

August 2026

# Newsletter



# NanoSafety

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



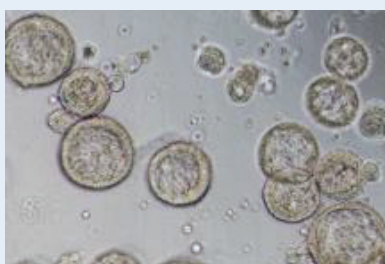
NanoSafety2 partners at Siemens Energy

## NanoSafety2 meets at Siemens Energy

The **fifth biannual NanoSafety2 project meeting** was held at Siemens Energy, bringing partners together for productive discussions on ongoing work, upcoming analyses and the next stages of the project. Many thanks to our hosts Ulrika Kjellberg Danielsson and Mikael Berntzen for the warm welcome and excellent organization.

## Next-Generation Nasal Models

NanoSafety2 is advancing towards more realistic respiratory exposure models through the development of nasal organoids. Following training at Karolinska Institutet and submission of the ethical application, the project is now entering the next phase of model establishment and exposure studies beyond NanoSafety2.



Human nasal organoids

## SP1&3 plans in 2026/2027

New sampling campaign is planned for the 2026 and 2027.

**Week 46 (2026):** Lasertech

**Week 50 (2026):** AMEXCI

**Week 7 (2027):** Siemens Energy

Chemical  
Research in  
Toxicology

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### Evaluating Dermal Bioactivity of Metal Additive Manufacturing Powders Using Human *In Vitro* and *Ex Vivo* Skin Models

Alexander Persson, Zuzanna Łyczynska, Mariam Shahata, Oleksandr Kotlyar, Magnus Engwall, Eva Särndahl, Marcus Ehrström, Keira Melican, Inger Odneval, and Andi Alijagic

Cite This: Chem. Res. Toxicol. 2026, 39, 966–976

Read Online

## New NanoSafety2 publication: How do AM metal powders interact with the skin?

The recent [NanoSafety2 study](#) shows that metal AM powders have low short-term skin reactivity under skin-relevant conditions. Metal release was limited, and no clear inflammatory response was detected in human skin cells or ex vivo skin. However, subtle mitochondrial-associated cellular changes were observed, highlighting the value of sensitive methods for detecting early biological responses even when overt toxicity is absent.

## Meet Mostafa Karimi Roshan, a new postdoc

Mostafa Karimi Roshan recently joined Örebro University as a postdoctoral researcher. He brings experience in advanced cell culture, respiratory models, inflammatory signaling, and particle exposure studies, including work with air-liquid interface systems. In NanoSafety2, he will contribute to developing and applying human-relevant *in vitro* models to better understand how particle and chemical exposures affect human health.



Mostafa Karimi Roshan