

The Enchanted View



INCOSE Enchantment Chapter Newsletter

WESTERN STATES REGIONAL CONFERENCE 2023: WHAT YOU MISSED

Article Author: Mary Compton

The 6th Annual Western States Regional Conference, hosted by INCOSE's Cascade Chapter, was held September 14 – 16, 2023 in Discovery Hall at the Pacific Northwest National Laboratory (PNNL) in Richland, WA. On September 13th two pre-conference tours of facilities in the area were conducted. The conference program consisted of tutorials, tours of PNNL's energy research centers, plenary sessions, and presentations. Attendees also enjoyed a wonderful reception and the Washinton State University's Wine Science Center and a lovely banquet at the Terra Blanca Winery just outside Richland.

Pre Conference Tours

The morning tour was of the Laser Interferometer Gravitational-Wave Observatory (LIGO). LIGO was designed to open the field of gravitational-wave astrophysics through the direct detection of gravitational waves predicted by Einstein's General Theory of Relativity. Although it is considered one observatory, LIGO comprises four facilities across the United States, including one of two gravitational wave detectors (the interferometers) right in Hanford. The tour offered participants to review LIGO's critical work in the search for gravitational waves.



One of LIGO's Detector Arms



LIGO's Detector Arms Explained

Newsletter Highlights

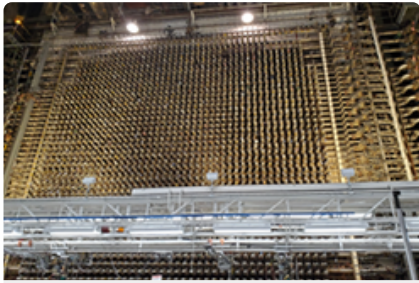
**Western States
Regional Conference
Recap**

**Awe: The New Science
of Everyday Wonder and
How it Can Transform
Your Life**

**INSIGHT Magazine:
Systems Engineering in
Early Stage R&D**

**Meet the 2024 Board of
Directors**

Event Calendar



Hanford B Reactor

The afternoon tour was of the Hanford B Reactor National Historic Landmark. The B Reactor National Historic Landmark is the world's first full-scale plutonium production reactor and part of the Manhattan Project National Historical Park administered by the U.S. Department of Energy and the National Park Service. It was a great opportunity to learn more about the people, events, science, and engineering that led to the creation of the atomic bombs that helped bring an end to World War II.



PNNL's Discovery Hall

Conference Program

Six tutorials and 2 tours of two PNNL energy research centers were offered on September 15th. One and a half days of plenary sessions and presentations took place on September 15th and 16th.



View from the Terra Blanca Winery

Enchantment Chapter Secretary Ann Hodges presented a talk entitled "A Bridge Blueprint to Span the Chasm Between Research and Engineering – A Framework for Systems Engineering in Early-Stage R&D (ESRD)". Ann's talk generated interest in collaboration amongst members of the audience.

Socializing

RECEPTION: On Thursday evening a reception was held at the Washington State University Ste. Michelle Wine Estates Wine Science Center, a hub for wine innovation, education, and collaboration. This facility among the most technologically advanced wine research and

education facilities of its kind in the world. The reception highlighted wines developed and produced by the Center's students.

BANQUET: Friday evening's festivities featured a banquet held at the Terra Blanca Winery just outside of Richland. We enjoyed a great meal accompanied by Terra Blanca wines. The views were stunning!

