

**Edward Orton, Jr. Memorial Lecture  
History of Lecturers**

Date	Name	Lecture Title
2023	Sergei V. Kalinin	Microscopy is All You Need: The Rise of Autonomous Science
2022	Sanjay Mathur	Ceramic Particles for Precision Drug Delivery
2021	Clive Randall	Turning Down the Heat in Sintering to Enable the Unification of all Materials
2020	Mrityunjay Singh	Additive Manufacturing: Disruptive Threat to Global Supply Chains and
2019	Minoru Tomozawa	Enabler for Sustainable Development
2018	Cato T. Laurencin	Regenerative Engineering: Materials in Convergence
2017	Steven Zinkle	What's new in nuclear reactors?
2016	Bruce Dunn	Designing Ceramics for Next-Generation Energy Storage Systems
2015	Sylvia M. Johnson	Space: The Materials Frontier
2014	Adrian Wright	My Borate Life: An Enigmatic Journey
2013	Sheldon Wiederhorn	Griffith Cracks at the Nanoscale
2012	Zhong Lin Wang	Nanogenerators and piezotronics – from basic science to novel applications
2011	Gary Messing	Lessons Learned after 40 years Sintering Technical Ceramics
2010	Brian R. Lawn	Teeth—What Nature's Most Resilient Bioceramic Can Tell Us About Our Origins
2009	Ludwig J. Gauckler	Innovations through Ceramic Processing by Tailoring Solid-Liquid and Solid-Gas Interfaces
2008	C. Jeffrey Brinker	Sol-Gel Processing - A Retrospective and Perspective
2007	Harry L. Tuller	Micro-Ionics: A Revolution in Portable Power Generation and Environmental Sensing
2006	Paul F. Becher	Microstructural and Interfacial Engineering of Ceramics Across Atomic-to-Micro Length Scales
2005	Peter G. Barnwell	An Innovative Ceramic Technology Success – LTCC from Laboratory to Electronic Applications in the Market Place
2004	David W. Johnson, Jr.	Ceramic Materials for Electronic and Photonic Applications: Past, Present and Future
2003	Nathan S. Lewis	An 'Electronic Nose' Based on Arrays of Conducting Polymer Composite Vapor Detectors
2002	Duncan T. Moore	
2001	Subhash C. Singhal	The important role of ceramic materials in developing fuel cells for the Electric Vehicles of the future.
2000	David L. Wilcox, Sr.	The Wireless/Internet Revolution and the Multi-layer Ceramic Technology Enabling Role
1999	Alastair M. Glass	Photonic Materials: The Enabler for the Communications Revolution
1998	Maxine L. Savitz	Commercialization of Advanced Structural Ceramics: Patience is a Necessity
1997	Terry A. Michalske	Intergrated Microsystems
1996	George H. Beall	Innovation in Multiphase Glass-Derived Systems
1995	Delbert E. Day	Uses of Glass in the Body
1994	Robert A. Laudise	Industrial Ecology: A Key to Green Processing and Green Design
1993	J. Derek Birchall	The Processing and Properties of Ceramics
1992	L. Eric Cross	Ceramic Sensors and Actuators for Smart Materials and Adaptive Structures
1991	Arthur H. Heuer	Biological and Biomimetic Ceramics: A New Frontier

**Edward Orton, Jr. Memorial Lecture  
History of Lecturers**

Date	Name	Lecture Title
1990	Karl M. Prewo	Fiber-Reinforced Ceramic Matrix Composites
1989	Anthony G. Evans	A Perspective on the Development of High-Performance Structural Ceramics
1988	Richard M. Spriggs	Ceramic Engineering and Science for the 21st Century
1987	Robert E. Newnham	The Golden Age of Electroceramics
1986	Hiroaki Yanagida	Industrial and Cultural Revolution with High Tech Ceramics
1985	Rustum Roy	The Ambivalent Role of Technology in the Future of America and the World
1984	Gene H. Haertling	Ceramics in a High Technology World
1983	Fred M. Ernsberger	The Nonconformist Ion
1982	Hermann Schmalzried	Can Reactions in Ceramic Systems Be Predicted?
1981	John B. Wachtman, Jr.	National Materials Policy: Critical Materials and Opportunities
1980	W. David Kingery	Social Needs and Ceramic Technology
1979	Joseph A. Pask	Ceramic processing and ceramic science.
1978	Julius J. Harwood	The dynamics of materials changes and ceramics opportunities in automotive vehicles in the future.
1977	Hans Thurnauer	Reflections
1976	John F. McMahon	Implications of Our Ceramic Heritage
1975	Emilio Q. Daddario	Materials Program of the Office of Technology Assessment
1974	James Boyd	
1973	George W. Brindley	The World of Clays and Clay Materials
1972	Henry Eyring	Thermodynamic and Transport Properties of Condensed Phases
1971	Hobart K. Kraner	Partners in Success
1970	Elburt F. Osborn	The Remarkable Development and Precarious Future of Basic Ceramic Research in the United States - A Case History
1969	Edward Wenk, Jr.	A New Look at the Oceans
1968	W.T. Pecora	The Earth's Crust as Our Geologic Laboratory
1967	Eric A. Walker	Engineering: Needs and Prospects
1966	J. Herbert Hollomon	Technology and Public Policy
1965	Frederick Seitz	Current Trends in Solid State Science
1964	W. Scott Hill	The Changing Role of Our Engineering Societies
1963	Andrew I. Andrews	The Specification of Color
1962	Seymour W. Herwald	
1961	Robert F. Legget	
1960	John R. Townsend	The Challenge to Ceramics in National Defense
1959	David Swan	
1958	John S. Rinehart	Meteorites, Satellites, and Ceramics

**Edward Orton, Jr. Memorial Lecture  
History of Lecturers**

Date	Name	Lecture Title
1957	Farrington Daniels	Utilization of Solar Energy
1956	John Frank Schairer	Melting Relations of the Common Rock-Forming Oxides
1955	Alexander Silverman	Glass Through the Ages
1954	Edward H. Kraus	Gems, Natural and Synthetic
1953	Frederick R. Matson	Ceramic Archaeology
1952	James Bliss Austin	The Thermal Dilatation of Non-Metallic Substances
1951	William C. Taylor	The Effect on Glass of Half a Century of Technical Development
1950	C.E. Kenneth Mees	The Growth of Industrial Research
1949	Frank H. Riddle	Spark Plug Insulation
1948	William H. Scheick	Ceramics in the Future of Housing
1947	Ralph E. Gibson	Integration in Science, Education, and Study
1946	George L. Clark	Roentgen Ceramics, Past, Present, and Future
1945	Clarence S. Ross	Minerals & Mineral Relationships to the Clay Minerals
1944	Hoyt C. Hottel	Infraray Heating
1943	Norman L. Bowen	Petrology and Silicate Technology
1942	Louis B. Tuckerman	An Outsider Looks at Ceramic Problems
1941	Ernest A. Hauser	Colloid Chemistry in Ceramics
1940	Wolsey G. Worcester	Orton, the Ceramist
1939	Lawrence E. Barringer	A Background for Ceramics
1938	Paul F. Kerr	A Decade of Research on the Nature of Clay
1937	Robert B. Sosman	Pyrometry & Steel Maker's Refractories
1936	William J. McCaughey	Contribution on Mineralogy to Ceramic Technology & Research
1935	H. Ries	Geology and Clay Research
1934	Arthur L. Day	Natural and Artificial Ceramic Products
1933	Edward W. Washburn	Phase Rule in Ceramics