



NDIA

AT THE HEART
OF THE MISSION



2021 CBRN DEFENSE CONFERENCE & EXHIBITION

Responding Now – Preparing for Future CBRN Threats

August 16 – 18 | Baltimore, MD | [NDIA.org/CBRN21](https://www.ndia.org/CBRN21)

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NDIA

WHO WE ARE

The National Defense Industrial Association is the trusted leader in defense and national security associations. As a 501(c)(3) corporate and individual membership association, NDIA engages thoughtful and innovative leaders to exchange ideas, information, and capabilities that lead to the development of the best policies, practices, products, and technologies to ensure the safety and security of our nation. NDIA's membership embodies the full spectrum of corporate, government, academic, and individual stakeholders who form a vigorous, responsive, and collaborative community in support of defense and national security. For more than 100 years, NDIA and its predecessor organizations have been at the heart of the mission by dedicating their time, expertise, and energy to ensuring our warfighters have the best training, equipment, and support. For more information, visit NDIA.org

SCHEDULE AT A GLANCE

MONDAY, AUGUST 16

Registration

Key Ballroom Foyer
12:00 – 5:00 pm

TUESDAY, AUGUST 17

Networking Breakfast

Key Ballroom Foyer
7:00 – 8:00 am

General Session

Holiday Ballroom
8:00 am – 4:40 pm

Keynote Speaker

Holiday Ballroom
8:35 – 9:35 am

Exhibit Hall and Poster Sessions

Key Ballroom
9:00 am – 6:00 pm

Networking Lunch

Key Ballroom
11:35 am – 12:35 am

Networking Reception

Key Ballroom
4:40 – 6:00 pm

WEDNESDAY, AUGUST 18

General Session

Holiday Ballroom
8:00 am – 4:50 pm

Keynote Speaker

Holiday Ballroom
8:35 – 9:35 am

Exhibit Hall and Poster Sessions

Key Ballroom
9:00 am – 3:15 pm

Networking Lunch

Key Ballroom
12:30 – 1:30 pm

WELCOME TO THE 2021 CBRN DEFENSE CONFERENCE & EXHIBITION

Welcome to the 2021 CBRN Defense Conference & Exhibition where our focus is on “Responding Now – Preparing for Future CBRN Threats.”

Given the Department of Defense’s new way of doing business, a one-team concept created through collaborating across the whole of government and industry to highlight a team of teams concept is a top DoD priority. The Pentagon is committed to accelerating and adapting the traditional and other transactional agreements acquisition processes to improve readiness and modernize the Joint Force as well as respond to our nation’s defense. Anticipate in-depth discussions on evolving threats, requisite future capabilities and capacities for response and pandemic preparedness, acquisition reform, and the future of warfighter training and readiness.

Accordingly, leadership is fully committed to the ethos of a learning organization and thus the acceleration and adaptation of not just observations but lessons learned from our shared experience with COVID-19 over the last year and the processes to improve readiness and achieve modernization goals, ultimately changing the future fight and enabling our warfighters to dominate and win. In fact, we have proven in this last year that we are resilient and adaptable, and that we must accelerate acquisition and contracting processes so that all current and future threats can be quickly defeated. Likewise, we must adapt our current training methods by incorporating current capabilities and future technologies to enhance the lethality, protection, and survivability of our combat systems. In the end, these efforts will assure our warfighters’ dominance in the future fight.

In support of these efforts, the 2021 CBRN Defense Conference & Exhibition has a multifaceted and diverse agenda. For

example, you will hear about leadership’s approach to responding to and now preparing for pandemics in addition to implementing necessary acquisition reforms, CBRN Defense requirements in the context of current and future threats and vulnerabilities, the use of non-traditional contracting approaches (e.g., Other Transaction Authorities (OTAs) and assisted acquisition vehicles) to accelerate acquisition, emerging national and international CBRN Defense technologies, medical and non-medical countermeasure solutions, advanced development and manufacturing needs, and promising research and development opportunities from our interagency partners.

This is an exciting year for the one-team CBRN Defense community. By responding now and preparing for the future fight, we continue to shape and improve our products and capabilities against threats while adapting training methods and facilities amid a steadfast leadership commitment to win.

Hosted by the NDIA CBRN Defense Division and the Chemical Biological Defense Acquisition Initiatives Forum, this conference will feature attendance from the Combatant Commands, Services, select Other Federal Agencies, the Joint Program Executive Office for Chemical, Biological, Radiological, & Nuclear Defense, and select Industry Leaders.

We thank the exhibitors and sponsors of this event for having provided the support necessary to create a quality experience for all participants. We appreciate their partnership and urge you to learn more about their organizations’ capabilities.

Please enjoy the 2021 CBRN Defense Conference & Exhibition; come with your questions, suggestions, and innovative ideas; and make time to check out the exhibit hall and poster sessions. I look forward to speaking with you.



William E. King, IV
Brigadier General, USA (Ret)
Chair, CBRN Defense Division, NDIA

GET INVOLVED

Learn more about NDIA's Divisions and how to join one at [NDIA.org/Divisions](https://www.ndia.org/Divisions)



LEADERSHIP AND COMMITTEES

BG William King, USA (Ret)

Division Chair

COL Armando "Mandy" Lopez, Jr., USA (Ret)

Chair Emeritus

CHEMICAL, BIOLOGICAL, RADIOLOGICAL AND NUCLEAR (CBRN) DEFENSE

WHO WE ARE

The Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Division promotes the exchange of information—technical and operational—related to defenses against weapons of mass destruction between the Department of Defense and other government agencies, industry, and academia. To do so, the Division addresses various functional areas: defensive measures, chemical weapons demilitarization, treaty compliance, industrial base issues, and domestic preparedness.

EVENT INFORMATION

LOCATION

Hilton Baltimore Inner Harbor
401 W Pratt Street
Baltimore, MD 21201

ATTIRE

Civilian: Business
Military: Uniform of the Day

SURVEY AND PARTICIPANT LIST

You will receive via email a survey and list of participants (name and organization) after the conference. Please complete the survey to make our event even more successful in the future.

SPEAKER GIFTS

In lieu of speaker gifts, a donation is being made to the Fisher House Foundation.

EVENT CONTACTS

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PLANNING COMMITTEE

COL Armando “Mandy” Lopez, Jr., USA (Ret)

Chair Emeritus, CBRN Defense Division
Tex-Shield, Inc.

BG William King, USA (Ret)

Division Chair, CBRN Defense Division
Booz Allen Hamilton, Inc.

CSM Kenneth Graham, USA (Ret)

ANSER

COL Jay Reckard, USA (Ret)

Teledyne FLIR

Charles Janney

Inter Fuze

COL Tamar Main, USA (Ret)

ARServices

COL Ronald Fizer, USA (Ret)

LMI

MASK POLICY

All attendees will be required to wear a face mask to all portions of the event in accordance with Baltimore City’s mask mandate. Where applicable, face masks must be worn to cover from the top of the nose to the bottom of the chin. Attendees should keep their masks conservative, professional, and in keeping with dignity and respect. Face coverings with demeaning or derogatory logos, profanity, offensive script or imagery, or political dissent are not authorized.

HARASSMENT STATEMENT

NDIA is committed to providing a professional environment free from physical, psychological and verbal harassment. NDIA will not tolerate harassment of any kind, including but not limited to harassment based on ethnicity, religion, disability, physical appearance, gender, or sexual orientation. This policy applies to all participants and attendees at NDIA conferences, meetings and events. Harassment includes offensive gestures and verbal comments, deliberate intimidation, stalking, following, inappropriate photography and recording, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome attention. Participants requested to cease harassing behavior are expected to comply immediately, and failure will serve as grounds for revoking access to the NDIA event.