Enchantment Chapter Members at the WSRC



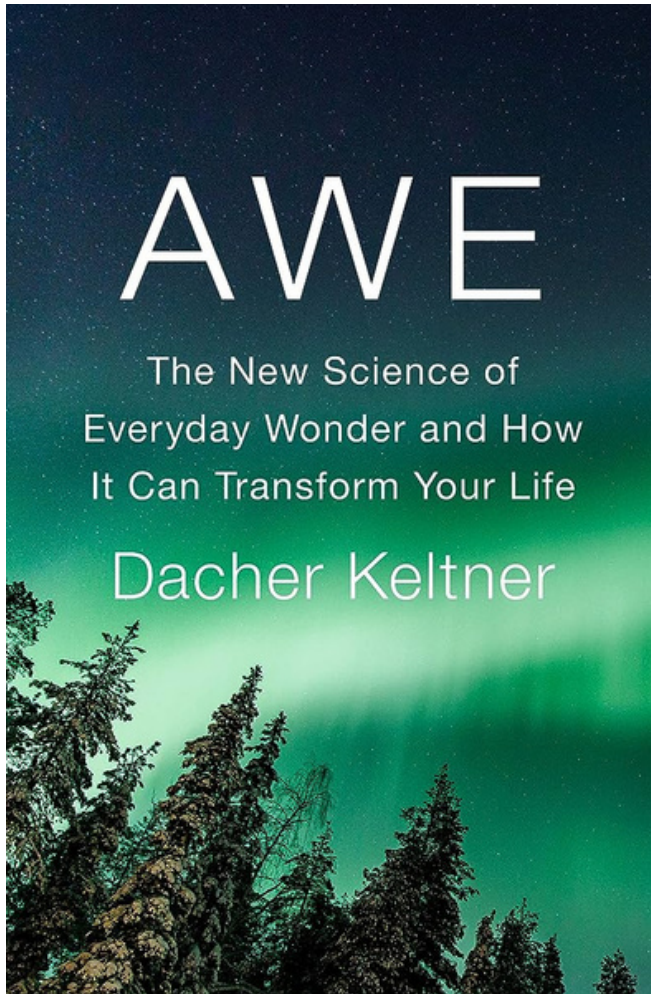
Ann's Talk Generates Interest in Collaboration



Mary Compton, Raymond Wolfgang, and Ann Hodges

AWE: THE NEW SCIENCE OF EVERYDAY WONDER AND HOW IT CAN TRANSFORM YOUR LIFE

Review Author: Rob Schwenke



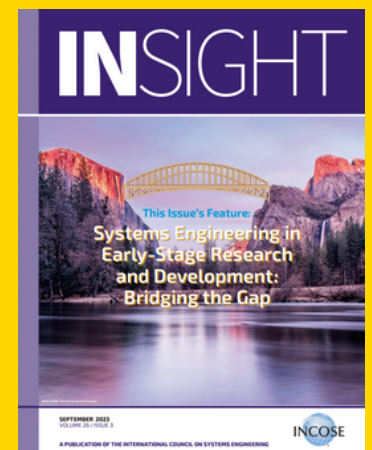
For the last few years now, my reading list has come about almost entirely from listening to The Michael Shermer Show, a long-form conversation podcast between Dr. Michael Shermer and leading scientists, philosophers, historians, scholars, writers, and thinkers about the most important issues of our time. The conversations are fascinating and I typically end up purchasing the books of the guests. One of the better books I picked up this last year was, "Awe: The New Science of Everyday Wonder and How it Can Transform Your Life" by Dacher Keltner. In this book, Keltner explains when, how, and why we feel awe and illustrates how it helps us stress less, feel a sense of purpose, be kinder, and even think better.

Now you may be saying to yourself, "that's nice Rob, but what does this have to do with systems engineering?" Well Keltner outlines the "eight wonders of life" that are most likely to induce awe including: moral beauty, collective effervescence, nature, music, visual art, spirituality, morality, and epiphanies....and it is this last wonder, epiphanies, that really brings this full circle. You see, one of the many epiphanies Keltner discusses is that of systems, systems larger than yourself. "Awe is the feeling of being in the presence of something vast that transcends your current understanding of the world," says Keltner. I don't know about you, but that almost sounds like a systems engineering-based definition to me.

INSIGHT Magazine: Systems Engineering in Early Stage R&D

The systems engineering in early stage R&D (SE in ESRD) themed INSIGHT magazine was just published. Ann Hodges was a co-editor with Michael DiMario for this magazine issue. A little background: the SE in ESRD working group has deep roots in the Enchantment Chapter. Heidi Hahn and Ann Hodges, along with Nick Lombardo (PNNL) and Mitchell Kerman (INL) started this working group in the 2020 time frame. Some of the foundational papers were co-written and presented at several INCOSE Internal Symposia by Heidi, Nick, Mitchell and Ann- with Michael joining this core group a little later.

Let Ann Hodges know if you have any questions or would like to participate in the SE in ESRD Working Group.



MEET THE 2024 BOARD OF DIRECTORS

Go [here](#) for bios!



Past President: Cheryl Bolstad



President: Jose Parga



Vice-President: Amy Moy



Secretary: Ann Hodges



Treasurer: Mary Compton



Dir at Large: Greg Chavez



Dir. at Large: Heidi Hahn



Dir. at Large: Quinn Fatherly

Upcoming Chapter Events

December

December 13 - 4:45 PM MST

Presenter: John Hearing (Caltech, US Naval War College)

Title: How Much Autonomy is Enough?

January

October 11 - 4:45 PM MST

Presenter: Celia Tseng (Dassault Systems)

Title: Digital Engineering Standards Development to Achieve SE Vision 2035