1962	Technical Information Services
1963	Biological Effects of Radiation
1964	Novel Applications of Nuclear Energy
1965	Reactor Materials
1966	Outstanding Contributions to Reactor Physics since 1955
1967	Outstanding Contributions in the Field of Reactor Chemistry
1968	Outstanding Achievement in the Area of Industrial Applications of Radiation Techniques
1969	Fuel Burn-up Predictions and Measurements
1970	Computer Methods for the Solution of Problems in Reactor Technology
1971	No Award Presented
1972	Neutron Damage to Reactor Materials
1973	Nuclear Materials Safeguards Technology
1974	Public Understanding of Nuclear Energy
1975	Waste Disposal and/or Management
1976	Assessments of Nuclear Power Reactor Safety
1977	The Fuel Cycle
1978	Outstanding Contributions in Power Reactor Operations and Analysis
1979	Outstanding Achievement in the Production of Electricity by Commercial Nuclear Power Plants
1980	Outstanding Contributions in the Field of Radiological Environmental Protection Control
1981	Advancements in Nuclear Technology in Response to Three Mile Island
1982	Outstanding Advancements in Nuclear Waste Isolation Technology
1983	Distinctive Quality Assurance Achievement in the Nuclear Energy Field
1984	Distinguished Achievement in Nuclear Technology for Medical Diagnostics
1985	Distinguished Achievement in Developing Recognition of the Significance of Improved Knowledge
	Accuracy of the Nuclear Accident Source Term
1986	Reactor Operator Training
1987	Innovations in Reactor Plant Maintenance Methodology
1988	Elements in Enhancing Plant Operations as Measured by Plant Performance Indicators
1989	Radiation in Food Processing
1990	Radon Measurement and Control Technologies
1991	Innovations in Design of Passive Safety Systems for Advanced Power Reactors
1992	Outstanding Advances in the Use of Nuclear Technologies for Medical Applications
1993	No Award Presented
1994	Innovations in Long-Term Storage of Spent Fuel
1995	Application of Nuclear Techniques in Food Production
1996	Linear Dose Model vs. Other Models for Critical Dose Values
1997	Non-Proliferation Issues Concerning Pu Disposition
1998	Food Irradiation
1999	Nuclear Techniques in Medical Diagnosis and Treatment
2000	Life Extension and License Renewal for Nuclear Power Plants
2001	Nuclear Energy's Role in Sustaining Quality of Life
2002	Advanced Nuclear Power Generation Concepts
2003	No Award Presented (Nuclear Science on the Front Lines of the War Against Terrorism)
2004	No Award Presented (Closing the Divide Between Nuclear Power and the Public)
2005	Space Nuclear Power

and

2006 Radiochemistry in Nuclear Technology

2007 No Award Presented (Forwarding and Implementing the Nuclear Renaissance)

2008 Inherent and Passive Safety Features in Advance Water Reactors



- 2009 No Award Presented (Advancements in Risk-informed Decision-Making Practices)
- 2010 Advances in Predictive Science for Design and Analysis of Nuclear Reactors
- 2011 Innovations in Small Modular Reactors
- 2012 Media and Communications: 2011 Japanese Earthquake and Tsunami
- 2013 Advancement of Severe Accidents Analysis Capabilities/ Beyond-Design-Basis- Accident (BDBA) scenarios, analysis and management
- 2014 Enhancing Nuclear Power Plant Safety in response to the Fukushima Accident
- 2015 Demonstrating the Value of Nuclear Energy
- 2016 No topic selected
- 2017 Making SMRs a Reality: Going beyond conceptual designs to deployment
- 2018 Advancements in Alternative Uses of Nuclear Energy
- 2019 Modernization or Enhancement of the Regulatory Framework for Nuclear Energy Development
- 2020 Making advanced nuclear energy systems a reality: Going beyond promotion toward deployment.
- 2021 Making advanced nuclear energy systems a reality: Going beyond promotion toward deployment.
- 2022 Outstanding contributions to retaining the operations and lifetime of Zero Carbon Nuclear Generators.
- 2023 The role nuclear power plays in meeting state energy and environmental objectives.
- 2024 Achievements and contributions to advancing peaceful applications of nuclear technology and addressing future challenges.
- 2025 Secure digital control systems for advanced reactors / Advancement of enabling technologies for advanced reactors.