EVENT CODE OF CONDUCT

NDIA’s Event Code of Conduct applies to all National Defense Industrial Association (NDIA), National Training & Simulation Association (NTSA), and Women In Defense (WID) meeting-related events, whether in person at public or private facilities, online, or during virtual events. NDIA, NTSA, and WID are committed to providing a productive and welcoming environment for all participants. All participants are expected to abide by this code as well as NDIA’s ethical principles and practices. Visit [NDIA.org/CodeOfConduct](https://www.ndia.org/CodeOfConduct) to review the full policy.

REAL-TIME Q&A



Sli.do is an audience engagement platform that allows users to crowd-source top questions to drive meaningful conversations and increase crowd participation. Participants can up-vote the questions they would most like to hear discussed. Simply tap the thumbs-up button to up-vote a question. Top questions are displayed for the moderator and speaker to answer. Ask your question in sessions by going to Sli.do!

Event code: **CBRN**

CBRN MOBILE APP

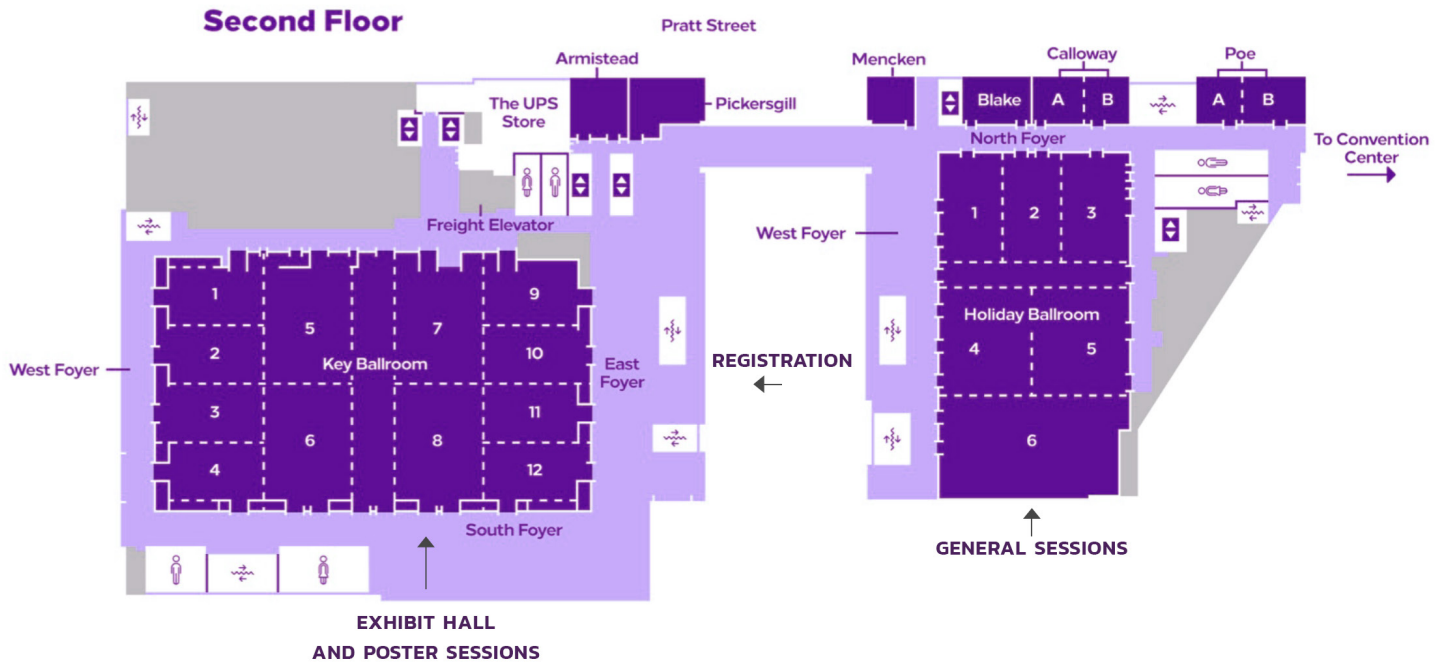


Download the CBRN Mobile App for the most up-to-date event information by visiting [NDIA.org/CBRN21/MobileApp](https://www.ndia.org/CBRN21/MobileApp) or scanning the QR Code to the left.

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VENUE MAP



EMERGING TECH HORIZONS

ETI EMERGING
TECHNOLOGIES
INSTITUTE

A National Security Podcast with Dr. Mark Lewis

This brand-new podcast invites you to listen in on conversations with Dr. Mark Lewis, the Executive Director of NDIA's Emerging Technologies Institute, as he welcomes a diverse slate of national security leaders from government, industry, and academia to discuss the defense technologies of today and tomorrow. Each episode takes a deep dive as the experts share their personal views on future technology topics, providing listeners with unique perspectives on the latest in emerging technologies and how they relate to national security. Listen to Emerging Tech Horizons where you find all your favorite podcasts.

NDIAETI.org/Podcast



AGENDA

MONDAY, AUGUST 16

12:00 – 5:00 pm

REGISTRATION

KEY BALLROOM FOYER

TUESDAY, AUGUST 17

7:00 am – 6:00 pm

REGISTRATION

KEY BALLROOM FOYER

7:00 – 8:00 am

NETWORKING CONTINENTAL BREAKFAST

KEY BALLROOM FOYER

8:00 – 8:10 am

OPENING REMARKS

HOLIDAY BALLROOM

Dave Chesebrough

Vice President, Divisions, National Defense Industrial Association (NDIA)

8:10 – 8:30 am

OVERVIEW, ADMIN GUIDANCE, TRANSITION OF NDIA CBRN DEFENSE DIVISION CHAIRMANSHIP, AND RECOGNITION OF OUTGOING CHAIRMAN

HOLIDAY BALLROOM

COL Mandy Lopez, Jr., USA (Ret)

Chair Emeritus, Chemical, Biological, Radiological, and Nuclear (CBRN) Defense Division, NDIA

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA

Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

8:35 – 9:35 am

KEYNOTE SPEAKER

HOLIDAY BALLROOM

Max Rose

COVID Advisor to the Secretary of Defense, U.S. Department of Defense

9:00 am – 6:00 pm

EXHIBIT HALL AND POSTER SESSIONS OPEN

KEY BALLROOM

9:35 – 10:05 am

NETWORKING BREAK

KEY BALLROOM

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Chem-Bio Challenges



Contact us to learn more about how we can partner
with you in protecting what matters most

CBRNE Defense (battelle.org)

800.201.2011 | solutions@battelle.org

BATTELLE

It can be done

10:05 – 11:35 am

NATIONAL RESPONSE TO BIOLOGICAL ATTACKS AND PANDEMICS

HOLIDAY BALLROOM

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA

Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

*Moderator***Dr. Chris Hassell**

Former Deputy Assistant Secretary of Defense, Chemical & Biological Defense, U.S. Department of Defense

Senior Science Advisor, U.S. Department of Health and Human Services

11:35 am – 12:35 pm

NETWORKING LUNCH

KEY BALLROOM

12:35 – 12:50 pm

WILLIAM “BILL” BAUGH AWARD

HOLIDAY BALLROOM

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA

Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

CW3 Douglas Bryce, USMC (Ret)

President, Douglas W. Bryce Consulting

12:55 – 2:25 pm

CCMD’S PANEL DISCUSSION

HOLIDAY BALLROOM

COL Ron Fizer, USA (Ret)

Fellow and Principal Analyst, LMI

*Moderator***Maj Gen Paul Friedrichs, USAF**

Joint Staff Surgeon, Joint Chiefs of Staff

RDML Bradley Andros, USN

Director, Countering Weapons of Mass Destruction Directorate (J10), U.S. Special Operations Command

RDML Miriam Lafferty, USCG

Deputy Director, Operations, Headquarters, U.S. Northern Command

2:25 – 2:55 pm

NETWORKING BREAK

KEY BALLROOM

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Countering Weapons of Mass Destruction
CONSORTIUM

