and applications of aerodynamic technologies, computational methods, and experimental validations.

**Dr. Marc Barry Taub (2, 9)**

Vice President  
Abbott Diabetes Care

For leadership in bioengineering design and the development of transformational wearable devices and systems for in vivo electrochemical biosensing.

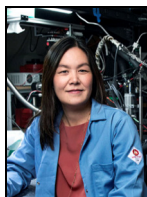
**Professor Venkat Venkatasubramanian (3, 5)**

Samuel Ruben-Peter G. Viele Professor of Engineering  
Department of Chemical Engineering  
Columbia University

For research in the development and implementation of artificial intelligence methods in process safety and pharmaceutical



# Class of 2025: Members

**Professor Evelyn N. Wang (10)**

Vice President for Energy and Climate and Ford Professor of Engineering  
Massachusetts Institute of Technology

For contributions to clean energy, water technology, and nanostructure-based phase change heat transfer, and for service to the nation.

**Dr. Changfu Wu (2)**

Senior Biomedical Research and Biomedical Product Assessment Service (SBRBPAS) Expert  
U.S. Food and Drug Administration

For propelling the United States to a position of global leadership in early patient access to cutting-edge cardiovascular devices.

**Dr. Yong Wang (3)**

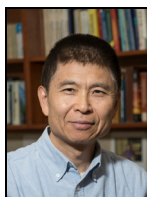
Regents Professor  
Voiland School of Chemical Engineering and Bioengineering  
Washington State University

For advancing catalyst discovery, design, and reaction engineering for energy and environmental applications.

**Dr. Yuehwern Yih (8)**

Tompkins Professor of Industrial Engineering  
Purdue University

For contributions to supply chain management systems in humanitarian relief efforts and health care.

**Professor Zhen-Gang Wang (3)**

Dick and Barbara Dickinson Professor of Chemical Engineering  
Division of Chemistry and Chemical Engineering  
California Institute of Technology

For unifying theories of thermodynamic and transport properties of polymers to predict phase behavior, self-assembly, and nucleation.

**Mr. Eric S. Yuan (5)**

CEO  
Zoom Communications, Inc

For leadership enabling worldwide video communications.

**Dr. Robert A. Weller (12)**

Senior Scientist  
Woods Hole Oceanographic Institution

For contributions to the theory, observation, and instrumentation of the upper ocean and air-sea interface.

**Dr. Lixia Zhang (5)**

Professor  
Computer Science Department  
University of California, Los Angeles

For the development of internet protocols which significantly impacted internet quality and performance, and for leadership in setting standards.

**Dr. Jim D. Wiethorn (4)**

Forensic Engineering Specialist  
ICC Forensics

For research on and analysis of crane accidents, saving lives through improved technology and training.

**Dr. Ming Zhou (10)**

Chief Engineer, Computational Mechanics and Design Optimization  
Altair Engineering

For contributions to topology optimization and simulation-driven generative design technology.

**Dr. Julie Beth Zimmerman (12, 4)**  
Vice Provost and Lilliane & Christian Haub  
Professor  
Yale University



For leadership in education and the development of green technologies that enhance the sustainability of engineered systems.

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# Class of 2025: International Members

## Dr. Hirofumi Akagi (6)

Distinguished Professor  
Institute of Science Tokyo

For contributions to the theory, design, and application of utility high-power electronic systems.



## Professor Jon Atli Benediktsson (12, 2)

Professor  
Faculty of Electrical Engineering  
University of Iceland

For contributions to design and application of advanced machine learning and morphological methods in information analysis of multisource sensing data.



## Dr. Mohammed Yahya Al Qahtani (11)

President Downstream  
Aramco

For leadership and contributions in carbon management in oil and gas operations.



## Dr. Martin Julian Blunt (11)

Professor  
Department of Earth Science and Engineering  
Imperial College London

For the description and simulation of multiphase flow in porous media from pore-to-reservoir-scale.



## Professor Virgilio A. F. Almeida (5)

Professor Emeritus  
Federal University of Minas Gerais

For contributions to the performance evaluation and modeling of large-scale distributed systems and to information technology policies.



## Mr. Anil Chaudhry (6)

Managing Director and CEO  
Schneider Electric India Pvt Ltd

For leadership in advancing real-time power grid management.



## Professor Vanderlei Salvador Bagnato (12, 2)

Professor  
University of Sao Paulo

For contributions to metrology, optical sensing, bioengineering, technology transfer, and engineering education.



## Dr. Bjerne S. Clausen (3, 9)

President & CEO (retired)  
Haldor Topsoe A/S

For pioneering the molecular science of catalyst function for important chemical processes with long-lasting technical and practical impact.



## Ms. Catia Bastioli (2)

CEO and President  
Novamont S.p.A

For leadership in industrial bioplastics and for championing the circular bioeconomy.



## Dr. Daniel Gold (12, 1)

Head of DDR&D (Defense Directorate of Research and Development)  
Israel Ministry of Defense

For contributions and leadership in the defense industry, especially the development and deployment of missile defense systems.



# Class of 2025: International Members

**Professor Masanori Hamada (4)**

Professor Emeritus  
Waseda University

For developing methods to protect critical infrastructure against earthquakes and soil liquefaction.

