

Contact

23276 Southdown Manor Terrace
Unit 105
Ashburn, VA 20148
USA
1-703-729-1687 (Work)
deytec@frontiernet.net

www.linkedin.com/in/dr-monideep-dey-a130941b (LinkedIn)
www.deytecinc.com (Company)

Top Skills

Public Policy
Regulatory Requirements
Sustainable Development

Honors-Awards

Special Achievement Award
High Quality Award
Keynote Speaker
Appreciation for Workshop

Publications

Considerations of Conformity
Assessment for the Circular
Economy
Fire Safety Publications
Publications on Public Policy,
Regulation and Standardization
Profiles in Conservation

Dr. Monideep Dey

Principal Consultant, Deytec, Inc.
Washington DC-Baltimore Area

Summary

Monideep Dey, PhD, principal consultant of Deytec, Inc., is an expert in nuclear safety regulation, international standards and public policy. His specialized areas of work are mainly in two areas:

- Promoting rigorous nuclear safety regulation to maintain nuclear power as a viable option to address climate change
- Supporting international safety standards as the best means to achieve a high level of nuclear safety worldwide.

At the US Nuclear Regulatory Commission (USNRC), Dr. Monideep Dey pioneered the use of innovative performance-based regulation utilizing advanced models to enhance safety . This work included the verification of the models for use in nuclear safety regulation.

Dr. Monideep Dey has served as a US technical expert in leadership roles in safety and conformity assessment committees at the International Organization for Standardization (ISO). He also served as a US expert at the United Nations Economic Commission for Europe (UNECE), Working Party on Regulatory Cooperation and Standardization Policies (WP.6).

His experience spans over 44 years on policy, regulation and standards at the national and international levels in government, private industry and international organizations. Dr. Monideep Dey's work on regulation, standards and policy matters are documented extensively in his publications over the last 44 years.

Further details are provided at the "About Me" page of www.deytecinc.com.

Experience

Deytec, Inc., USA
President
May 2008 - Present (15 years 11 months)

Washington D.C. Metro Area

Monideep Dey, PhD, principal consultant of Deytec, Inc., is an expert in nuclear safety regulation, international standards and public policy. His specialized areas of work are mainly in two areas:

- Promoting rigorous nuclear safety regulation to maintain nuclear power as a viable option to address climate change
- Supporting international safety standards as the best means to achieve a high level of nuclear safety worldwide

Following retirement from the US Nuclear Regulatory Commission, Dr. Dey has been active in international standardization at ISO through the American National Standards Institute from 2011 through 2022. He served as an US expert to ISO's committee on conformity assessment (CASCO) from 2017 to 2022 where he contributed in the development of international standards, specifically for ISO/IEC TR 17032:2019, Conformity assessment — Guidelines and examples of a scheme for the certification of processes.

Dr. Dey served as Chairman (Convenor) of ISO TC 92 SC 4 WG 7, Fire safety engineering: Verification and validation of calculation methods from 2013 to 2017. See below for further details.

International Organization of Standardization (ISO)

Convenor (Chairman) of ISO TC 92 SC 4 WG 7, Verification and validation of fire calculation methods

October 2013 - March 2017 (3 years 6 months)

Geneva Area, Switzerland

Dr. Monideep Dey served in the U.S. delegation to the International Organization of Standardization (ISO) Technical Committee 92, "Fire Safety" for five years. He served as the chairman (convenor) of a fire safety engineering working group in ISO/TC/92 from 2013 to 2017. He was elected by the international experts in the committee to serve as Convenor because of his highly regarded expertise and work at NIST on fire model verification and validation (see below). During his term as Convenor, Dr. Dey initiated major initiatives at ISO/TC/92 to make its standards relevant in the international market, including for conformity assessment of fire safety designs to ensure quality and safety. Dr. Dey convened meetings in over 10 countries around the world to discuss these initiatives.

During Dr. Dey's Convenorship, he led the ISO Technical Committee on Fire Safety to revise its international standard for the assessment, verification,

and validation of fire calculation methods to include enhanced validation and verification procedures. He used his experience at NIST (see below) to inform the revision. This revised standard (see ISO 16730-1:2015) has resulted in much higher quality fire safety engineering practices worldwide.