2:55 – 4:20 pm

**SERVICES – RESPONDING TO THE PANDEMIC AND MAINTAINING
READINESS – LESSONS LEARNED**

HOLIDAY BALLROOM

COL Jay Reckard, USA (Ret)

Director, Business Development, Unmanned & Integrated Solutions, Teledyne FLIR

*Moderator***MG Bradley Gericke, USA**

Director, Strategy, Plans, & Policy, Office of the Deputy Chief of Staff, U.S. Army

MG Jeffrey Van, USA

Commanding General, Joint Task Force Civil Support

4:25 – 4:40 pm

CLOSING REMARKS

HOLIDAY BALLROOM

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA
Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

4:40 – 6:00 pm

NETWORKING RECEPTION

KEY BALLROOM

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WEDNESDAY, AUGUST 18

7:00 am – 4:50 pm

REGISTRATION

KEY BALLROOM FOYER

7:00 – 8:00 am

NETWORKING CONTINENTAL BREAKFAST

KEY BALLROOM FOYER

8:00 – 8:30 am

WELCOME, OVERVIEW, AND ADMIN GUIDANCE

HOLIDAY BALLROOM

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA
Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

8:35 – 9:35 am

KEYNOTE SPEAKER

HOLIDAY BALLROOM

Dr. Brandi Vann

Acting Assistant Secretary of Defense, Nuclear, Chemical, & Biological Defense

9:00 am – 3:15 pm

EXHIBIT HALL AND POSTER SESSIONS OPEN

KEY BALLROOM

9:35 – 10:05 am

NETWORKING BREAK

KEY BALLROOM

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10:05 – 11:05 am

FUTURE CHEMICAL, BIOLOGICAL, AND WEAPONS OF MASS DESTRUCTION CHALLENGES PANEL

HOLIDAY BALLROOM

COL Ron Fizer, USA (Ret)

Fellow and Principal Analyst, LMI
Moderator

Dr. John Caves, Jr.

Distinguished Fellow, Center for the Study of Weapons of Mass Destruction, Institute for National Strategic Studies, National Defense University

COL Chris Hoffman, USA

Performing the Duties of the Deputy Assistant of Defense, Chemical & Biological Defense

11:10 – 11:25 am

JOSEPH WIENAND AWARD

HOLIDAY BALLROOM

Joseph Wienand

Former Director, Edgewood Chemical Biological Center, U.S. Army Research, Development, and Engineering Command

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA
Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

Dr. Jared DeCoste

Senior Research Chemist, Chemical Biological Center, U.S. Army Combat Capabilities Development Command

11:30 am – 12:30 pm

RESEARCH, DEVELOPMENT, AND ACQUISITION PANEL

HOLIDAY BALLROOM

COL Thamar Main, USA (Ret)

Senior Manager, Chemical & Biological Technologies Support, ARServices
Moderator

Dr. Ronald Hann, Jr.

Director, Chemical, Biological Technologies Department, Defense Threat Reduction Agency

Dr. Eric Moore

Director, Chemical Biological Center, U.S. Army Combat Capabilities Development Command

Dr. Jason Roos

Joint Program Executive Officer, Chemical, Biological, Radiological, & Nuclear Defense

12:30 – 1:30 pm

NETWORKING LUNCH

KEY BALLROOM

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Countering Weapons of Mass Destruction
CONSORTIUM

UPCOMING CBRN DEFENSE DIVISION EVENTS

“CBRN INDUSTRIAL BASE HEALTH AND RESILIENCY”

September 22, 2021 | NDIA Headquarters, Arlington, VA

“PANDEMIC RESPONSE”

January 19, 2022 | NDIA Headquarters, Arlington, VA

“CBRN SUPPLY CHAIN MANAGEMENT”

April 20, 2022 | NDIA Headquarters, Arlington, VA

“SUSTAINING OPERATIONS IN A CBRN ENVIRONMENT”

October 19, 2022 | NDIA Headquarters, Arlington, VA



AN ONLINE COMMUNITY FOR DEFENSE PROFESSIONALS

Various specialized communities are available for you to join and use, all while enhancing your Division and Chapter participation and growing your network.

As the National Defense Industrial Association's members-only online community, NDIA Connect offers 24/7 exclusive access to content, contacts, and collaboration capabilities. Each day, defense professionals from around the world post their thoughts, questions, and answers related to topics ranging from cybersecurity and the space domain to international trade regulations and human systems. Log in today to join these conversations and take advantage of all that NDIA Connect enables:

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- Plan meetings, seminars, webinars, conferences, or any NDIA-related event
- Foster discussion, promote innovation, and grow your network

Log in today at Connect.NDIA.org



1:30 – 2:45 pm

INDUSTRY PANEL

HOLIDAY BALLROOM

COL Jay Reckard, USA (Ret)

Director, Business Development, Detection, Teledyne FLIR
Moderator

Dean Pfoztzer, SES

Executive, Marketing & Growth, LMI

Roger Wells

Vice President and General Manager, Unmanned Systems & Integrated Solutions, Teledyne FLIR

COL Tony Francis, USA (Ret)

Vice President, Marketing & Business Development, ANSER

2:45 – 3:15 pm

NETWORKING BREAK

KEY BALLROOM

3:15 – 4:30 pm

ACQUISITION PANEL

HOLIDAY BALLROOM

CSM Kenneth Graham, USA (Ret)

Senior Program Analyst, ANSER
Moderator

COL Dan McCormick, USA (Ret)

Deputy Joint Program Executive Officer, Operations & Modernization,
Chemical, Biological, Radiological, & Nuclear Defense

Stacey Shepherd

Joint Project Manager, Chemical, Biological, Radiological, & Nuclear Protection

Christopher Seacord

Joint Project Manager, Chemical, Biological, Radiological, & Nuclear Sensors

COL Ryan Eckmeier, USA

Joint Project Manager, Chemical, Biological, Radiological, & Nuclear Medical

CAPT Scott White, USN (Ret)

Joint Project Lead, Chemical, Biological, Radiological, & Nuclear Information Management/Information Technology

Michael Poe

Joint Project Lead, Chemical, Biological, Radiological, & Nuclear Special Operations Forces

Bruce Goodwin

Acting Joint Project Lead, Chemical, Biological, Radiological, & Nuclear Enabling Biotechnologies

4:35 – 4:50 pm

CLOSING REMARKS

HOLIDAY BALLROOM

BG William King, USA (Ret)

Chair, CBRN Defense Division, NDIA
Principal/Director and Senior Fellow, Booz Allen Hamilton, Inc.

NDIA has a policy of strict compliance with federal and state antitrust laws. The antitrust laws prohibit competitors from engaging in actions that could result in an unreasonable restraint of trade. Consequently, NDIA members must avoid discussing certain topics when they are together at formal association membership, board, committee, and other meetings and in informal contacts with other industry members: prices, fees, rates, profit margins, or other terms or conditions of sale (including allowances, credit terms, and warranties); allocation of markets or customers or division of territories; or refusals to deal with or boycotts of suppliers, customers or other third parties, or topics that may lead participants not to deal with a particular supplier, customer or third party.

BIOGRAPHIES



MAX ROSE

COVID Advisor to the Secretary of Defense
U.S. Department of Defense

Max Rose served as the U.S. Representative for New York's 11th congressional district, which includes all of Staten Island and parts of southern Brooklyn. He commissioned in the United States Army in 2010 as an infantry officer and still serves in the New York Army National Guard.

