

The Latest From the Homeland Defense & Security Information Analysis Center // July 5, 2021



Department of Homeland Security

# **NOTABLE TECHNICAL INQUIRY**

# What data exists on the reaction of RSDL with nerve agents GB and GD and forming degradation products?

The Homeland Defense and Security Information Analysis Center (HDIAC) received a technical inquiry regarding existing test data for the decontamination of GB and GD with RSDL and the production of hydrolysis products such as isopropyl methylphosponic acid (IMPA), pinacolyl methylphosphonic acid (PMPA), methylphosphonic acid (MPA), or any other reaction products that might have been identified. **READ MORE** 



# **SNEAK PEEK**

#### **UPCOMING WEBINAR:**

Master State Awareness Estimator (MSE) for Cyber-Physical Substation Protection

#### DATE:

July 13, 2022

#### TIME:

12:00 PM

#### **PRESENTED BY:**

Craig Rieger, Ph.D., PE

#### **HOST:**

**HDIAC** 



# VOICE FROM THE COMMUNITY

**Dr. Qingwang (Kevin) Yuan**Assistant Professor, Department of
Petroleum Engineering, Texas Tech
University

Dr. Qingwang (Kevin) Yuan is an assistant professor at the Department of Petroleum Engineering at Texas
Tech University, where he aims to accelerate and secure energy transition through novel research on energy and environmental science and engineering. He leads the HOPE Group in developing new research programs on in-situ hydrogen generation from petroleum reservoirs (HOPER), natural hydrogen production from earth subsurface (HOPES), CO<sub>2</sub> and hydrogen geological storage, and methane leakage from orphaned wells.

BECOME A SUBJECT MATTER EXPERT



## **HIGHLIGHT**

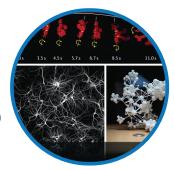
#### **BARDA Strategic Plan 2022-2026**

The Biomedical Advanced Research and Development Authority (BARDA) released its new strategic plan for 2022-2026. This plan focuses on strengthening the health security of the nation, embracing lessons learned from the COVID-19 pandemic, incorporating new avenues of promising research and development, and addressing the imperative for medical countermeasures that are safe, effective, and widely accessible to all Americans. This plan sets out how BARDA will continue to work with their partners to secure the nation during public health emergencies, including expanding the domestic supply chain for production... **LEARN MORE** 

## **FEATURED NEWS**

# **LLNL Researchers Chart Progress in Architected Materials That Respond to External Stimuli**

Recent advances in preprogrammed architected materials could enable new functions that can evolve in response to their environments or external stimuli, according to Lawrence Livermore National Laboratory (LLNL) researchers.



In a paper published by Nature Reviews

Materials, LLNL researchers provide an overview of the progress made in responsive architected materials that can morph into a... **READ MORE** 

Image: Lawrence Livermore National Laboratory



### **WEBINARS**

# **Master State Awareness Estimator (MSE) for Cyber-Physical Substation Protection**

**Presented:** July 13, 2022 12:00 PM - 1:00 PM

Presenter: Craig Rieger, Ph.D., PE

Host: HDIAC

Idaho National Laboratory performed research and development efforts associated with the first primary recommendation from a U.S. Department of Energy, Office of Electricity workshop—the MSE. This agent serves as an independent, authoritative, protective software module/device for every zone of protection in its area of influence, monitoring the communications and power systems' protective relays for anomalous conditions or misoperations. The benefits of these metrics are that they provide an assessment, from the ground up, of the grid state at lower latency and with greater resilience to threats; they also provide early indications of impact from damaging storms and cyberattacks. **LEARN MORE** 



Countering Unmanned Aerial Systems in the Homeland: Constraints and Emerging Solutions

August 18, 2022 12:00 PM

### **EVENTS**

**DoD Energy & Power Summit** 

July 6-7, 2022

National Homeland Security Conference 2022

July 11-14, 2022

11th International Conference on Emerging Infectious Diseases (ICEID)

August 7-10, 2022

Military Health System Research Symposium

September 12-15, 2022

Drone Assessment and Response Tactics (DART) & Unmanned Aircraft Systems Program Development (UASPD) Training Courses

October 4-5, 2022

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**CBRN** Defense



Critical Infrastructure Protection



**Cultural Studies** 



**Homeland Defense & Security** 



Medical



Weapons of Mass Destruction

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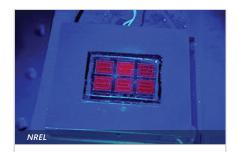








## **RECENT NEWS**



NREL Creates Highest Efficiency 1-Sun Solar Cell

Alternative Energy





New Digital Indoor Mapping Capability Now Available for First Responders

Homeland Defense & Security





Unique ERDC Facility Allows Researchers the Opportunity for Large-Scale Structural Testing

Critical Infrastructure Protection





Researchers Aim to
Better Quantify Greenhouse
Gas Emissions From
Hydropower Reservoirs

**Alternative Energy** 





Sandia Researchers Test Explosives and Propellants to Create Geothermal Power Sites

Alternative Energy





Learning From Foes: How Racially and Ethnically Motivated Violent Extremists Embrace and Mimic Islamic State's Use of Emerging Technologies

Cultural Studies; Homeland Defense & Security



