

# Chemical and Biological News

---

## NATIONAL AND INTERNATIONAL DEVELOPMENTS

### **New Omicron cases detected as coronavirus variant spreads**

28 November 2021

New cases of the Omicron coronavirus variant have been detected around the world, with two cases reported in Australia, as more countries try to seal themselves off by imposing travel restrictions.

First discovered in South Africa, Omicron has since been recorded in the Netherlands, Denmark, Belgium, Botswana, Germany, Hong Kong, Israel, Italy and the United Kingdom.

The discovery of Omicron, dubbed a “variant of concern” on Friday by the World Health Organization, sparked worries that it could resist vaccines and prolong the nearly two-year COVID pandemic.

Omicron is potentially more contagious than previous variants, but experts do not know yet if it will cause more or less severe COVID-19.

<https://www.aljazeera.com/news/2021/11/28/omicron-covid-variant-spreads>

### **Protective Biosystems: Parasites to Fight Chemical and Biological Weapons**

Global Biodefense Staff, October 2, 2021

Charles River Analytics announced on September 14, 2021, that it was awarded a contract by the Defense Advanced Research

Projects Agency (DARPA) to lead a team of research organizations seeking to develop a novel biosystem solution to protect warfighters from chemical and biological threats. The five-year, \$16M contract will focus on neutralizing threats at vulnerable internal tissue barriers (including skin, airway, and ocular barriers) using a configurable biological countermeasure.

The effort is part of DARPA’s Personalized Protective Biosystem (PPB) program, which is exploring the use of new transgenic commensal organisms—specifically hookworms and schistosomes—to secrete therapeutics specifically targeting chemical and biological threats, including neurotoxins (such as organophosphates) and microbial pathogens.

<https://globalbiodefense.com/2021/10/02/protective-biosystems-parasites-to-fight-chemical-and-biological-weapons/>

### **Sophisticated Tardigrade malware has attacked Biomanufacturing firms**

Graham Cluley, November 25, 2021

Security researchers are warning biomanufacturing facilities around the world that they are being targeted by a sophisticated new strain of malware, known as Tardigrade.

The warning comes from the non-profit Bioeconomy Information Sharing and Analysis Center (BIO-ISAC) which revealed that at least two large facilities working on manufacturing bio-drugs and vaccines have been hit by the same malware this year, in what appear to be targeted attacks.

Charles Fracchia, founder of BioBright and a BIO-ISAC board member, says that Tardigrade is an APT targeting Windows computers in the bioeconomy and biomanufacturing sector “using tools of unprecedented sophistication and stealth.”

<https://www.tripwire.com/state-of-security/security-data-protection/sophisticated-tardigrade-malware-launches-attacks-on-vaccine-manufacturing-infrastructure/>

## DISARMAMENT

### **Damascus Has Not Fully Complied With UN-backed Chemical Weapons Probe**

Nisan Ahmado, October 12, 2021

On October 4, Bassam Sabbagh, the Permanent Representative of Syria to the United Nations, claimed during a U.N. Security Council briefing on Syria’s chemical weapons that his country had met all its obligations under the chemical weapons ban. Sabbagh commented after U.N. Undersecretary-General and High Representative for Disarmament Affairs, Izumi Nakamitsu, complained of “unaddressed discrepancies and insufficient cooperation” by the Syrian government. She said Syria’s declaration of compliance was inaccurate.

An Organization for the Prohibition of Chemical Weapons (OPCW) fact-finding mission has been investigating allegations that Syrian government forces used chemical weapons during the country’s civil war. Sabbagh claimed the mission used flawed investigative methods. “Syria is cooperating with OPCW and is keen to close the file as soon as possible,” he said. But that is false.

Since the investigations began eight years ago, Syrian President Bashar Assad has blocked investigators and provided inaccurate information.

Damascus allegedly began using chemical weapons in 2012, targeting opposition-held neighborhoods in the cities of Homs and Aleppo. In August 2013, a large-scale attack targeting the Ghouta region outside Damascus reportedly took place, killing more than 1,000 civilians. In September 2013, under pressure from its main ally Russia, the Syrian government signed the international Chemical Weapons Convention, which bans the development, production, stockpiling and use of chemical weapons.