**Prof. Hitoshi Kuninaka (1)**

Specially Appointed Professor  
Institute of Space and Astronautical Science  
Japan Aerospace Exploration Agency

For accomplishments in electric propulsion for spacecraft and for the Hayabusa2 asteroid sample return mission.

**Professor Gerhard A. Holzapfel (10)**

Professor of Biomechanics  
Institute of Biomechanics  
Graz University of Technology

For contributions to the mechanics of soft materials and for the quantification, modeling, and analysis of biological tissue microstructures.

**Dr. Po-Yen Lu (3, 9)**

Partner  
CID Group

For leadership and innovation in the mass production of liquid-crystal displays and semiconductors for high-bandwidth data transmission.

**Dr. Ingrid Kogel-Knabner (11)**

University Professor  
Technical University of Munich

For contributions to mechanisms for soil organic carbon persistence and impacts on soil functions and climate.

**Dr. Dierk Raabe (9)**

Professor, Max-Planck Director  
Max Planck Institute for Sustainable Materials

For contributions to the fundamental understanding of materials and to sustainable metallurgy.

**Professor Fumio Koyama (7)**

Professor Emeritus  
FIRST Lab.  
Institute of Science Tokyo

For developing vertical-cavity surface-emitting lasers (VCSEL), including the first room-temperature continuous operation and advanced beam-steering VCSEL.

**Professor Bhaskar Ramamurthi (7)**

Professor  
Department of Electrical Engineering  
Indian Institute of Technology - Madras

For the advancement and commercialization of wireless technology in India.

**Dr. Ondrej Ladislav Krivanek (9, 7)**

Senior Scientific Advisor  
Bruker AXS

For the realization of the aberration-corrected scanning transmission electron microscope to extend microscopy to sub-ångström resolution.

**Mr. Mate Rimac (10)**

Founder Rimac Group, CEO Bugatti Rimac, CEO Rimac Technology  
Rimac Group

For contributions to electric vehicle technology and leadership in the automotive industry.

# Class of 2025: International Members

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**Dr. Sreedhara Panicker Somanath (1, 9)**

Vikram Sarabhai Professor  
Aerospace Engineering Department  
ISRO, Department of Space



For engineering excellence and leadership in making India the first country to reach the Moon's south pole, advancing space technology.

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# Class of 2025

**By Section and  
Geographic Location**



**SECTION 1  
AEROSPACE ENGINEERING  
(PRIMARY SECTION)**

Bowersox, Rodney Dale Welch  
Cherepinsky, Igor  
Feyereisen, Thea  
Johnson, Wayne Robert  
Kuninaka, Hitoshi  
Nordt, Alison  
Roybal, Mary M.  
Schaub, Hanspeter  
Somanath, Sreedhara Panicker  
Taylor, Thomas E.  
Vassberg, John Charles

**SECTION 1  
AEROSPACE ENGINEERING  
(SECONDARY SECTION)**

Gold, Daniel  
Hewson, Marillyn A.  
Tan, F. Don

**SECTION 2  
BIOENGINEERING  
(PRIMARY SECTION)**

Achilefu, Samuel  
Athanasios, Kyriacos Athens  
Bastioli, Catia  
Brannon-Peppas, Lisa  
Cameron, Douglas C.  
Cochran, Jennifer R.  
Cooney, Charles L.  
Estell, David  
Hanes, Justin  
Joshi, Abhay  
Karikó, Katalin  
Prather, Kristala L. J.  
Schaffer, David V.  
Swanson, Eric  
Taub, Marc Barry  
Uzzell, Janeen  
Wu, Changfu

**SECTION 2  
BIOENGINEERING  
(SECONDARY SECTION)**

Bagnato, Vanderlei Salvador  
Benediktsson, Jon Atli  
Dicciani, Nance Katherine  
Ozcan, Aydogan

**SECTION 3  
CHEMICAL ENGINEERING  
(PRIMARY SECTION)**

Bailliey, Gerard Marcel Abel  
Bazant, Martin Zdenek  
Beckham, Gregg T.  
Benson, Olester, Jr.  
Clausen, Bjerne S.  
Dicciani, Nance Katherine  
Gindy, Marian  
La Marca, Concetta  
Loo, Yueh-Lin  
Lu, Po-Yen  
McKee, Karen  
Mickols, William E.

Venkatasubramanian, Venkat  
Wang, Yong  
Wang, Zhen-Gang

**SECTION 3  
CHEMICAL ENGINEERING  
(SECONDARY SECTION)**

Amine, Khalil  
Cochran, Jennifer R.  
Cooney, Charles L.  
Dooley, James H.  
Facchetti, Antonio  
Hanes, Justin  
Joshi, Abhay  
Kotov, Nicholas A.  
Persson, Kristin A.  
Prather, Kristala L. J.  
Schaffer, David V.

**SECTION 4  
CIVIL & ENVIRONMENTAL  
ENGINEERING  
(PRIMARY SECTION)**

Anderson Bomar, Marsha  
Ben-Akiva, Moshe E.  
Crouse, Charles Brian  
Frangopol, Dan M.  
García, Marcelo Horacio  
Hamada, Masanori  
Hausler, Elizabeth A.  
Jacangelo, Joseph G.  
Lehman, Maria C.  
Rathje, Ellen  
See, SawTeen  
Smilowitz, Robert  
Wiethorn, Jim D.

