August 2025

Newsletter

NanoSafety

(Nano)particle exposure levels and characterization, toxicity mechanisms, health effects, and knowledge transfer

NanoSafety2 researchers at NIVA

Left: View from Skåla. Right: Alexander Hedbrant giving the talk.

At the NIVA course on respirable crystalline silica (STAMI, Oslo, 12–14 May), Alexander Hedbrant lectured on toxicological mechanisms and biomarkers of quartz exposure, and Lena Andersson on exposure levels in iron foundries. Participants represented health care, research, industry, and regulatory authorities.

NIVA (Nordic Institute for Advanced Training in Occupational Health) organizes courses and seminars in occupational health and safety, bringing together experts, researchers, practitioners, and policymakers from the Nordic region and beyond. It operates under the mission set by the Nordic Council of Ministers.

AIRMON conference

At the AIRMON conference "*The 11th International Symposium on Modern Principles of Air Monitoring and Biomonitoring*" (Loen, Norway, 15–19 June), Alexander Hedbrant gave an oral presentation on the effects of occupational exposure to respirable crystalline silica dust on inflammatory lipid mediators (photos above).

Sampling as AMEXCI

Sampling 2025/2026

New sampling campaign is planned for the fall 2025 and early 2026.

Week 40 (2025): Lasertech

Week 46 (2025): AMEXCI

Week 6 (2026): Siemens Energy

alnab

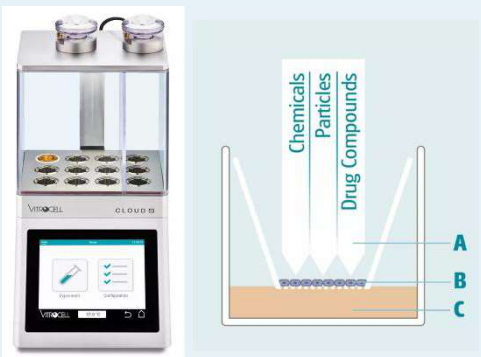
Business partner in:
Sub-projects 1, 3, and 4

Meet the new NanoSafety2 business partner: Alnab AB

Alnab (https://www.alnab.se/) is a Swedish company with offices in Partille, Stockholm, and Luleå. The company provides technical solutions and services through a dedicated project structure, supported by a team of specialists. Since 1995, Alnab has been part of the Process Energy & Water business area within Indutrade AB. Alnab offers instruments for air quality measurement and particle analysis from suppliers such as Palas, 2B Technologies, and Naneos. The equipment is used for research, workplace monitoring, and regulatory applications, enabling accurate detection and assessment of airborne particles and pollutants in different environments.

The VITROCELL® Cloud Alpha 12

NanoSafety2 will have access to the VITROCELL® Cloud Alpha 12, a modern system that makes it easier to study how airborne substances affect living cells. The technology allows researchers to expose cell cultures to tiny particles or droplets in a controlled and efficient way. Importantly, it works at the air–liquid interface (ALI), which means the cells are grown with air above them and liquid below – closely mimicking how cells in the lungs come into contact with inhaled substances and enabling the study of airborne particle effects.



The VITROCELL® Cloud Alpha 12