Q&A

- **U.S. EPA:** This might be useful to create coatings. Is that a beneficial use you see?
    - **Rouzbeh Tehrani:** There are many things happening with these 2-dimensional (2D) materials. I have not seen any published records of using these materials.
- **U.S. EPA:** Can you use 2D materials for water treatment?
    - **Rouzbeh Tehrani:** The problem with this type of nanomaterial is that they are tiny, and the pressure increases so much that you cannot pump water to the nanomaterials; they deform with increasing pressure. We have nanomaterials with magnetic properties. The problem is that the use of magnets is not technically feasible.
- **U.S. EPA:** Do 2D nanomaterials affect transcription data regulation?
    - **Rouzbeh Tehrani:** There is some literature about that. In our own laboratory, we had experiment with some phenotypic change. There is not much known about what happens when you expose cells to nanomaterials.
- **U.S. EPA:** Do you see 2D nanomaterials using PPEs?
    - **Rouzbeh Tehrani:** In some countries, they have 4D startup testing on the PPEs and for one of the materials, they have deposited nanomaterials on the masks and the PPEs for the chemical warfare agents. It showed that it does have degradation.