**SECTION 4  
CIVIL & ENVIRONMENTAL  
ENGINEERING  
(SECONDARY SECTION)**

Johns, Russell Taylor  
Parker, Beth Louise  
Zimmerman, Julie Beth

**SECTION 5  
COMPUTER SCIENCE &  
ENGINEERING  
(PRIMARY SECTION)**

Acero, Alex  
Almeida, Virgilio A. F.  
Bahl, Paramvir  
Cao, Pei  
Comaniciu, Dorin  
Estrin, Judith L.  
Jassy, Andy  
Lozano-Perez, Tomas  
Manferdelli, John L.  
Manning, Christopher David  
Mataric, Maja  
Russell, Stuart J.  
Satyanarayanan, Mahadev  
Yuan, Eric S.  
Zhang, Lixia

**SECTION 5  
COMPUTER SCIENCE &  
ENGINEERING  
(SECONDARY SECTION)**

Coleman, Victoria  
Kavraki, Lydia E.  
Venkatasubramanian, Venkat

**SECTION 6  
ELECTRIC POWER/ENERGY  
SYSTEMS ENGINEERING  
(PRIMARY SECTION)**

Akagi, Hirofumi  
Apostolov, Alexander  
Bian, Jessica  
Chapman, Patrick  
Chaudhry, Anil  
Cheung, Kwok Wai  
Klein, Dale E.  
Paserba, John Joseph, Jr.  
Peng, Fang Zheng  
Tan, F. Don

**SECTION 7  
ELECTRONICS,  
COMMUNICATION &  
INFORMATION SYSTEMS  
ENGINEERING  
(PRIMARY SECTION)**

Diddams, Scott Alan  
Doerr, Christopher R.  
Eng, Julie Sheridan  
Heath, Robert Wendell, Jr.  
Kalkunte, Mohan  
Kavraki, Lydia E.  
Koyama, Fumio  
Krames, Michael R.  
Lipson, Michal  
Nagarajan, Radhakrishnan L.  
Ozcan, Aydogan  
Papermaster, Mark  
Ramamurthi, Bhaskar  
Shalae, Vladimir M.

**SECTION 7  
ELECTRONICS,  
COMMUNICATION &  
INFORMATION SYSTEMS  
ENGINEERING  
(SECONDARY SECTION)**

Acero, Alex  
Bahl, Paramvir  
Chen, Tze-Chiang  
Krivanek, Ondrej Ladislav  
Manferdelli, John L.  
Taylor, Thomas E.

**SECTION 8  
MANUFACTURING,  
SERVICES, AND HUMAN  
SYSTEMS ENGINEERING  
(PRIMARY SECTION)**

Cohen, Robert C.  
Coleman, Victoria  
Hull, Charles W.

Smith, Alice Elaine  
Yih, Yuehwern

**SECTION 8  
MANUFACTURING,  
SERVICES, AND HUMAN  
SYSTEMS ENGINEERING  
(SECONDARY SECTION)**

Bascur, Osvaldo A.  
Benson, Olester, Jr.

**SECTION 9  
MATERIALS ENGINEERING  
(PRIMARY SECTION)**

Amine, Khalil  
Chen, Long-Qing  
Chen, Tze-Chiang  
Dembek, Alexa Ann  
Facchetti, Antonio  
Fink, Yoel  
Holm, Elizabeth Ann  
Kotov, Nicholas A.  
Krivanek, Ondrej Ladislav  
Lipkin, Don Mark  
Momoda, Leslie A.  
Persson, Kristin A.  
Raabe, Dierk  
Schadler Feist, Linda S.

**SECTION 9  
MATERIALS ENGINEERING  
(SECONDARY SECTION)**

Clausen, Bjerne S.  
Krames, Michael R.  
Loo, Yueh-Lin  
Lu, Po-Yen  
Mickols, William E.  
Somanath, Sreedhara Panicker  
Taub, Marc Barry

**SECTION 10  
MECHANICAL  
ENGINEERING  
(PRIMARY SECTION)**

Erdman, Arthur Guy  
Garimella, Suresh V.  
Heshmat, Hooshang  
Holmes, Philip John  
Holzapfel, Gerhard A.  
Lee, Robert  
Malladi, Subbaiah Venkata  
Raghavan, Madhusudan  
Rimac, Mate  
Wang, Evelyn N.  
Zhou, Ming

**SECTION 10  
MECHANICAL  
ENGINEERING  
(SECONDARY SECTION)**

Bazant, Martin Zdenek  
Brown, Robert Clinton  
Holm, Elizabeth Ann  
Nordt, Alison  
Roybal, Mary M.