In August 2014, the Assad government declared it had completely destroyed its chemical weapons arsenal. The OPCW continues to dispute the accuracy of that assertion. Following the reported attack on Ghouta, a U.N. investigation team headed to inspect the targeted areas, but snipers prevented the team from entering. Responding to that incident, then-U.S. Secretary of State John Kerry accused the Assad regime of delaying the team for five days to cover up the evidence. Earlier this month, the OPCW said Damascus had refused to issue a visa to a member of its inspection team. It wasn’t the first time. Damascus has declined to provide accurate data on its chemical weapons activities, the OPCW has said, or to answer questions about chemical traces found at several alleged attack locations.

<https://www.polygraph.info/a/fact-check-damascus-has-not-fully-cooperated-with-un-backed-chemical-weapons-probe/31505761.html>

## **INTERNATIONAL COOPERATION**

### **India contributes 20,000 Euro to future OPCW Centre for Chemistry and Technology**

25 November 2021

The Government of the Republic of India has contributed 20,000 Euro to a special Trust Fund of the Organisation for the Prohibition of Chemical Weapons (OPCW) to support the construction and operation of a new facility, the OPCW Centre for Chemistry and Technology (“ChemTech Centre”), currently being built outside The Hague.

The contributions was formalised on November 24, during a ceremony between the Permanent Representative of the Republic of India to the OPCW, H.E. Ambassador Pradeep Kumar Rawat, and the Director-General of the OPCW, H.E. Mr Fernando Arias.

Ambassador Rawat stated: “I am happy to announce India’s voluntary contribution to OPCW Trust Fund for construction of the new ChemTech Centre. As the original signatory to the Chemical Weapons Convention, India remains a strong supporter of its full, effective, and universal implementation. We appreciate the role played by OPCW and hope that the ChemTech Centre will further strengthen capabilities of Member States to jointly deal with the new and emerging challenges. We envisage the Centre to be the fulcrum for research and training, technical partnerships and greater exchanges between the scientists and experts.”

Director-General Arias additionally expressed his gratitude to the OPCW States Parties and other donors who supported the project and encouraged continued

participation in this important initiative. He further emphasised the role the new ChemTech Centre will play in strengthening the OPCW’s ability to address chemical weapon threats and enhance capacity building activities to the benefit of all 193 OPCW Member States.

The ChemTech Centre Trust Fund remains open for further contributions. Additional funds will provide extra assurances for the successful completion of the project and for the international cooperation projects to be carried out at the Centre once the building is operational.

### **National Authorities consider ways to enhance global implementation of Chemical Weapons Convention**

26 November 2021

The Twenty-Third Annual Meeting of National Authorities brought together more than 200 representatives from over 100 Member States of the Organisation for the Prohibition of Chemical Weapons (OPCW). The online meeting, held from 23 to 26 November, provided National Authorities with an opportunity to exchange views with the OPCW Technical Secretariat on recent developments related to the implementation of the Chemical Weapons Convention (CWC) and to discuss capacity building approaches to chemical security.

The Director-General of the OPCW, H.E. Mr Fernando Arias, noted in the opening session: “As the OPCW evolves against the backdrop of a changing security environment, our future priorities will require a range of activities to ensure the Organisation remains fit for purpose as the bulwark against chemical weapons. We will need to continue to strengthen engagement with diverse stakeholders around the globe to effectively

prevent the re-emergence of chemical weapons.” He added: “National Authorities are integral in this respect as they are actively involved in CWC implementation on the ground.”

During the meeting, the Secretariat updated the participants on policy-related issues, as well as on its activities in the implementation of the verification regime and highlighted the most important developments within its capacity building programmes. Attendees were briefed on the ongoing construction of the ChemTech Centre – an important upgrade to the OPCW’s facilities that will help the Organisation fulfil its mandate and further support Member States in implementing the Chemical Weapons Convention.

Participants exchanged views on OPCW’s capacity building support related to the development of legislative and regulatory frameworks for chemical security, to chemical security management, and to strengthening response capacities against the use or threat of use of chemical weapons. The meeting was attended by representatives from all five OPCW regional groups: Africa, Asia, Eastern Europe, Latin America and the Caribbean (GRULAC), and Western Europe and Others Group (WEOG).

*<https://www.opcw.org/media-centre/news/2021/11/national-authorities-consider-ways-enhance-global-implementation-chemical>*