As Congressman, Rose served as the Chairman of the Homeland Security Subcommittee on Intelligence and Counterterrorism and as a member of the Veteran Affairs Committee. A leader in the fight against domestic terrorism as well as the opioid epidemic, Rose successfully led efforts to expand the Foreign Terrorist Organization designation list, establish the Global Internet Forum to Counter Terrorism, and combat the flow of illicit fentanyl into the United States from overseas. In

March 2020, while serving as a member of Congress, Rose deployed with the U.S. Army National Guard to assist New York City's coronavirus pandemic response. He is credited with turning a psychiatric center into an emergency hospital for patients with COVID-19, successfully leading the advocacy effort to deploy the Comfort Naval Hospital to New York City and pushing for the opening of the New York City VA to non-veterans during the COVID crisis. He is a frequent contributor to all major networks and his comments have been featured in prominent national and international publications. Prior to his election to Congress, Rose deployed to Afghanistan as a Stryker platoon leader. After leaving full-time military service, Rose served as Director of Public Engagement for Brooklyn District Attorney Kenneth P. Thompson. Rose led an initiative known as "Begin Again," helping thousands of

New Yorkers erase outstanding warrants for minor offenses that were concentrated in underserved areas. Max also served as Chief of Staff at Brightpoint Health, now a member of Sun River Health, one of the largest federally qualified health centers in New York City, serving at the time over 100,000 patients specifically providing medical services to the poor and homeless. Max Rose serves as the Senior Advisor on COVID to the Secretary of Defense, Lloyd Austin, responsible for coordinating the Pentagon's internal COVID response as well as its support to the national and global effort. He graduated from Wesleyan University with a Bachelor's degree in History and earned a Master of Social Science from the London School of Economics. His decorations include the Ranger tab, the Combat Infantryman Badge, a Bronze Star, and a Purple Heart.



DR. BRANDI VANN

Acting Assistant Secretary of Defense
Nuclear, Chemical, & Biological Defense

Dr. Brandi Vann currently serves as the Acting Assistant Secretary of Defense for Nuclear, Chemical and Biological Defense (Acting ASD (NCB)). In this capacity, she is the principle advisor to the Secretary, Deputy Secretary, and Under Secretary of Defense for Acquisition and Sustainment (A&S) on nuclear energy, nuclear weapons, and chemical biological defense.

Prior to her acting role, she was the Deputy Assistant Secretary of Defense for Chemical and Biological Defense Programs (DASD (CBD)) where she conducted Department-level research, development, and acquisition (RDA)

activities from concept and requirements development, through early science and technology, to advanced development, testing and evaluation, and procurement. These efforts focus on reducing risk from emerging threats and fielding sustainable capabilities to all Services in accordance with Department, Service, and Combatant Command priorities for chemical, biological, and radiological (CBR) defense (CBRD), as well as ensuring our warfighters can fight and win in chemical, biological, radiological, and nuclear (CBRN) contested environments. Previously, Dr. Vann worked for the Defense Threat Reduction Agency (DTRA) where she served as the Chief of Advanced and Emerging Threats. At DTRA, she led the assessment of future chemical

and biological (CB) combat threats to aid in the prioritization of capability investments to provide protection, situational awareness, and recovery to the future force, as well as inform the creation of CB Doctrine and Concepts of Operations. She also led the development of medical countermeasures, environmental detection, and medical diagnostic systems. She has received numerous commendations for her work, including the Office of the Director of National Intelligence Meritorious Achievement Award for her management of an innovative program to detect contaminated battlefields. Previously, Dr. Vann served as the Director of Laboratories for Nephron Pharmaceuticals Corporation (NPC). While there, she was responsible

for the start-up of a new state-of-the-art facility for the manufacturing of generic respiratory therapies and sterile pre-filled medications for hospitals and medical facilities. In this role, she was responsible for the build of laboratory infrastructure and the regulatory clearance to commence full operational capability. Dr. Vann was a visiting scientist at the Counterterrorism and Forensic Science Research Unit at the

Federal Bureau of Investigation (FBI). While at the FBI, she provided research expertise in forensic toxicology and trace analysis in support of the FBI Laboratory Division mission to include development of novel methodologies for chemical and biological agent analysis in environmental and clinical samples. Dr. Vann also worked at the South Carolina Department of Agriculture Livestock Poultry Health as a Veterinary

Forensic Toxicologist providing clinical and research expertise for the protection of the food supply system and health of state public and agricultural industry. Dr. Vann received her PhD in Chemistry from the University of South Carolina where she studied Analytical Chemistry and Applied Statistics. She also held a Senior Executive Fellowship from the Kennedy School at Harvard University.

THE HONORARY WILLIAM C. BAUGH CBRN DEFENSE EXCELLENCE AWARD



ABOUT THE AWARD

The Honorary William C. Baugh CBRN Defense Excellence Award recognizes the greatest

overall contribution to CBRN Defense programs during Mr. Baugh's lifetime and acknowledges the lasting impacts that

he tirelessly accomplished through his passion and persistence to service and never-ending demands for excellence. The award encompasses achievements during the nominee's career and is presented to the winner at the annual NDIA CBRN Defense Conference. This competition is open to all individuals, regardless of grade or position, in the United States and or

International CBRN Defense community. All military personnel, government civilians, and contractor employees are eligible. All executive and/or service CBRN Defense supervisors of Headquarters, plants, depots, laboratories, and proving grounds are asked to seriously consider the contributions of their best qualified subordinates for this prestigious award.



CW3 DOUGLAS BRYCE, USMC (RET) – AWARD WINNER

Mr. Bryce started his Consulting Company in December 2020, offering Acquisition, Acquisition

Leadership, Leadership, and CBRN Defense services, to include Medical. He retired from federal service in December 2020 with over 48 years of service to our nation. He served 38 years with the U.S. Marine Corps (20 years on Active Duty and 18 years as a Marine Civilian) and 10 years with the U.S. Army. He retired as Joint Program Executive Officer, Chemical, Biological, Radiological, and Nuclear Defense (JPEO-CBRND).

Mr. Bryce was appointed as the JPEO-CBRND in October 2015, obtaining materiel acquisition decision authority for the services on CBRND equipment. He

provided acquisition management and professional leadership on complex issues related to joint service CBRN Defense acquisition programs. He plans, directs, manages, and coordinates the JPEO-CBRND's mission; he is responsible for the development, acquisition, distribution, and deployment of highly specialized and dynamic joint CBRN Defense devices as well as medical diagnostic systems, drugs, and vaccines. For the 10 years prior to his current role, Mr. Bryce was the Deputy JPEO-CBRND, overseeing a diverse team of acquisition professionals and technical SMEs to effectively manage the CBRND acquisition process. From 2003 to 2005, he served concurrently as the Joint PM for Individual Protective Equipment and the PM for Marine Corps CBRND Equipment. Prior to 2005, he was the PM for Individual Marine

Combat Equipment and the PM for NBC Defense Equipment for Marine Corps Systems Command.

Mr. Bryce holds a Level III Program Management Certification from the Defense Acquisition University and is a member of the Navy and Army Acquisition Corps. He is published in *Military Medical Technology Magazine*, *Marine Magazine*, and the *Marine Corps Gazette*. His awards include the Navy Unit Commendation, Marine Corps Systems Command; David Packard Excellence in Acquisition Award; Commander's Roundtable Team Excellence Award; Navy Certificate of Excellence; Meritorious Service Medal (Gold Star in lieu of second award); Navy Commendation Medal (Gold Star in lieu of second award), and several other civilian awards.

THE JOSEPH D. WIENAND NDIA CBRN DIVISION STEM EXCELLENCE AWARD



ABOUT THE AWARD

The Joseph D. Wienand NDIA CBRN Division STEM Excellence Award is in recognition of the greatest

overall STEM achievement and/or efforts of an individual that most significantly impacted CBRN Defense programs. Over the years, Mr. Wienand championed several STEM programs. Accordingly, this

award acknowledges the lasting impacts Mr. Wienand has made. The award is presented at the annual NDIA CBRN Defense Conference.

This award recognizes the individual who, in the judgment of the panel, demonstrated outstanding accomplishment through their own personal innovation and creativity in the areas of STEM. Example areas include but

are not limited to scientific, technological, engineering, or mathematical improvements and the enhancement of a CBRN Defense-related product, system, or process for the current year. The achievements for which this award is considered may relate to any of the many components that make up our highly diverse, complex, and vital CBRN Defense community.