# Class of 2025: By Section

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**SECTION 11  
NATURAL RESOURCES  
ENGINEERING**

(PRIMARY SECTION)

Al Qahtani, Mohammed Yahya  
Bascur, Osvaldo A.  
Blunt, Martin Julian  
Brantley, Susan L.  
Everett, Lorne G.  
Johns, Russell Taylor  
Johnson, Denise C  
Kogel-Knabner, Ingrid  
Kreig, Raymond Arthur  
Parker, Beth Louise  
Torn, Margaret Susan

**SECTION 11  
NATURAL RESOURCES  
ENGINEERING**

(SECONDARY SECTION)

García, Marcelo Horacio  
Rignot, Eric J.  
Spinrad, Richard W.

**SECTION 12  
SPECIAL FIELDS &  
INTERDISCIPLINARY  
ENGINEERING**

(PRIMARY SECTION)

Bagnato, Vanderlei Salvador  
Benediktsson, Jon Atli  
Brown, Robert Clinton  
Dooley, James H.  
Eberhard, Martin Forest  
Gold, Daniel  
Hewson, Marilyn A.  
Hill, Stephanie C.  
Rignot, Eric J.  
Ruan, Rongsheng Roger  
Sandstrom, Richard  
Spinrad, Richard W.  
Weller, Robert A.  
Zimmerman, Julie Beth

**SECTION 12  
SPECIAL FIELDS &  
INTERDISCIPLINARY  
ENGINEERING**

(SECONDARY SECTION)

Diddams, Scott Alan  
Frangopol, Dan M.  
Garimella, Suresh V.  
Hausler, Elizabeth A.  
Heshmat, Hooshang  
Lehman, Maria C.  
Peng, Fang Zheng  
Torn, Margaret Susan

# Class of 2025: By Geographic Location

## ALABAMA

Smith, Alice Elaine

## ALASKA

Kreig, Raymond Arthur

## ARIZONA

Garimella, Suresh V.  
Roybal, Mary M.

## CALIFORNIA

Acero, Alex  
Apostolov, Alexander  
Athanasiou, Kyriacos Athens  
Cao, Pei  
Cochran, Jennifer R.  
Coleman, Victoria  
Eberhard, Martin Forest  
Eng, Julie Sheridan  
Estell, David  
Estrin, Judith L.  
Everett, Lorne G.  
Hanes, Justin  
Heath, Robert Wendell  
Hull, Charles W.  
Johnson, Wayne Robert  
Joshi, Abhay  
Kalkunte, Mohan  
Krames, Michael R.  
Malladi, Subbaiah Venkata  
Manferdelli, John L.  
Manning, Christopher David  
Mataric, Maja  
Momoda, Leslie A.  
Nagarajan, Radhakrishnan L.  
Nordt, Alison  
Ozcan, Aydogan  
Persson, Kristin A.  
Rignot, Eric J.  
Russell, Stuart J.  
Sandstrom, Richard  
Schaffer, David V.  
See, SawTeen  
Tan, F. Don  
Taub, Marc Barry  
Taylor, Thomas E.  
Torn, Margaret Susan  
Vassberg, John Charles  
Wang, Zhen-Gang  
Yuan, Eric S.  
Zhang, Lixia  
Zhou, Ming

## COLORADO

Beckham, Gregg T.  
Cameron, Douglas C.  
Diddams, Scott Alan  
Frangopol, Dan M.  
Hausler, Elizabeth A.  
Schaub, Hanspeter

## CONNECTICUT

Cherepinsky, Igor  
Zimmerman, Julie Beth

## DELAWARE

La Marca, Concetta

## FLORIDA

Cohen, Robert C.  
Hewson, Marilyn A.

## GEORGIA

Anderson Bomar, Marsha  
Facchetti, Antonio  
Paserba, John Joseph

## ILLINOIS

Amine, Khalil  
García, Marcelo Horacio

## INDIANA

Shalaev, Vladimir M.  
Yih, Yuehwern

## IOWA

Brown, Robert Clinton

## MARYLAND

Hill, Stephanie C.  
Wu, Changfu

## MASSACHUSETTS

Bazant, Martin Zdenek  
Ben-Akiva, Moshe E.  
Bian, Jessica  
Cooney, Charles L.  
Fink, Yoel  
Lozano-Perez, Tomas  
Prather, Kristala L. J.  
Swanson, Eric  
Wang, Evelyn N.  
Weller, Robert A.

## MICHIGAN

Holm, Elizabeth Ann  
Kotov, Nicholas A.  
Lee, Robert  
Raghavan, Madhusudan

## MINNESOTA

Benson, Olester  
Erdman, Arthur Guy  
Ruan, Rongsheng Roger

## NEW JERSEY

Comaniciu, Dorin  
Doerr, Christopher R.  
Gindy, Marian  
Holmes, Philip John  
Loo, Yueh-Lin

## NEW YORK

Chen, Tze-Chiang  
Heshmat, Hooshang  
Lehman, Maria C.  
Lipson, Michal  
Smilowitz, Robert  
Venkatasubramanian, Venkat

## OHIO

Baillely, Gerard Marcel Abel

## PENNSYLVANIA

Brantley, Susan L.  
Karikó, Katalin  
Chen, Long-Qing  
Dembek, Alexa Ann  
Dicciani, Nance Katherine  
Johns, Russell Taylor  
Peng, Fang Zheng  
Satyanarayanan, Mahadev

## TEXAS

Achilefu, Samuel  
Bagnato, Vanderlei Salvador  
Bascur, Osvaldo A.  
Bowersox, Rodney Dale Welch  
Brannon-Peppas, Lisa  
Chapman, Patrick  
Johnson, Denise C  
Kavraki, Lydia E.  
Klein, Dale E.  
Lipkin, Don Mark  
McKee, Karen  
Papermaster, Mark  
Rathje, Ellen  
Wiethorn, Jim D.

