AROUND THE REGION IN HOMELAND SECURITY

The Northwest Regional Technology Center (NWRTC) is a virtual resource center, operated by Pacific Northwest National Laboratory (PNNL), to support regional preparedness, resilience, response, and recovery. The center enables homeland security solutions for emergency responder communities and federal, state, and local stakeholders in the Northwest.

SENIOR CANTWELL, SCIENCE LEADERS HELP BREAK GROUND ON $75 MILLION GRID STORAGE LAUNCHPAD

In April, U.S. Senator Maria Cantwell joined with science leaders to help break ground on a $75 million facility that will boost clean energy adoption and make the nation’s power grid more resilient, secure, and flexible.

Speaking at the dedication ceremony at PNNL, Cantwell said “The Grid Storage Launchpad represents a huge investment in PNNL, the Tri-Cities, the State of Washington, and the future of our nation. The Launchpad will help us make America’s grid more reliable, and resilient, lead the world in inventing and exporting clean energy products, and accelerate the transition to a cleaner energy system. PNNL has my continued support as it strives to make the Launchpad the world’s premier energy storage research center.”

At the Grid Storage Launchpad, scientists will validate and test new grid storage technologies—from basic materials and components to prototype devices—under realistic operating conditions. It will promote rigorous grid performance requirements for all stages of technology development and accelerate the development of innovative technologies.

The facility supports DOE’s Energy Storage Grand Challenge, which draws on the extensive research capabilities of the DOE national laboratories, universities, and industry to accelerate the development of energy storage technologies. To learn more, see the press release or watch the video.
PNNL CLIMATE RESEARCH HAS FAR-REACHING BENEFITS

PNNL brings an array of skills to understand the far-reaching consequences of climate change. In honor of Earth Day 2022, PNNL shared highlights from its climate research spanning the science and technology realm.

As the intensity and frequency of extreme events affects both society and infrastructure resilience, PNNL is anticipating the world’s changing climate by modeling energy futures and translating climate science into decisions that integrate security, sustainability, and resilience. PNNL brings together observations with computational analysis, scalable models, and technical expertise to protect national security by enhancing the resilience of ecosystems, economies, societies, and critical infrastructure affected by climate instability.

“Changes in global climate such as the rapid increase in temperatures in the Arctic can increase the vulnerability of human systems,” said Jill Brandenberger, PNNL’s climate security research lead. Her team assesses how changing climatic conditions might affect national security missions. “These global changes have impacts everywhere in our world and pose a threat to our energy security and our national security.”

PNNL includes societal stability as a premise when working with its research partners to assess climate change impacts across time and spatial scales, assess vulnerabilities and resilience, and define interdependent risks.

“The links between energy, food, water, socioeconomics, climate, and security are challenging to measure, but that is a national lab challenge,” said Brandenberger. “It is critical to understand the links between these domains to increase our societal and environmental resilience.”

ITAK AVAILABLE ON APP STORE

Public safety agencies can now access the Team Awareness Kit (TAK) application on both Apple and Android devices. TAK is a geospatial mapping platform and common operating program that uses a mobile device’s GPS to track a user’s location, while displaying the locations of others for enhanced situational awareness. In April, the U.S. Department of Homeland Security (DHS) Science and Technology Directorate announced the iOS iTAK app is now available on the Apple App Store. The Android version of TAK (or ATAK) is already available and has supported hurricane relief, firefighting, national security events, and public safety operations. See the press release to learn more.

Locations of interagency resources viewed in the iTAK app. (Source: DHS)

CHATTERJEE TO LEAD SUBGROUP ON ANALYTIC DEVELOPMENT

PNNL’s Samrat Chatterjee was selected to lead a subgroup on analytic development as part of the Risk Architecture Lab Performers Council of the DHS Cybersecurity and Infrastructure Security Agency National Risk Management Center. Chatterjee’s experience in cyber and physical infrastructure network resilience modeling and simulation, risk and decision optimization under uncertainty, and graph and data analytics positions him as an ideal leader for the analytic development subgroup. As such, Chatterjee will drive the development of guidance material to help shape direction on risk architecture analytic development. See the staff accomplishment to learn more.

For more information, contact Director Ann Lesperance (ann.lesperance@pnnl.gov | (206) 528-3223) or Deputy Director Richard Ozanich (richard.ozanich@pnnl.gov | (509) 375-4586) or visit pnnl.gov/projects/nwrtc.

PNNL-SA-172837