



ARMADILLO

Portable Detection Solutions for GHB in Law Enforcement Your gateway to a safer and smarter forensic future.

Welcome to the first issue of the ARMADILLO newsletter!

ARMADILLO is a Horizon Europe project developing a **portable, reliable, and rapid toolset for detecting gamma-hydroxybutyrate (GHB)** in a variety of matrices. Designed for **Law Enforcement Authorities (LEAs)**, police, and forensic institutes, ARMADILLO's innovative approach aims to strengthen the fight against drug-facilitated crimes.

Over the next three years, we'll keep you updated on our progress, breakthroughs, field trials, events, and expert insights from the world of forensic science.

"With ARMADILLO, we are taking on one of the most pressing forensic challenges in Europe, the rapid and reliable detection of GHB outside the laboratory. This first newsletter is the start of our work, and we look forward to sharing our progress, milestones, and breakthroughs with you."

Panayiota Petrou, ARMADILLO Project Coordinator

Our Vision:

A future where LEAs have **immediate, on-site access** to accurate GHB testing, helping to prevent crimes, secure justice, and support victims without delay.



Main Objectives:

1. Develop a portable detection system for GHB identification in various matrices, including beverages and biological samples.
2. Ensure rapid testing capability with results delivered in minutes, even by non-specialist users.
3. Integrate secure digital reporting and evidence management, preserving the chain of custody.
4. Conduct extensive pilot testing in operational environments to ensure reliability under real conditions.
5. Provide training programmes and guidelines to build LEA and forensic capacity.
6. Engage stakeholders and raise awareness about GHB-related crimes and detection technologies.

The Challenge & ARMADILLO's Solution



The Challenge:

- **Short detection window:** GHB metabolises rapidly in the human body, making detection difficult after a few hours.
- **Limited access to lab facilities:** Most reliable methods are laboratory-based, requiring complex equipment and trained personnel.
- **Delays in justice:** Slow results can reduce the chances of prosecuting offenders effectively.
- **Growing prevalence:** GHB-related crimes are an increasing concern for European LEAs and communities.

Our Solution:

ARMADILLO is developing a **robust, portable device** that:

- **Detects GHB on-site** without the need for complex sample preparation.
- Works **across different sample types** (liquids, biological fluids).
- Offers **lab-comparable accuracy** in a fraction of the time.
- Features an **intuitive interface** for quick use during field operations.
- **Securely transmits results** to databases, ensuring data integrity.

Impact:

By bridging the gap between laboratory accuracy and field usability, ARMADILLO's solution will help **catch perpetrators faster, strengthen legal evidence, and reduce victim trauma.**



ARMADILLO's technology will be tested through three **real-life pilots**:

1. Urban Nightlife Venues

- **Purpose:** Test detection efficiency in bars, clubs, and festivals.
- **Partners:** Local LEAs and venue operators.
- **Goal:** Ensure technology can operate in crowded, fast-paced environments.

2. Forensic Laboratory Integration

- **Purpose:** Validate device performance against standard lab methods.
- **Partners:** Forensic science institutes.
- **Goal:** Confirm accuracy and compatibility with official forensic protocols.

3. Field LEA Operations

- **Purpose:** Assess use during roadside checks, raids, and incident responses.
- **Goal:** Test robustness, portability, and ease of use during unpredictable situations.



Between **14–17 September 2025**, ARMADILLO was represented at the **14th International Conference on Instrumental Methods of Analysis (IMA-2025)** in Argostoli, Kefalonia. The conference, organized by the **National Technical University of Athens** and the **University of Patras**, gathered leading researchers to discuss cutting-edge innovations in analytical science.



Between July 6–11, 2025, the ARMADILLO project was represented at the 5th International Sociological Association Forum 2025, which took place in Rabat, Morocco, through its partner, [*Sinopsis Innovation*](#). During the event, Eri Eleftheria Papadopoulou and Georgios Chatzichristos presented the research study “*Addressing LGBTQ+ Bias in Forensic Evidence for Sexual Violence Cases*” as part of a thematic session focused on LGBTQ+ rights.