## VERMONT

Schadler Feist, Linda S.

## VIRGINIA

Jacangelo, Joseph G.  
Spinrad, Richard W.  
Uzzell, Janeen

## WASHINGTON

Bahl, Paramvir  
Cheung, Kwok Wai  
Crouse, Charles Brian  
Dooley, James H.  
Jassy, Andy  
Krivanek, Ondrej Ladislav  
Mickols, William E.  
Wang, Yong

## WISCONSIN

Feyereisen, Thea

## AUSTRIA

Holzapfel, Gerhard A.

## BRAZIL

Almeida, Virgilio A. F.

## CANADA

Parker, Beth Louise

## CROATIA

Rimac, Mate

## DENMARK

Clausen, Bjerne S.

## GERMANY

Kogel-Knabner, Ingrid  
Raabe, Dierk

## ICELAND

Benediktsson, Jon Atli

## INDIA

Chaudhry, Anil  
Ramamurthi, Bhaskar  
Somanath, Sreedhara Panicker

## ISRAEL

Gold, Daniel

## ITALY

Bastioli, Catia

## JAPAN

Akagi, Hirofumi  
Hamada, Masanori  
Koyama, Fumio  
Kuninaka, Hitoshi

## SAUDI ARABIA

Al Qahtani, Mohammed Yahya

## TAIWAN

Lu, Po-Yen

## UNITED KINGDOM

Blunt, Martin Julian

# Anniversary Members



# NAE Anniversary Members

## 55+ YEARS

Members whose names are in boldface type are celebrating their 55th year.

**Arthur E. Bryson**

**William J. Perry**

## 50 TO 54 YEARS

Members whose names are in boldface type are celebrating their 50th year.

Norman H. Brooks

John C. Hancock

Ivan E. Sutherland

James F. Gibbons

John P. Hirth

**Ralph E. Gomory**

Arthur E. Humphrey

## 45 TO 49 YEARS

Members whose names are in boldface type are celebrating their 45th year.

Daniel Berg

Theodore V. Galambos

**Henry Kressel**

**Kenneth Thompson**

**Jose B. Cruz, Jr.**

Robert G. Gallagher

Robert D. Maurer

Andrew J. Viterbi

**Raymond F. Decker**

William J. Galloway

John S. Mayo

James Wei

Leo Esaki

Stephen E. Harris

C. Kumar N. Patel

**Jasper A. Welch, Jr.**

Thomas E. Everhart

Paul C. Jennings

**J. R. Anthony Pearson**

**Gerald L. Wilson**

Steven J. Fenves

Bernard H. Kear

John M. Prausnitz

Amnon Yariv

Merton C. Flemings

**Leonard Kleinrock**

**James R. Rice**

Douglas W. Fuerstenau

Herwig Kogelnik

**Herbert H. Richardson**

## 40 TO 44 YEARS

Members whose names are in boldface type are celebrating their 40th year.

Dell K. Allen

**Donald C. Fraser**

Donald E. Knuth

Irwin W. Sandberg

Norman R. Augustine

Kent F. Hansen

Butler W. Lampson

John H. Schmertmann

Lionel O. Barthold

Robert D. Hanson

**Ronald M. Latanision**

William R. Schowalter

Arden L. Bement, Jr.

Kenneth E. Haughton

Peter W. Likins

John H. Seinfeld

**Alfred Y. Cho**

Alfred J. Hendron, Jr.

Dan Luss

Charles V. Shank

Anil K. Chopra

Cyril Hilsun

Carver A. Mead

Eugene D. Shchukin

**Philip M. Condit**

**William G. Howard, Jr.**

Robert Mehrabian

Kenneth A. Smith

James W. Dally

John W. Hutchinson

**Richard C. Messinger**

**Ponisseril Somasundaran**

**James M. Duncan**

**Erich P. Ippen**

Thomas K. Perkins

Nickolas J. Themelis

Charles A. Eckert

Irwin M. Jacobs

Lawrence R. Rabiner

Sheldon Weinig

**Richard E. Emmert**

Trevor O. Jones

Raj Reddy

**Sheila E. Widnall**

John V. Evans

Thomas Kailath

Eli Reshotko

**Edward L. Wilson**

G. David Forney, Jr.

C. Judson King

**Ronald E. Rosensweig**

# NAE Anniversary Members

## 35 TO 39 YEARS

Members whose names are in boldface type are celebrating their 35th year.