DR. JARED DECOSTE – AWARD WINNER

Dr. Jared DeCoste is a Senior Research Chemist at the US Army DEVCOM Chemical Biological Center who leads a

variety of technical projects in the areas of materials chemistry and synthetic biology. While his work has led to more than 60 manuscripts, 75 oral presentations, and seven patents, his passion for education and developing the future generation of scientists is evident through the more than 20 mentees he has been involved with over the past 11 years. Dr. DeCoste has been recognized by his superiors and peers through numerous awards, including the ACS Maryland Chemist of the Year Award, Achievement Medal for Civilian Service, ECBC's Rookie of the Year for

Outstanding Early Career Achievement, and ECBC's STEM Volunteer Award. Dr. DeCoste has always had a passion for teaching and involvement in education, which was first recognized by the Lois Mackey Award and Binghamton University Award for Excellence in Teaching while he was in graduate school. Nearly every summer since 2013, Dr. DeCoste has formally mentored summer college interns at CBC while informally working with many graduate students through research collaborations. He has particularly enjoyed his opportunities to host Cadets from USMA and Midshipmen from USNA. More recently, he has led an effort to integrate CBC's Biotechnology program with local Colleges and Universities through on-site training for their students. He is also integrally involved in developing a

virtual reality DoD laboratory experience for students, which will be released in early 2022. During the pandemic, Dr. DeCoste recognized a lack of virtual STEM resources for parents and established his own YouTube channel for parents to teach them how to do a variety of STEM activities with their kids. While Dr. DeCoste works as a researcher within the U.S. Army and revolves his work around finding new and innovative solutions to support the warfighter, he further recognizes that one of the best ways he can make this impact is by bolstering future generations and setting them up to be passionate about STEM careers to support the Department of Defense.

EXHIBIT HALL HOURS

TUESDAY, AUGUST 17

9:00 am – 6:00 pm

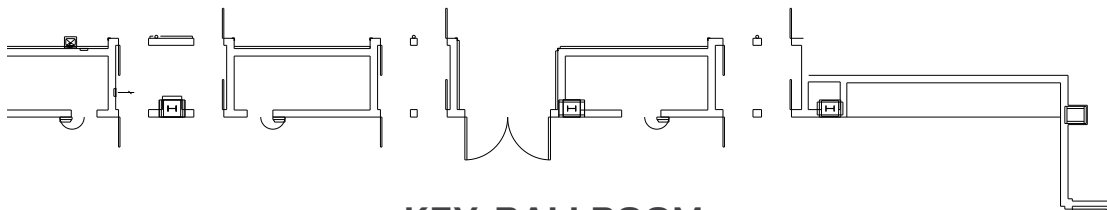
WEDNESDAY, AUGUST 18

9:00 am – 3:15 pm

EXHIBITORS BY COMPANY

908 Devices	704	Ginkgo Bioworks	506
ADS, Inc.	706	Gore	514
Agilent Technologies.....	605	H3D, Inc	619
ALTI, LLC.....	614	HDT Global.....	616
Argon Electronics LTD.....	517	INFICON.....	508
Avon Protection Systems, Inc.....	708	ITL Solutions	509
Battelle.....	606	JGW Group.....	515
Calgon Carbon Corporation	507	JPEO CBRND	414
CBRNe World	504	Katmai Health Services, LLC	407
Clear Scientific	406	Motorola Solutions	604
CMMC Solutions	716	ORTEC	404
CWMD Consortia	618	QuickSilver Analytics, Inc.....	405
Design West Technologies.....	607	Rigaku Analytic Devices.....	714
DEVCOM Chemical Biological Center.....	408	Teledyne FLIR.....	609
Federal Resources	505	U.S. Army Chemical Materials Activity (CMA).....	409
First Line Technology.....	718 and 1124	U.S. Army Chemical Materials Activity's Recovered Chemical Materiel Directorate (CMA RCMD)	1025
Ghost Robotics.....	615		

EXHIBIT HALL MAP



KEY BALLROOM

Posters

Gore
514 20'

	CWM D 618
Argon Electr 517	HDT Globa 616
JGW Group 515	ALTI LLC 614

H3D, Inc. 619	First Line 718
Ghost Robotics 20'	CMMC Soluti 716
	Rigaku 714

JPEO CBRND 414
DEVCOM 408
Clear Scient 406
ORTEC 404

U.S. Army 409	INFICON 508
Katmai 407	Ginkgo 506
Quick Silver 405	CBRN 504

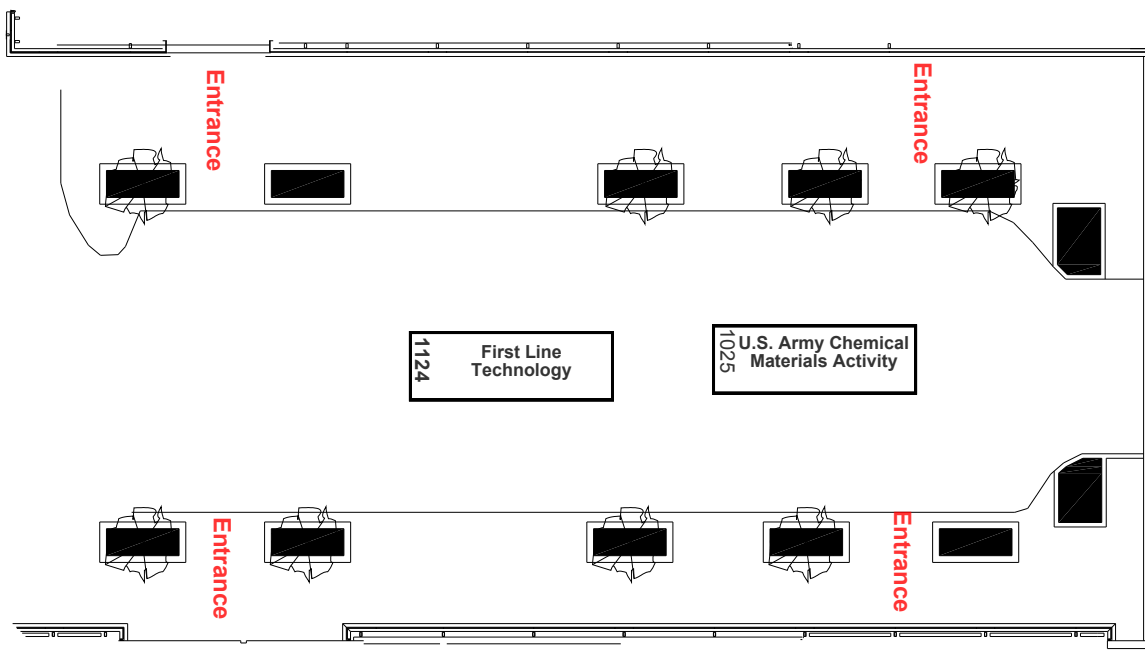
ITL Soluti 509	Battelle 20'
Calgon 507	
Federal 505	
	Motorola 604

FLIR Syste 609	Avon Protec 708
Design 607	ADS, Inc. 706
Agilent 605	908 Devic 704

East Foyer

Main Entrance

Registration Desk



EXHIBITORS

908 DEVICES

704

908 Devices is democratizing laboratory mass spectrometry with simple handheld and desktop devices. These devices are used at the point-of-need to interrogate unknown and invisible materials and provide quick, actionable answers to address some of the most critical problems in life sciences research, bioprocessing, pharma / biopharma, forensics and adjacent markets.

ADS, INC.

706

ADS is the world's premier equipment, procurement, and solutions specialist to the US Military. We ensure mission success, operational efficiency, and cost savings for our customers by partnering with leading manufacturers of CBRN equipment. Bring us your mission requirement and we will help you identify the best solutions to meet it. We will offer you a range of contract vehicles for procurement to get your equipment when and where you need it. Our Purpose. Your Mission.