Dr. Dey continued his effort to ensure quality in fire safety engineering in ISO's committee on conformity assessment (CASCO) where he served as an US expert from 2017 to 2022. In CASCO, he contributed in the development of ISO/IEC TR 17032:2019, Conformity assessment — Guidelines and examples of a scheme for the certification of processes. Dr. Dey contributed a specific annex in the standard on its use to certify fire protection designs based on fire safety engineering.

He is recognized as an expert in the ISO system of international standards worldwide.

U.S. Nuclear Regulatory Commission

Senior Engineer (GS-15, Step 10)

May 1985 - October 2006 (21 years 6 months)

Rockville, Maryland

Monideep Dey provided 21 years of dedicated federal service at the US Nuclear Regulatory Commission. After retirement at the highest professional grade level (GS 15 Step 10), his work there led to international standards at ISO for use in robust regulations that require the use of certified models. See the reports by Dr. Dey on work conducted at the USNRC at: <https://www.deytecinc.com/work-toward-iso-standards.html>. Also see above experience at ISO.

During his career at USNRC, Monideep Dey developed and managed several high profile and critical projects to enhance the safety of nuclear installations, including pioneering efforts to use standards in nuclear safety regulation. His efforts also included developing national public policy for nuclear safety. These efforts were supported by technical work on development of safety risk assessment techniques and engineering analytical methods.

Dr. Dey managed several international collaborative nuclear safety research programs. His last assignment at the USNRC was the high priority International Collaborative Fire Model Program conducted by the USNRC from 1999 until 2008. The project's goal was to verify and validate fire models for use in performance-based fire safety regulation. Dr. Dey was assigned to the

National Institute of Standards and Technology (NIST) as a guest researcher for four years to evaluate NIST fire models for use in nuclear safety regulation.

Dr. Dey also led other pioneering USNRC initiatives for performance-based regulation, including for testing reactor containment vessels, and a high-profile successful program to implement cost-effective regulation.

Dr. Dey adhered to the highest principles of integrity in science and engineering, and the use of verified scientific data in regulation throughout his career at the USNRC.

National Institute of Standards and Technology

Guest Researcher

January 2000 - September 2004 (4 years 9 months)

Gaithersburg, Maryland

Dr. Monideep Dey served as a guest researcher at the National Institute of Standards and Technology (NIST), U.S. Department of Commerce for 4 years as part of an inter-agency agreement for a collaborative program between the U.S. Nuclear Regulatory Commission (NRC) and NIST. His assignment was to evaluate the CFAST and FDS fire models developed by NIST for nuclear power plants applications, and to lead the International Collaborative Fire Model Project (ICFMP) (see Projects) initiated by the NRC.

His task was to evaluate and ensure that NIST fire models were verified and validated for use in the implementation of nuclear safety regulation. He initiated the first programs at NIST for the verification and validation of its fire models with full-scale fire tests. His highly acclaimed reports and findings on fire model verification and validation that led to ISO standards are extensively documented and may be found at: <https://www.deytecinc.com/work-toward-iso-standards.html>

Dr. Dey was elected by international experts in the ISO fire safety committee to serve as Convenor (see above) because of his highly regarded expertise and work at NIST on fire model verification and validation. As Convenor, he led an effort to revise ISO's international standard for the assessment, verification, and validation of fire calculation methods (ISO 16730-1:2015) to include enhanced validation and verification procedures. This revised standard has resulted in much higher quality fire safety engineering practices worldwide.

Westinghouse Electric Company

Senior Engineer

August 1980 - May 1985 (4 years 10 months)

Monideep Dey conducted safety analysis of the Nuclear Steam Supply Systems (NSSS) for nuclear power plants designed and supplied by Westinghouse Electric Company to U.S. and international utilities. Dr. Dey's duties included the development of engineering simulation methods, and the conduct of analyses in the areas of neutronics, thermal hydraulics, and plant operations. Monideep Dey developed design bases and functional requirement documents for safety and balance-of-plant systems for nuclear plants, including for innovative instrumentation and control systems with consideration of the man-machine interface.

Education

University of Michigan

Doctor of Philosophy (PhD), Nuclear Engineering · (1976 - 1980)

University of Michigan

Master of Science (MS), Nuclear Engineering · (1975 - 1976)

Queen's University

Bachelor of Science (BSc), Engineering Physics · (1971 - 1975)