

**ADVANCED REACTORS SUMMIT VI
&
TECHNOLOGY TRAILBLAZERS SHOWCASE**
UNDER THE AUSPICES OF
THE U.S. NUCLEAR INDUSTRY COUNCIL
AND IN CONJUNCTION WITH
UNIVERSITY OF CALIFORNIA SAN DIEGO

**JANUARY 29-31 2019
SAN DIEGO, CALIFORNIA**

Tuesday, January 29 - Career Fair & Welcome Reception

The Price Center at UC San Diego

11:00am – 1:00pm U.S. DEPARTMENT OF ENERGY CLEAN ENERGY TALK

4:00pm – 5:30pm CAREER FAIR

6:00pm – 7:30pm WELCOME RECEPTION

Wednesday, January 30 - Plenary

The Price Center at UC San Diego

8:00 am I. WELCOME

Dr. Miroslav Krstic

Senior Associate Vice Chancellor for Research;
Director of Cymer Center for Control Systems and Dynamics
UC San Diego

Dr. Albert P. Pisano

Professor and Dean
UC San Diego Jacobs School of Engineering

Mr. Linden S. Blue

Vice Chairman
General Atomics

8:20 am II. STAGE SETTERS

**U.S. Nuclear Regulatory Commission Transformation
& Licensing Modernization**

Hon. David A. Wright

Commissioner
U.S. Nuclear Regulatory Commission

Canadian Nuclear Safety Commission Update

Mr. Ramzi Jammal

Executive Vice President & Chief Regulatory Operations Officer
Canadian Nuclear Safety Commission

U.S. Department of Energy Advanced Nuclear Programs

Mr. Shane Johnson

Deputy Assistant Secretary for Nuclear Technology
U.S. Department of Energy

Gateway for Accelerated Innovation in Nuclear Update

Dr. Rita Baranwal

Director, Gateway for Accelerated Innovation in Nuclear
Idaho National Laboratory

10:00 am BREAK

10:15 am III. PANEL: FROM VERY SMALL TO MEGA: THE RIGHT REACTOR SIZE FOR THE RIGHT APPLICATION

Advanced reactors of various sizes are under development: from the very small (micro) for off-grid terrestrial and space applications to the very large, grid baseload-oriented systems. Panelists representing the range of reactor sizes will discuss their unique applications and design features in addition to challenges and innovative ideas to their future successful deployment.

Dr. Ron Faibish - Moderator

Senior Director of Business Development,
Nuclear Technologies and Materials
General Atomics

Dr. Mark Peters

Laboratory Director
Idaho National Laboratory

Mr. Chris Levesque

President and CEO
TerraPower

Ms. Karin Feldman

Vice President, Program Management
NuScale Power

Mr. Ken Canavan

Chief Technology Officer
Westinghouse Electric Company

Dr. Jacob DeWitte

Founder and CEO

Oklo Inc.

11:45 am IV. SPECIAL UPDATE: LICENSING & FIRST MOVER DEPLOYMENT

Hon. Jeffrey Merrifield

Former Commissioner, U.S. Nuclear Regulatory Commission
&
Chairman, USNIC Advanced Reactor Task Force;
Partner - Pillsbury Winthrop Shaw Pittman

12:05 pm V. TRAILBLAZERS UPDATE I & WORKING LUNCH

Energy Multiplier Module (EM²)

Dr. Christina Back

Vice President, Nuclear Technologies and Materials
Energy Group
General Atomics

Perspectives and Prospects for a U.S. Compact Fusion Pilot Plant

Dr. Richard BATTERY

DIII-D Experimental Science Director
DIII-D National Fusion Facility
General Atomics

1:05 pm VI. PANEL: ADVANCED FUELS: NEEDS, OPPORTUNITIES AND CHALLENGES

Discussion on the latest status and plans for advanced nuclear fuels. The session will also feature a specific discussion on the need for high-assay enriched uranium and overall nuclear fuel enrichment capabilities in the U.S. in order to accommodate fuel requirements for future deployment of various types of advanced reactors.

Mr. Spencer Nelson - Moderator

Program Director
ClearPath

Mr. Elmer Dyke

Senior Vice President, Business Operations & Chief Commercial Officer
Centrus Energy

Dr. Jon Carmack

Senior Technical Advisor, Office of Nuclear Energy
U.S. Department of Energy

Dr. Alan Icenhour

Associate Laboratory Director, Nuclear Science & Engineering

Oak Ridge National Laboratory

Mr. Joel Duling

President, Nuclear Operations Group
BWX Technologies, Inc.

Mr. Jeff Whitt

Director, Government Services
Framatome

2:35 pm VII. TRAILBLAZERS UPDATE II

On the Cusp of a New Energy Paradigm

Dr. Michl Binderbauer

Chief Executive Officer
TAE Technologies

2:55 pm BREAK

3:15 pm VIII. SPECIAL UPDATE: VERSATILE TEST REACTOR

Dr. Kemal Pasamehmetoglu

Executive Director for the Versatile Test Reactor
Idaho National Laboratory

3:35 pm IX. PANEL: ADVANCED REACTORS: GLOBAL PERSPECTIVES

This session will feature international perspectives on the state of advanced reactor concepts and deployment around the world. What are some of the common challenges and opportunities?