AGILENT TECHNOLOGIES

605

The Agilent Resolve handheld Raman analyzer provides revolutionary capabilities in hazardous chemical identification and incident response. The Resolve enables rapid identification of explosives, chemical warfare agents, and more through a range of non-metallic, containers, barriers, and packaging. Powered by Agilent's handheld SORS technology, the proprietary optics also mean that laser light is not sharply focused, resulting in a greatly reduced risk of burning or ignition.

ALTI, LLC

614

ALTI LLC is developing game changing technology to detect and identify explosives and other hazards. We are actively searching for partners to confirm our analyzer's performance in this area as part of a Field-testing Campaign. We can also safely generate and monitor nitric oxide for breathing therapy including the potential treatment of Covid-19 as a separate endeavor.

ARGON ELECTRONICS LTD

517

Learn how Argon simulators enable the world's leading CBRN/ HazMat instructors to deliver safe, cost-effective CBRN training by simulating contamination, decontamination, local search, and large area survey/recon scenarios while monitoring student activity.

AVON PROTECTION SYSTEMS, INC.

708

Avon Protection is a world leader in Respiratory Protective Equipment (RPE), providing complete solutions for Air, Land & Sea based personnel in Military, Law Enforcement, First Responder, Firefighting & Industrial sectors globally. Our portfolio of innovative, high-performance products include escape devices, full face masks, powered air systems, self-contained breathing apparatus & a full range of filters & accessories to deliver maximum operational flexibility & accommodate changing threats.

BATTELLE

606

For 30 years, government agencies and industry have trusted Battelle to solve their most complex chemical and biological defense challenges. Tap our expertise spanning decades and dozens of interrelated scientific disciplines, unmatched chemical and biological test facilities, advanced product design and manufacturing, and objectivity as the world's largest independent R&D organization.

CALGON CARBON CORPORATION

507

Calgon Carbon, the world's largest producer of granular activated carbon, supplies more than 100 types of activated carbon products—in granular, powdered, pellet, and cloth form—for more than 700 distinct applications. The company operates production facilities in North America, Europe, and Asia. Calgon Carbon maintains the most advanced R&D organization in the industry and manages an expanding network of sales and service centers worldwide. Visit www.calgoncarbon.com for more information.

CBRNE WORLD

504

CBRNe World is the longest established and most widely read magazine for the global CBRNE community. It also organizes the annual CBRNe Convergence conference & exhibition which this year is hosted in Nashville November 5-7. Delivering news, comment and in depth articles via the magazine, website and conferences to assist CBRNE military and civil professionals achieve their mission goals. [Www.cbrneworld.com](http://www.cbrneworld.com).

CLEAR SCIENTIFIC

406

Through private capital, government funding, and by leveraging strengths in chemistry, Clear Scientific is focused on addressing the foundational chemical and biological threats facing our society. Clear Scientific's products have a broad impact across healthcare and defense markets including antidotes and reversal agents for treatment of substance use disorders, prescription drug overdoses, and protection of warfighters against pharmaceutical-based threat agents.

CMMC SOLUTIONS

716

Our History CMMC Solutions is a division of Corporate Visions LLC dedicated to preparing the Defense Industrial Base (DIB) for its cybersecurity challenges as a RPO. Corporate Visions started serving the industry in 2005. Our Focus CMMC Solutions offers services to provide DIB solutions to meet their cybersecurity challenges. We have experienced IT Auditors with considerable cybersecurity knowledge. We understand the passing an assessment and more importantly, we know what it takes to be secure.

CWMD CONSORTIA

618

The Countering Weapons of Mass Destruction (CWMD) Consortium and the Medical CBRN Defense Consortium (MCDC) consist of business and academic entities across the medical, CBRN, WMD and defense industries assembled to address the DoD's need for innovative, safe and effective medical solutions to counter CBRN threats and technologies to counter WMD. They operate through an Other Transaction Agreement (OTA) with JPEO-CBRND and are managed by Advanced Technology International (ATI).

DESIGN WEST TECHNOLOGIES

607

Design West Technologies is founded on the philosophy of bringing innovative engineering solutions to warfighters through an agile small business environment. We have proudly served our warfighters for over 25 years with solutions for weapon systems, CBRN detection, and protection. Vertically integrated from R&D to final assembly and testing, we offer product development with design, engineering, CNC machining, injection molding, and robotic welding capabilities.

DEVCOM CHEMICAL BIOLOGICAL CENTER

408

The U.S. Army Combat Capabilities Development Command Chemical Biological Center (DEVCOM CBC) is the primary Department of Defense technical organization for non-medical chemical and biological defense. Our Mission - Provide innovative chemical, biological, radiological, nuclear and explosive (CBRNE) defense capabilities to enable the Joint Warfighters' dominance on the battlefield and interagency defense of the homeland.

FEDERAL RESOURCES

505

Federal Resources is the premier single source provider of the customized, integrated solutions your team needs to successfully complete it's next assignment. With more than three decades of specialized experience, coupled with industry connections and trusted partnerships, FR helps military, first responders and organizational professionals equip, train and maintain every component of your next mission, program or project.

FIRST LINE TECHNOLOGY

718 AND 1124

First Line Technology designs and manufactures disaster preparedness and emergency response equipment- taking ideas from the lab to life-saving products. We work with first responders and the military to develop innovative products that make their jobs easier and their lives – and the lives of the people they serve – safer. We focus on emergency response missions and pride ourselves on creating products that are comfortable, effective and safe for use in hazardous environments.

GHOST ROBOTICS

615

Robots That Feel the World® Ghost Robotics™ is revolutionizing legged robotics and the market for autonomous unmanned ground vehicles (Q-UGVs) used in unstructured terrain and harsh environments. Our Q-UGVs are unstoppable. Beyond all terrain operation, a core design principle for our legged robots is size-scalability, and reduced mechanical complexity with total software (SDK) control when compared to other legged and traditional wheeled and tracked UGVs on the market.

GINKGO BIOWORKS

506

Founded in 2008, Ginkgo Bioworks' mission is to make biology easier to engineer. Today, Ginkgo is building a platform so that its customers can program cells as easily as they program computers. In applications across diverse markets, from food and agriculture to industrial chemicals to pharmaceuticals and biodefense, Ginkgo's platform enables customers to program cells as easily as we program computers.

In 2020, we leveraged our platform to support diverse COVID-19 responses, including therapeutics discovery, vaccine manufacturing optimization, and the launch of our biosecurity offering, Concentric by Ginkgo™

GORE

514

Since our inception in 1958, innovation and materials expertise has been at our heart as an enterprise. Lightweight GORE® CHEMPAK® fabrics provide protection against toxic industrial chemicals, chemical warfare agents, infectious diseases, synthetic opioids, and biological and radiological particulate hazards. Visit goretexprofessional.com for more information about our technologies and solutions.

H3D, INC 619

H3D, Inc offers the world's highest-performance gamma-ray spectrometers and imaging spectrometers. From storage to measurement in less than two minutes, we guarantee 1.1% FWHM energy resolution at 662 keV in a portable package. The H series gamma-ray imaging spectrometers are used for applications in CBRNE and emergency response around the world. The A400 series RIIDs are the new state-of-the-art technology for portable isotope identification in a ruggedized package.

HDT GLOBAL 616

A provider of highly-engineered mobile military and emergency response solutions, HDT Global is widely recognized for its industry-leading production of state-of-the-art, fully integrated deployable solutions. With advanced systems currently being used by the U.S. and allied military units stationed worldwide, HDT's products include shelter systems, environmental control systems, generators, heaters, air filtration devices, parachutes, aerial delivery systems, and robotics.

INFICON 508

INFICON is a leading global manufacturer of gas detection instruments that designs, manufactures and markets field-portable and stationary instruments for on-site assessment, characterization and monitoring of Toxic Industrial Chemicals (TICs) and Volatile Organic Compounds (VOCs) in air or water.