Richard C. Alkire  
John A. Armstrong  
**Michael F. Ashby**  
Bishnu S. Atal  
David H. Auston  
William F. Ballhaus, Jr.  
Robert G. Bea  
Alexis T. Bell  
John A. Betti  
Joel S. Birnbaum  
**Richard E. Blahut**  
H. Kent Bowen  
**Donald A. Brand**  
Robert L. Byer  
**James D. Callen**  
John F. Cashen  
Jon F. Claerbout  
Rodney J. Clifton  
**G. Wayne Clough**  
**Harry M. Conger**  
Robert W. Conn  
Edward J. Cording  
Morton M. Denn  
**Frederick H. Dill**  
Stephen W. Director  
Russell D. Dupuis  
Lloyd A. Duscha  
Robert J. Eaton  
Charles Elachi  
Gerard W. Elverum  
Frank F. Fang

Edward A. Feigenbaum  
Robert E. Fischell  
John W. Fisher  
Elsa M. Garmire  
Alastair M. Glass  
**Marvin E. Goldstein**  
Joseph W. Goodman  
**Paul R. Gray**  
Keith E. Gubbins  
Siegfried S. Hecker  
Adam Heller  
**Arthur H. Heuer**  
Edward A. Hiler  
Narain G. Hingorani  
Yu-Chi Ho  
John E. Hopcroft  
Izzat M. Idriss  
Anthony J. Iorillo  
James O. Jirsa  
Gunther F. Joklik  
Robert E. Kahn  
Melvin F. Kanninen  
**Robert H. Kingston**  
Albert S. Kobayashi  
Louis J. Lanzerotti  
Gerald D. Laubach  
L. Gary Leal  
**Norman N. Li**  
Barbara H. Liskov  
Daniel P. Loucks  
Albert Macovski

John C. McDonald  
Chiang C. Mei  
**David G. Messerschmitt**  
**Keith K. Millheim**  
James W. Mitchell  
Joe H. Mize  
C. D. (Dan) Mote, Jr.  
**Stuart O. Nelson**  
George L. Nemhauser  
J. Nicholas Newman  
William D. Nix  
Ronald P. Nordgren  
William G. Oldham  
Alan V. Oppenheim  
Morton B. Panish  
Ronald R. Parker  
**Bradford W. Parkinson**  
Donald R. Paul  
R. Byron Pipes  
John W. Poduska, Sr.  
Michael Prats  
**Edwin P. Przybylowicz**  
Robert A. Rapp  
Jerome G. Rivard  
**Ronald L. Rivest**  
**Larry A. Roesner**  
Ronald A. Rohrer  
**Murray W. Rosenthal**  
Elbert L. Rutan  
Chih-Tang Sah  
**Gavriel Salvendy**

Alan Schriesheim  
**Norman R. Scott**  
Laurence C. Seifert  
Don W. Shaw  
Michael L. Shuler  
Henry I. Smith  
James J. Solberg  
Fred I. Stalkup  
Richard G. Strauch  
William D. Strecker  
Ben G. Streetman  
**John H. Sununu**  
Byron D. Tapley  
Robert E. Tarjan  
David A. Thompson  
Larry F. Thompson  
Neil E. Todreas  
Jeffrey D. Ullman  
William J. Ward, III  
Arthur W. Westerberg  
John A. White, Jr.  
Robert M. White  
Forman A. Williams  
James C. Williams  
Eugene Wong  
Jerry M. Woodall  
Israel J. Wygnanski  
**Loring A. Wyllie, Jr.**

# NAE Anniversary Members

## 30 TO 34 YEARS

Members whose names are in boldface type are celebrating their 30th year.

John L. Anderson

**Karl J. Astrom**

**Arthur B. Baggeroer**

Donald W. Bahr

B. Jayant Baliga

Peter M. Banks

Craig R. Barrett

Forest Baskett

Leslie A. Benmark

David B. Bogy

Peter R. Bridenbaugh

Alec N. Broers

Robert A. Brown

Keith A. Browning

Wilfried H. Brutsaert

**Federico Capasso**

Renso L. Caporali

**Vinton G. Cerf**

Don B. Chaffin

**K. Mani Chandy**

Steve S. Chen

**Wai-Fah Chen**

Joseph P. Colaco

**Thomas M. Cook**

Donald C. Cox

Magnus G. Craford

Jerome J. Cuomo

David N. Cutler

Lance A. Davis

Carl R. de Boor

**Nicholas M. Donofrio**

Steven D. Dorfman

Earl H. Dowell

E. Linn Draper, Jr.

Stephen W. Drew

Robert W. Dutton

Lewis S. Edelheit

Charles Fairhurst

Odd M. Faltinsen

Bruce A. Finlayson

Essex E. Finney, Jr.

George M.C. Fisher

Marshall L. Fisher

William L. Fisher

Edith M. Flanigen

Samuel H. Fuller

Thomas G. Giallorenzi

Ronald E. Goldsberry

Bernard M. Gordon

Susan L. Graham

Sidney J. Green

Donald P. Greenberg

**Edward M. Greitzer**

George I. Haddad

**Gene H. Haertling**

**Wesley L. Harris**

Howard R. Hart, Jr.

Henry J. Hatch

John L. Hennessy

John A. Herbst

George J. Hess

George J. Hirasaki

Kaare Høeg

**Thomas J.R. Hughes**

James F. Jackson

David W. Johnson, Jr.

