Dr. Dale Michael Meade
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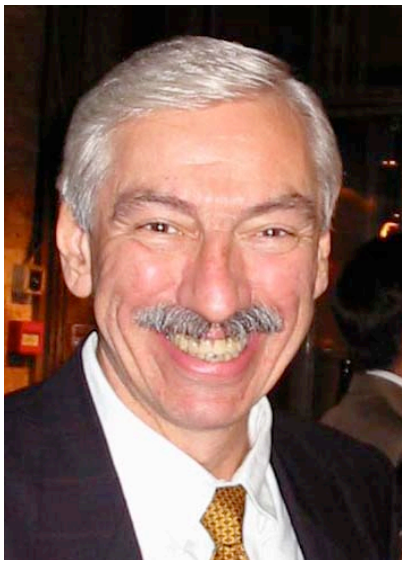

**Interests** – fusion energy research in magnetic and inertial confined plasmas, large scale experimental facilities including accelerators, and new carbon-free energy sources.

Dale Meade is an experimental plasma physicist who has been the leader of large fusion projects aimed at producing burning plasmas. As a graduate student at the University of Wisconsin, he participated in the construction of the first toroidal octupole experiment under Professor Donald Kerst. After a post doc at the Princeton Plasma Physics Laboratory (PPPL), Dale joined the Physics faculty at the University of Wisconsin and directed the construction of three specialized experimental plasma facilities (Toroidal Quadrupole, DC Toroidal Multipole and Linear Multi-Mirror Experiment) to study plasma confinement and was appointed Professor of Physics in 1972. He next went to PPPL, and in 1973 proposed the construction of a new medium size tokamak, the Poloidal Divertor Experiment (PDX), and was named Head of the PDX Project. After the successful completion of PDX construction and first year of operation, Dale was appointed to three positions: Head of the Experimental Division at PPPL, Head of the TFTR Research Program and Deputy Head of the TFTR Project. The Tokamak Fusion Test Reactor (TFTR) was a large tokamak built at PPPL (1982) with the objective of producing fusion plasma parameters using fusion reactor fuel (D-T) fuel. While in these positions, Dale set up a structured research organization that provided effective utilization of TFTR. In 1985, Dale chaired the Magnetic Fusion Advisory Committee Panel (MFAC XIV) that recommended construction of the Compact Ignition Tokamak (CIT), a US burning plasma experiment. In 1986, he was named Head of the TFTR Project and Head of Experimental Physics at PPPL. During this period TFTR was brought to full operating parameters, established several plasma performance records and produced many scientific advances. From 1991 to 1997, Dale was Deputy Director of PPPL with primary responsibility for overseeing TFTR D-T activities and Laboratory operations. In addition to the major scientific advances (> 10 MW of fusion power, demonstration of fusion plasma self-heating, etc), TFTR was distinguished by an outstanding safety and environmental record from 1986 – 1997. Since 1997, Dale has focused his energy on advocating the establishment of a strong burning plasma program in the US Fusion Energy Research Program. In 1998, he was appointed Head of the US Next Step Options activity, a national effort to design the Fusion Ignition Research Experiment (FIRE). The FIRE design activity was featured at the 2002 Snowmass Summer Study and the Department of Energy (DOE) Fusion Energy Sciences Committee review of US Burning Plasma Strategy and was found to be technically suitable as the US Burning Plasma Physics experiment. The FIRE design

activity was successfully completed with a DOE Physics Validation Review in 2004. In 2004, Dale was named Head of the PPPL Off-site Research Program. Since his retirement from PPPL in mid-2005, Dale has remained active in the fusion program as the Head of Fusion Innovation Research and Energy® (FIRE), a participant in the ARIES program, and as a member of the Fusion Energy Sciences Advisory Committee (FESAC) from 2008 to 2013. From mid-2012 to 2014, Dale was the leader of a Fusion Community Working Group that assessed various pathways to a magnetic fusion DEMO, and developed a framework for a US Road Map to Fusion Energy. Dale also maintains the FIRE (http://www.firefusionpower.org) web site, which has become the source of historic fusion documents, fusion news and information for the fusion community.