ITL SOLUTIONS 509

ITL Solutions is your source for equipment to meet today's requirements and tomorrow's unknowns. Offering mission specific equipment from Marine Engineering to CBR Decontamination, ITL Solutions is a SDVOSB with the right systems to meet your needs. ITL Solutions is proud to be the US Distributor of the Cristanini S.p.A. line of Chemical, Biological, Radiological Decontamination and Firefighting equipment, a world leader since 1972.

JGW GROUP 515

The JGW Group has spent the last 37 years providing clients with highly specialized support in both the aerospace and defense sectors. Our expertise includes marketing and sales, training, consulting, proposal preparation and management, business development, and contractual intelligence. Our focus areas include CBRNE, Force Protection, and Defense.

JPEO CBRND 414

Team Chemical, Biological, Radiological, Nuclear and high-yield Explosives (CBRNE) partners form a consolidated CBRNE defense capability on the Edgewood area of Aberdeen Proving Ground, MD. Team CBRNE is made up of: ECBC, USAMRICD, USAMRIID, JPEO-CBRND, CMA, PEO ACWA, 20th CBRNE, USAPHC, and DTRA/JSTO. Team CBRNE has life cycle responsibility for the safety and defense of our Joint Forces, civilians and nation against CBRNE threats; providing medical and material solutions, safe destruction of chemical stockpile and recovered material, expertise in technologies and emerging threats, promoting health and preventing disease/injury, and providing countering weapons of mass destruction products.

KATMAI HEALTH SERVICES, LLC 407

Katmai is an experienced crisis and emergency response support provider. Since Katmai was initially formed in 2007, we have been providing training, logistical, and kitting services.

MOTOROLA SOLUTIONS 604

Whether you're leading an operation from a command center or performing emergency services, Motorola Solutions keeps you connected, secured, and informed with converged voice, video, and data capabilities. Our command software and video security solutions inform decisions with greater real-time intelligence while our communications connect teams with purpose-built devices, interoperability across any network, application or device and fast reliable coverage where none previously existed.

ORTEC 404

ORTEC will be showing the Detective X and RadEAGLET-R radioisotope identifiers. ORTEC Detective models are the standard devices used by Customs, Defense, Intelligence, state and local agencies in the US and around the world. ORTEC will show the GRACE Gamma Ray Analysis of Chemicals and Explosives system. This system is light, portable, easy to set up and deploy. GRACE analyzes and provides on-site identification of the chemical contents inside munitions or other unopened containers.

QUICKSILVER ANALYTICS, INC 405

QS is a Service Disabled, Veteran Owned Small Business, providing quality chem/bio products and services. QS specializes in customization of forensic quality environmental sampling kits for WMDs. Most of the components in the QS kit have national stock numbers. QS is ISO 9001-2015 registered. QS's sampling kit is a component of the Dismounted Reconnaissance Sets, Kits and Outfits. See our online catalogue at www.qcslvr.com for replacements or for items that have expired.

RIGAKU ANALYTICAL DEVICES

714

Used for the identification and detection of illegal drugs, explosives, and chemical threats, our rugged family of products include the Rigaku ResQ (approved by the U.S. DoD JPEO DR SKO Program) and Rigaku ResQ CQL handheld 1064nm Raman analyzers. Both instruments feature an expandable library, simple software, and advanced features – including 4C Technology for automatic threat recipe alerts and Quick Detect Mode for trace analysis.

TELEDYNE FLIR

609

FLIR Systems, Inc. designs, develops, manufactures, markets, and distributes technologies that enhance perception and awareness. We bring innovative sensing solutions into daily life through our thermal imaging systems, visible-light imaging systems, locator systems, measurement and diagnostic systems, and advanced threat detection systems. Our products improve the way people interact with the world around them, enhance public safety and well-being and enable healthy and entertained communities.

U.S. ARMY CHEMICAL MATERIALS ACTIVITY (CMA) 409

The U.S. Army Chemical Materials Activity (CMA) develops and deploys equipment to safely and effectively identify and destroy recovered chemical warfare materiel; manages the storage of the two remaining U.S. chemical weapons stockpile sites in Colorado and Kentucky; ensures communities near the stockpile are prepared in a stockpile emergency; and supports the United States treaty commitment to destroy chemical weapons. CMA fulfills its missions by partnering with the other members of “Team CBRNE” – which stands for Chemical, Biological, Radiological, Nuclear and Explosive. This team includes the Edgewood Chemical Biological Center, the Joint Program Executive Office for Chemical and Biological Defense, the Defense Threat Reduction Agency, the 20th CBRNE Command, the U.S. Army Medical Research Institute of Chemical Defense, the U.S. Army Public Health Center, and Program Executive Office, Assembled Chemical Weapons Alternatives. CMA's interactive kiosk and visual representations describe how CMA fulfills its mission. Visit the CMA exhibit at this year's NDIA conference to discuss their partnership with other NDIA exhibitors and showcase their missions and recent research and development efforts. Follow CMA on Facebook: <https://www.facebook.com/USArmyCMA/> Visit the CMA Website for additional resources and information: <https://www.cma.army.mil/>

U.S. ARMY CHEMICAL MATERIALS ACTIVITY'S RECOVERED CHEMICAL MATERIEL DIRECTORATE (CMA RCMD) 1025

The Recovered Chemical Materiel Directorate uses the Mobile Munitions Assessment System (MMAS) to provide analysis of recovered items with unknown fills. MMAS uses nonintrusive assessment equipment to rapidly provide detailed information on recovered items and distribute that information to appropriate authorities, reducing risk to the public, military and emergency personnel. MMAS also serves as a command center, equipment storage area and weather monitoring system to determine optimal conditions for assessment operations. MMAS operators use cameras to monitor activity around the site. Powered by a portable generator, MMAS can be driven or transported by military aircraft to all 50 states and can remain on site for extended periods. Once on site, the system can operate within 25 minutes.

POSTER SESSIONS

Innovations: Are You Systemically Creating Them? Designing Human Systems That Lead Innovation

Ted Sun

Every business in the defense industry is looking for innovation; most companies like to claim that they are an innovative organization. But when asked – “how many innovations does your company create monthly?”, many executives tend to get stuck.

Coordinating a Fleet of Autonomous Vehicles with CBRN Payloads Using the Mission Planning Management System (MPMS) Software Suite

Kurt Bruck | Jeffrey Hyams

Neya Systems has been developing a software suite to control, task, and coordinate a fleet of autonomous air and ground vehicle systems outfitted with advance CBRN payloads. The Mission Planning Management System (MPMS) suite of tools has now controlled over 12 autonomous vehicle configurations including program of record systems such as the Raven UAS and KMAX Helicopter. Neya is now integrating MPMS with U.S. ARMY DTRA to control a fleet of air and ground vehicles to automatically investigate CBRN threats all from a network of TAK devices.

The Aero – A New Capability to Rapidly Detect Aerosolized Threats in the Field

Dr. Matthew Aernecke | Dr. Christopher Brown |
Dr. Scott Miller | Anthony Leipert

The Aero enables 908 Devices' MX908 to fill a critical gap in aerosol threat detection, demonstrating detection capability across the range of aerosolized threats – solid and liquid CWA/FGAs and fentanyl analogs – in operational environments across widely ranging concentrations of operational relevance. Its seamless integration onto the MX908 enables the end-user to quickly access and rapidly deploy this capability to the point-of-need.

Situational Awareness for First Responders (SAFR)

Timothy Molner, Jr.

Alakai Defense Systems has recently developed what we believe is the first one-handed UV Raman sensor for standoff detection of chemicals, which we refer to as the Situational Awareness for First Responders (SAFR). SAFR detects bulk and residue quantities of material up to a range of 5 m. Since it is lightweight, SAFR can also be deployed on Unmanned Ground Vehicles (UGV's) or Unmanned Aerial Vehicles (UAVs). A short description of the instrument's design and performance will be presented.