Donald L. Johnson

Anita K. Jones

Paul G. Kaminski

Frank E. Karasz

Richard M. Karp

John G. Kassakian

Donald B. Keck

**Ralph L. Keeney**

Alexander M. Klibanov

Mark H. Kryder

David J. Kuck

Gerald L. Kulcinski

H. T. Kung

Richard T. Lahey, Jr.

Leslie B. Lamport

Robert S. Langer

Richard C. Larson

**George D. Leal**

W. John Lee

Sidney Leibovich

Robert H. Liebeck

Robert W. MacCormack

Alexander MacLachlan

Thomas L. Magnanti

Robert C. Marini

Karl E. Martersteck

William C. Maurer

Eugene R. McGrath

James C. McGroddy

**Jarold A. Meyer**

Jan D. Miller

L. David Montague

Manfred Morari

William B. Morgan

Norbert R. Morgenstern

Van C. Mow

Richard S. Muller

Earll M. Murman

Venkatesh Narayanamurti

John Neerhout, Jr.

Shlomo P. Neuman

**Andrew R. Neureuther**

Deborah J. Nightingale

Tak H. Ning

Robert M. Nowak

John H. Nuckolls

Thomas D. O'Rourke

**M. Elisabeth Paté-Cornell**

David A. Patterson

**Judea Pearl**

Irene C. Peden

Stewart D. Personick

Arun G. Phadke

William F. Powers

Richard B. Priory

W. Harmon Ray

**Elsa Reichmanis**

Jose M. Roesset

William B. Rouse

**John M. Rowell**

**Jesse E. Russell**

Maxine L. Savitz

Ronald W. Schafer

Gabriel Schmergel

Jerome S. Schultz

Robert J. Schultz

Lyle H. Schwartz

Mischa Schwartz

Charles L. Seitz

Robert J. Serafin

Frank S. Settles

Robert R. Shannon

**Thomas B. Sheridan**

Jeffrey J. Sirola

Arnold H. Silver

Richard W. Skaggs

**Larry L. Smarr**

Helmut E. Sobieczyk

Raymond S. Stata

Richard J. Stegemeier

Gunter Stein

Robert Stratton

Yasuharu Suematsu

James M. Symons

Zehev Tadmor

**George J. Tamaro**

**Man-Chung Tang**

Richard A. Tapia

**Kathleen C. Taylor**

Robert L. Taylor

**R. Rhodes Trussell**

**Stephen W. Tsai**

Rao R. Tummala

G. Keith Turnbull

**Robert C. Turnbull**

**Fawwaz Ulaby**

Gottfried Ungerboeck

**Steven J. Wallach**

C. Michael Walton

**Jaw-Kai Wang**

**W. Henry Weinberg**

**Bernard Widrow**

C. Grant Willson

Savio L-Y. Woo

Henry T. Yang

A. Thomas Young

William D. Young

**Ben T. Zinn**

# NAE Anniversary Members

## 25 TO 29 YEARS

Members whose names are in boldface type are celebrating their 25th year.

Hadi Abu-Akeel  
Leonard M. Adleman  
Ronald J. Adrian  
Alice M. Agogino  
Alfred V. Aho  
Kyle T. Alfriend  
Hiroyuki Aoyama  
**Frances H. Arnold**  
Marc A. Auslander  
Khalid Aziz  
**James P. Bagian**  
Ružena K. Bajcsy  
**Tamer Basar**  
Benton F. Baugh  
Zdeněk P. Bažant  
**Andreas von Bechtolsheim**  
Mark G. Benz  
Robert E. Bixby  
**James F. Blinn**  
Jack L. Blumenthal  
Alfred Blumstein  
Lillian C. Borrone  
John F. Brady  
Corale L. Brierley  
James P. Brill  
John H. Bruning  
Barry C. Buckland  
Thomas F. Budinger  
Jack E. Buffington  
Dennis M. Bushnell  
James E. Carnes  
**Edwin E. Catmull**  
Donald D. Chamberlin  
Edmund Y.S. Chao  
Pallab K. Chatterjee  
Shu Chien  
KunMo Chung  
David D. Clark  
James H. Clark  
David R. Clarke  
Vance D. Coffman  
Michael L. Corradini  
Edward F. Crawley  
David E. Crow  
**David E. Daniel**  
Mark E. Davis  
Earnest W. Deavenport, Jr.  
**Pablo G. Debenedetti**  
Thomas B. Deen  
James W. Demmel

David J. DeWitt  
James A. Dumesic  
Joel S. Engel  
Alan H. Epstein  
**Luis Esteva**  
**Michael Ettenberg**  
**Delores M. Etter**  
Leonard Evans  
**Millard S. Firebaugh**  
Paul A. Fleury  
David W. Fowler  
**Jean M. Fréchet**  
Richard H. Frenkiel  
Gilbert F. Froment  
Henry Fuchs  
William H. Gates, III  
Arthur M. Geoffrion  
Louis V. Gerstner, Jr.  
Don P. Giddens  
Eduardo D. Glandt  
Martin E. Glicksman  
Daniel S. Goldin  
Arthur L. Goldstein  
Martin Groetschel  
**Ignacio E. Grossmann**  
Edward E. Hagenlocker  
Bruce Hajek  
Kenneth N. Han  
Patrick M. Hanrahan  
Gerald T. Heydt  
John B. Heywood  
Julia S. Higgins  
J. Brent Hiskey  
Chih-Ming Ho  
**John P. Holdren**  
George M. Hornberger  
Hans G. Hornung  
Chenming Hu  
**Norden E. Huang**  
Jennie S. Hwang  
Salim M. Ibrahim  
Donald L. Iglehart  
Frank P. Incropera  
Jeremy Isenberg  
Akira Ishimaru  
Iwao Iwasaki  
Antony Jameson  
David Japikse  
Nikil S. Jayant  
Sungho Jin