**Awards:**

- Fusion Power Associates Special Service Award 2017
- University of Wisconsin Electrical Engineering (125 Most Impactful Graduates) 2017
- Fusion Power Associates Distinguished Career Award, 2005
- Department of Energy Distinguished Associate Award, 2005
- American Association Advancement of Science (AAAS) Fellow 2005
- University of Wisconsin-Physics Department Distinguished Alumni Award, 2002
- Fusion Power Associates Leadership Award, 1999
- Department of Energy Distinguished Associate Award, 1994
- University of Wisconsin-Madison College of Engineering Distinguished Service, 1990.
- American Physical Society (APS) Fellow 1978

**Professional Appointments and Service:**

- Board of Directors, Fusion Power Associates (FPA) (2006 to 2018)
- Fusion Energy Sciences Advisory Committee 2008-2013
- Fusion Energy Sciences Advisory Committee Panel on International Collaboration in Fusion Energy Sciences, Chairman 2011-2012
- Fusion Energy Sciences Advisory Committee, Committee of Visitors 2009
- ReNeW Panel on Integration of High-Performance Steady-State Burning Plasmas 2009
- Fusion Energy Sciences Advisory Committee Panel on Toroidal Alternatives 2008
- Fusion Energy Sciences Advisory Committee Panel on Priorities, Gaps and Opportunities: Toward a Strategic Plan for Magnetic Fusion Energy 2007
- US Burning Plasma Organization Panel on US Participation in ITER 2006
- C-Mod Program Advisory Committee, MIT (2004-2007)
- Fusion Energy Sciences Advisory Committee Panel on US Burning Plasma Strategy 2002
- Fusion Energy Sciences Advisory Committee Panel on Burning Plasma Physics 2002
- High Energy Physics Panel on Assessment of Accelerator Physics and Technology, 1995-1996
- Board of Directors of Fusion Power Associates (FPA) (February 1989 to 1991)
- Industrial Liaison Committee (ILC) for the Department of Nuclear Engineering and Engineering Physics, University of Wisconsin (January 1988 to October 1993)
- Magnetic Fusion Advisory Committee (MFAC) (1985-1989)
- Chairman of MFAC Panel XIV - Assessment of Compact Ignition Tokamaks (August 1985 to February 1986)
- Los Alamos National Laboratory Fusion Energy Advisory Committee (1988)
- APS-DPP Maxwell Prize Selection Committee (1987-1988, 1990-1991 and 2011-2012)

- American Physical Society Division of Plasma Physics Fellowship Selection Committee (1986-1987)
- Oak Ridge National Laboratory Fusion Energy Division Advisory Committee (1985-1986), Chair 1986
- APS-DPP Executive Committee – mid1970s

**Chronological Summary of Professional Career:**

**Fusion Innovation Research and Energy®**
- August 2005 to present, consultant: special U.S. government employee, Princeton University, General Atomics Corporation, Oak Ridge National Laboratory

**Princeton Plasma Physics Laboratory:**
- September 2004 to July 31, 2005 Head of International Collaboration
- July 1997 to September 2004 - Head of Next Step Options and National FIRE Design Team
- May 1991 to July 1997 - Deputy Director
- October 1, 1986 to May 1991
  Head of the TFTR Project in the Technical Operations Department
  Head of Experimental Physics in the Research Department
- November 1982 to September 30, 1986
  Deputy Project Manager of TFTR in the Technical Operations Department
  Head of TFTR Research Operations Div. in the Technical Operations Department
  Head of Experimental Division in the Research Department
- February 1980 to November 1982
  Head of TFTR Research Program in the Research Department
  Head of Experimental Division in the Research Department
- 1975 - 1980 Head of PDX Construction Project and PDX Operations
- 1973 – 1975 Co-Head of FM-1 (First Levitated Superconducting Multipole)

**University of Wisconsin:**
- 1972 - 1974: Professor of Physics
- 1969 - 1972: Associate Professor of Physics
- 1967 - 1969: Assistant Professor of Physics

**Princeton Plasma Physics Laboratory:**
- 1966-1967: Post Doctoral appointment

**Education:**
- Ph.D. (Physics), University of Wisconsin, 1965
- M.S. (Physics), University of Wisconsin, 1962
- B.S. with High Honors, (Elec. Eng.), University of Wisconsin, 1961