The ARMADILLO project’s representatives participated in the First International Workshop on Civil Security & Proactive Threat Detection and Prevention by presenting the project. This workshop was organized by PRESERVE project and was held at the Center for Security Studies (KEMEA) in Athens, Greece, conducted in a hybrid setting.



The ARMADILLO project had the opportunity to participate at the Project to Policy Seminar 2025, an initiative hosted by the European Commission to strengthen the vital link between EU-funded research and policymaking.



The ARMADILLO project held its 2nd Plenary Meeting in a hybrid format on March 11-12, 2025, in Ljubljana, Slovenia. This event was a significant milestone, allowing the consortium partners to meet, discuss progress, and collaboratively plan future steps following their initial kick-off meeting.



The ARMADILLO project has officially launched with a **successful two-day kick-off meeting**, held on **3 and 4 of October, 2024** at the **DIMOKRITOS** premises in Athens, Greece. This pivotal gathering brought together project partners, experts, and stakeholders to set the foundation for this ambitious EU-funded initiative.

“Building Trust in Tech: How ARMADILLO devices balance innovation and human integrity”

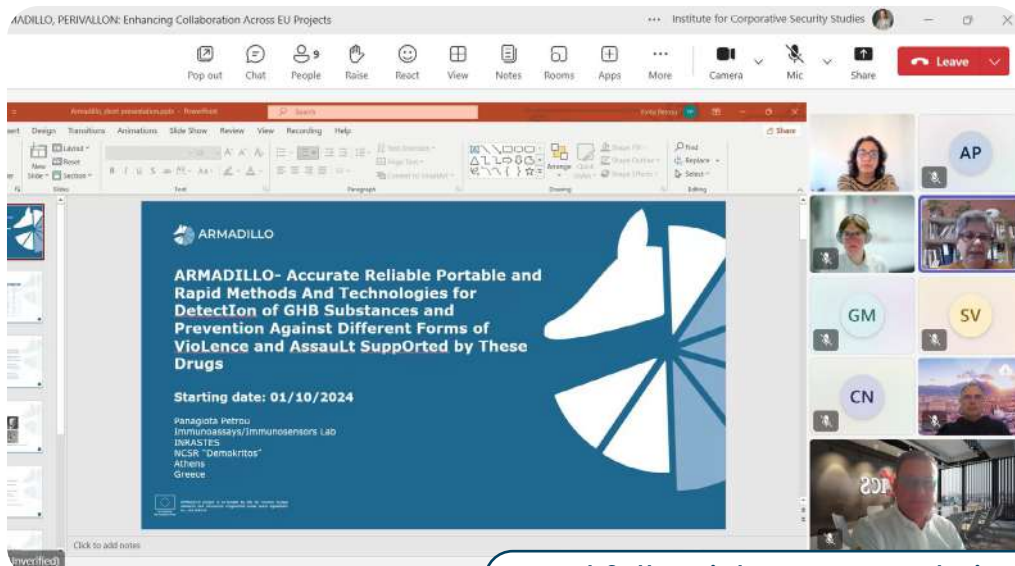
Discover how the ARMADILLO project is building cutting-edge GHB detection tools while protecting human rights from day one.



[Read full article on our website](#)

“ARMADILLO Unites with EU Projects”

Discover how ARMADILLO, PERIVALLON, and ARIEN are uniting technology and expertise to fight organized crime and create a safer future.



[Read full article on our website](#)

Meet the ARMADILLO Partners



The ARMADILLO project brings together a **multidisciplinary consortium** of leading European organisations, combining expertise in **forensic science, law enforcement, analytical chemistry, engineering, and communication**. This collaborative approach ensures that our solutions are **scientifically robust, operationally practical, and widely applicable**.



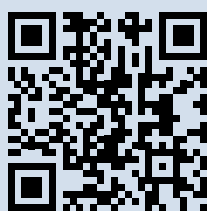
Get Involved & Stay Connected



We invite forensic experts, LEAs, policymakers, and the public to follow our progress, join events, and explore collaboration opportunities.

Project Coordinator:

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