**Forrester T. Johnson**  
William L. Johnson  
Andre G. Journal  
William N. Joy  
William H. Joyce  
John L. Junkins  
Dean Kamen  
Takeo Kanade  
William E. Kastenbergl  
**Randy H. Katz**  
Michael C. Kavanaugh  
Alan C. Kay  
Hossein Kazemi  
**David M. Kelley**  
**Albert I. King**  
Wolfgang G. Knauss  
Petar V. Kokotovic  
**William J. Koros**  
Frederick J. Krambeck  
Kent Kresa  
**Way Kuo**  
Michael R. Ladisch  
Bruce M. Lake  
Larry W. Lake  
Carl G. Langner  
S. Edward Law  
**Shung-Wu Lee**  
Margaret A. LeMone  
**Frederick J. Leonberger**  
**Nancy G. Leveson**  
Matthys P. Levy  
William C. Lindsey  
Richard J. Lipton  
**Helmut List**  
Jack E. Little  
Nicky C.C. Lu  
**Cecil Lue-Hing**  
Richard G. Luthy  
William J. MacKnight  
Christopher L. Magee  
William F. Marcuson, III  
James J. Markowsky  
William L. Maxwell  
Dan Maydan  
Eugene S. Meieran  
Robert M. Metcalfe  
Martin M. Mikulas, Jr.  
James J. Mikulski  
Joseph A. Miller, Jr.  
Warren F. Miller, Jr.

Parviz Moin  
Cleve B. Moler  
Francis C. Moon  
Duncan T. Moore  
**Peter F. Moulton**  
Alan R. Mulally  
Donald W. Murphy  
Marshall I. Nathan  
**Alan Needleman**  
John S. Newman  
**Donald R. Olander**  
Thomas J. O'Neil  
**Franklin M. Orr, Jr.**  
Julio M. Ottino  
Louis C. Parrillo  
R. Fabian W. Pease  
Timothy J. Pedley  
**Celestino R. Pennoni**  
Franz F. Pischinger  
James D. Plummer  
William T. Plummer  
Gary A. Pope  
Michael P. Ramage  
H. Donald Ratliff  
Lee R. Raymond  
Jean-Michel M. Rendu  
Bernard I. Robertson  
Kenneth M. Rosen  
Manfred Rühle  
B. Don Russell, Jr.  
Jerome H. Saltzer  
John M. Samuels, Jr.  
Isaac C. Sanchez  
Stanley I. Sandler  
Linda S. Sanford  
Alberto L. Sangiovanni-  
Vincentelli  
George W. Scherer  
Jerald L. Schnoor  
Henry G. Schwartz, Jr.  
Donald R. Scifres  
Frieder Seible  
Patricia G. Selinger  
**Hratch G. Semerjian**  
**Dan Shechtman**  
Freeman D. Shepherd  
**Hanif D. Sherali**  
Martin B. Sherwin  
**Daniel P. Siewiorek**  
**Marwan A. Simaan**

# NAE Anniversary Members

## 25 TO 29 YEARS *(continued)*

Members whose names are in boldface type are celebrating their 25th year.

Richard P. Simmons  
Charles Simonyi  
Jack M. Sipress  
Neil J.A. Sloane  
Vernon L. Snoeyink

**Jian Song**

Robert F. Sproull  
Katepalli R. Sreenivasan  
Rangaswamy Srinivasan  
Arnold F. Stancell  
Edgar A. Starke, Jr.  
John P. Stenbit

George Stephanopoulos  
Kenneth H. Stokoe, II  
Lawrence D. Stone  
Michael R. Stonebraker

**Gerald J. Sussman**

James R. Swartz  
**Jerome Swartz**  
Frank E. Talke  
Lewis M. Terman  
Theofanis G. Theofanous  
Robert V. Thomann  
Matthew V. Tirrell

Gary L. Tooker  
James A. Trainham, III  
Charles R. Trimble  
Richard L. Tucker  
Donald R. Uhlmann  
Andries van Dam  
Jack L. Walker  
John T. Watson  
William C. Webster  
Daniel Weihs  
Sheldon Weinbaum  
James E. West

Jack H. Westbrook  
**Garret P. Westerhoff**  
**John J. Wetzel, II**  
Mary F. Wheeler  
Ward Whitt  
H. Kumar Wickramasinghe  
Peter G. Wilhelm  
**Dennis F. Wilkie**  
Kensall D. Wise  
**Ching-Ping Wong**  
Margaret H. Wright  
**Joseph A. Yura**