In Vitro Neurotoxicity Tools to Support Research, Development, Test, and Evaluation Decisions for Military-Relevant Chemicals

Dr. Heidi Hoard-Fruchey | Dr. Lindsay Holden |
Dr. Valerie Adams | Dr. Michael Quinn

The poster describes our proposed assay battery to address the neurotoxicity assessment needs for CBRN and other military-relevant chemicals to allow decision makers to draft policy and procedures relating to these chemicals. The assay battery includes blood brain barrier (BBB) permeability prediction, neurite outgrowth and neurotransmitter transporter up take assays, and a toxidrome approach using an acetylcholinesterase inhibition assay (cholinergic toxidrome) and a multi-pharmacophore suite for predicting GABA A receptor binding (convulsant toxidrome).

ALTI LLC TD-CRDS Explosive Trace Detection System

James Hargrove | Sung Lee | Milo Janjic | Tamara Kylloe

ALTI LLC is developing game changing technology to detect and identify explosives and other hazards using thermal decomposition cavity ring down spectroscopy (TD CRDS). We have been able to detect five representative explosives: TNT, RDX, NG, TATP and PETN on a parts per trillion scale.

Drop-Puck System

Dr. Maria Bauer | Dr. Ramesh Palanisamy

DWT's Drop-Puck system exploits robotic, unmanned aerial and ground vehicle, platforms for CBRN sensor package delivery and subsequent formation of a distributed wireless sensor network. The system operates based on plurality of disposable point detectors (Pucks) scattered around an area of interest to achieve high probability of detection while suppressing false alarms and providing redundancy. With a self-healing mesh network, Pucks offer the benefits of standoff operation at an affordable cost. Further, the system offers the performance benefits of point detectors (i.e. classification/identification) while providing real-time aerial threat monitoring via ATAK.

Virtual Reality (VR) and Augmented Reality (AR) Applications for Nuclear Threat Detection

George Lekoudis | Tyler Browning |
Gabe Scott | Scott Sapp

DTRA is developing a capability to integrate high-fidelity physics simulation, instrument response functions, Virtual Reality (VR) technology, and Android devices to support RDT&E and mission rehearsal for radiation detection applications. Presented is a prototype application, characterizing DTRA's Test and Evaluation Monitoring Site (TEAMS), that allows a user to perform high-fidelity threat object detection and characterization using a DTRA-developed sensor in a VR environment.

THANK YOU TO OUR SPONSORS



NETWORKING RECEPTION SPONSOR

LMI is a consultancy dedicated to powering a future-ready, high-performing government, drawing from expertise in digital and analytic solutions, logistics, and management advisory services. We deliver integrated capabilities that incorporate emerging technologies and are tailored to customers' unique mission needs, backed by objective research and data analysis. Founded in 1961 to help the Department of Defense resolve complex logistics management challenges, LMI continues to enable growth and transformation, enhance operational readiness and resiliency, and ensure mission success for federal civilian and defense agencies.



MOBILE APP AND REUSABLE FACE MASK SPONSOR

Since 1945, Arbill has been and continues to be a leader in workplace safety by offering safety products, safety programs, safety technology and EH&S Managed Services to its customers. Arbill is one of the largest women-owned safety companies in the USA. Arbill provides world-class value with a culture rooted in safety to government service workers and industry employees. Arbill manufactures products under its Truline brand and is a leading supplier of Scott Safety products that safely protect Chemical, Biological, Radiological and Nuclear Defense Service Workers including the AV-3000 SureSeal, that features top-down convertibility for use as an APR or PAPR in a CBRN environment, as well as their NFPA SCBA's with CBRN approval. With safety as our only focus, we make life safer every day.



UVC SANITIZING CHARGING STATION SPONSOR

For over 70 years, government agencies and industry alike have trusted Battelle to solve their most complex chemical and biological defense challenges. Tap our expertise spanning decades and dozens of interrelated scientific disciplines, unmatched chemical and biological test facilities, advanced product design and manufacturing, and objectivity as the world's largest independent R&D organization.



NETWORKING BREAK SPONSOR

The Countering Weapons of Mass Destruction (CWMD) Consortium, is a well-established community of Industry, Academia and Government focused on rapid prototyping of technology areas focused on the Counter WMD domain. The CWMD Consortium provides opportunities for member organizations to pursue teaming and partnerships with other CWMD members, collaboration with Government requirement owners, and Prototype Awards worth millions of dollars with potential for follow-on production awards. We are actively seeking members for the Consortium.

The CWMD Consortium is an easier way to do business with the Federal Government than through the Federal Acquisition Regulation (FAR). CWMD relies on "Other Transaction Authority" granted to the Department of Defense and utilized by the Joint Program Executive Office for Chemical Biological Radiological and Nuclear Defense (JPEO-CBRND) to accelerate prototype development.

For more information on how to participate please visit: www.cwmdconsortium.org.



2021 CBRN DEFENSE CONFERENCE AND EXHIBITION

August 16 – 18 | Baltimore, MD

Biological | CBRN | Combat Architecture | Defensive Measures | Domestic Preparedness | Nuclear Defense | Radiological | Research & Development



2021 JOINT NDIA/AIA FALL INDUSTRIAL SECURITY CONFERENCE

November 8 – 10 | Chantilly, VA

Industrial Security | Insider Threat | Cybersecurity/CMMC | NISPOM Updates



2021 UNDERSEA WARFARE FALL CONFERENCE

September 27 – 29 | Groton, CT

Aviation USW | C4I | Mine Warfare | Undersea Sensors & Vehicles | Warfighter Performance



I/ITSEC 2021

November 29 – December 3 | Orlando, FL

Simulation | Training | Virtual Reality



24TH ANNUAL SYSTEMS & MISSION ENGINEERING CONFERENCE

October 4 – 7, 2021 | Orlando, FL

Engineering & Manufacturing | Human Systems Integration | Security Engineering | Systems Architecture Systems



2022 TACTICAL WHEELED VEHICLES CONFERENCE

February 28 – March 2 | Norfolk, VA

Autonomous Vehicles | Electric Drive | Modernization & Sustainment | Acquisition



2021 FUTURE FORCE CAPABILITIES CONFERENCE AND EXHIBITION

October 18 – 21 | Columbus, GA

Autonomous Systems | GARM | Live Fire | Multi-Domain | Small Arms | Explosive Ordnance Disposal



2022 UNDERSEA WARFARE SPRING CONFERENCE

March 28 – 30 | San Diego, CA

Aviation USW | C4I | Mine Warfare | Undersea Sensors & Vehicles | Warfighter Performance



PRECISION STRIKE TECHNOLOGY SYMPOSIUM (PSTS-21)*

October 19 – 21, 2021 | Laurel, MD

Hypersonics | Cruise Missiles | Non-kinetic Strike | Stand-off Weapons



2022 PACIFIC OPERATIONAL SCIENCE & TECHNOLOGY (POST) CONFERENCE**

March 7 – 9 (Unclassified), 9 – 10 (Classified) | Honolulu, HI

Regional Security | Science & Engineering Technology | Technology Engagement



2021 AIRCRAFT SURVIVABILITY SYMPOSIUM*

November 2 – 4 | Monterey, CA

Combat Survivability | Concealment and Deception | Countermeasures | Urban Warfare | Vulnerability Reduction



65TH ANNUAL FUZE CONFERENCE**

May 10 – 12, 2022 | Seattle, WA

Fuze | Missiles | Munitions Technology | Safety & Arming Devices | Warheads



32ND ANNUAL NDIA SO/LIC SYMPOSIUM

November 3 – 4, 2021 | Washington, DC

Special Operations Forces | Strategic Competition



2022 SPECIAL OPERATIONS FORCES INDUSTRY CONFERENCE & EXHIBITION (SOFIC)

May 16 – 19 | Tampa, FL

Communications | Light Vehicles | Small Arms | Special Operations

*All Classified | **Partially Classified