Mr. David Blee – Moderator

President & CEO
U.S. Nuclear Industry Council

Dr. Sama Bilbao y León

Head - Division of Nuclear Technology Development and Economics
OECD Nuclear Energy Agency

Ms. Kirsty Gogan

Co-Founder & Executive Director
Energy for Humanity

Dr. Kathryn McCarthy

Vice-President, Research and Development
Canadian Nuclear Laboratories

4:50 pm X. SPECIAL UPDATE: ARPA-E NUCLEAR PROGRAM UPDATE

Dr. Rachel Slaybaugh

Program Director, Advanced Nuclear Reactor Systems

Advanced Research Projects Agency-Energy (ARPA-E)

5:10 pm XI. SPECIAL UPDATE: ADVANCED NUCLEAR, MEET YOUR CUSTOMER

Mr. Tay Stevenson
Partner
Envoy Public Labs

5:30 pm ADJOURN DAY ONE PLENARY

5:45 pm TRAILBLAZER AWARDS RECEPTION
The Price Center at UC San Diego

Thursday, January 31 - Plenary

The Price Center at UC San Diego

8:00 am XII. SPECIAL UPDATE: SPACE APPLICATIONS FOR ADVANCED NUCLEAR

Mr. Lee Mason
STMD Principal Technologist for Power & Energy Storage
Glenn Research Center
National Aeronautical and Space Administration (NASA)

8:20 am XIII. TRAILBLAZERS UPDATE III

GE Hitachi's BWRX-300, PRISM, VTR Reactors
Dr. Jon Ball
Executive Vice President, Nuclear Plant Projects
GE Hitachi Nuclear Energy

8:40 am XIV. TRAILBLAZERS UPDATE IV

The Art of Advancing Nuclear Technology
Mr. Robin Rickman
Vice President of Corporate Development
Terrestrial Energy

9:00 am XV. PANEL: MODELING & SIMULATION AND THEIR INCREASING IMPORTANCE TO LICENSING OF ADVANCED NUCLEAR TECHNOLOGIES AND MATERIALS

Modeling and simulations have undergone dramatic transformation in recent years that has led to codes and computational approaches with ever-increasing levels of fidelity and precision. Such codes and approaches could potentially augment experimental data to provide additional valuable performance data for advanced reactor systems and related technologies, which could not have been achieved a

few years ago. The discussion will focus on the promise of modeling and simulation in accelerating the design and eventual deployment of advanced nuclear technologies.

Dr. Hussein Khalil – Moderator

Director, Nuclear Energy and Security Program
Distinguished Fellow
Argonne National Laboratory

Mr. Shane Johnson

Deputy Assistant Secretary for Nuclear Technology
U.S. Department of Energy

Dr. Christopher R. Stanek

NEAMS National Technical Director
Los Alamos National Laboratory

Mr. Raymond Furstenau

Director, Office of Nuclear Regulatory Research
U.S. Nuclear Regulatory Commission

Dr. David Kropaczek

Director, CASL
Oak Ridge National Lab

Mr. John Bolin

Senior Staff Engineer
General Atomics

10:30 am BREAK

10:45 am XVI. TRAILBLAZERS UPDATE V

Accelerating Small HTGR Through Modeling and Simulation

Dr. Martin van Staden

Vice President, Reactor Development
X-energy

**11:05 am XVII. SPECIAL UPDATE: U.S. DEPARTMENT OF ENERGY'S
TRANSFORMATIONAL CHALLENGE REACTOR PROGRAM**

Dr. Kurt Terrani

Technical Lead, Transformational Challenge Reactor Program
Oak Ridge National Laboratory

**11:25 am XVIII. PANEL: THE NEXUS BETWEEN FISSION AND FUSION: ADVANCED
MATERIALS AND BEYOND**

Both nuclear fission and fusion technologies have the need for advanced and innovative materials to accommodate extreme operating conditions associated with high temperature, corrosion, and particularly tolerance to high levels of radiation

induced damage. The panel will feature a discussion on these common challenges and joint opportunities for addressing them, as well as latest specific status of fusion technology and its future prospects.

Dr. Farhat Beg – Moderator

Director, Center for Energy Research (CER); Principal Investigator, HEDP Group; Professor, Mechanical & Aerospace Engineering Department
UC San Diego

Mr. Michael Delage

Chief Technology Officer
General Fusion

Dr. Christian Deck

Advanced Materials Group Leader
General Atomics

Dr. Steven J. Zinkle

UTK/ORNL Governor’s Chair for Nuclear Materials
Department of Nuclear Engineering and Department of Materials Science & Engineering
University of Tennessee

Dr. George Tynan

Associate Dean of Engineering;
Professor of Mechanical and Aerospace Engineering
UC San Diego Jacobs School of Engineering

12:55 pm XVIV. TRAILBLAZERS UPDATE VI

Starting a Generic Early Site Permit for Advanced Reactors

Mr. Paul Murray

Senior Vice President
Orano Federal Services

1:15 pm XVV. TRAILBLAZERS UPDATE VII & WORKING LUNCH

SMR Initiative for Puerto Rico

Mr. Eddie Guerra

Senior Engineer, Structural
Arup

Hybrid-Nuclear Energy Update

Mr. Michael Keller

President & CEO
Hybrid Power Technologies

2:00 pm XVI. SUMMARY & CHARGE

2:15 pm **ADJOURN DAY TWO PLENARY**

Optional Tours

2:30 pm - 5:00 pm Optional General Atomics Tour

Participants of the Advanced Reactors Summit VI & Showcase will have the opportunity to take part in one of the following optional tours:

Tour Option 1:

The DIII-D National Fusion Facility and the SiGA - Silicon Carbide Composites Labs.

Location: GA's Main Campus, Torrey Pines, CA.

Tour Option 2:

GA's Magnet Technology Center.

Location: Poway, CA.