

# AVVISO DI SEMINARIO

Il giorno **26 giugno 2026** alle ore **10:00**

in aula **D'Antoni**  
(dipartimento di Matematica)

**Il Prof. Dr. Peter A. Lieberzeit**

Department of Physical Chemistry, University of Wien, Austria

terrà un seminario dal titolo

## **Molecular Imprinting Strategies for Sensors and Assays**

Proponente: Prof.ssa Larisa Lvova

## Molecular Imprinting Strategies for Sensors and Assays,

Prof. Dr. Peter A. Lieberzeit

Department of Physical Chemistry, University of Wien, Austria

### Abstract

The synthesis of molecularly imprinted polymers (MIP) has established itself as an indispensable tool in generating biomimetic sensors, i.e. systems that aim at implementing bioanalogous recognition abilities into artificial materials. The focus of research has shifted towards implementing MIPs into sensors and assays that are inherently useful for real-life applications, which has brought substantial attention to questions such as reproducibility and robustness of MIP-based sensors. Especially radically polymerized systems pose a substantial challenge here: the inherently statistical polymerization process makes it difficult to achieve robust synthesis.

This seminar talk will highlight two aspects that the group in Vienna has been utilizing to improve applicability in recent years: implementing controlled radical polymerization for generating surface-imprinted thin films and solid-phase synthesis to obtain so-called “MIP nanobodies”, as pioneered in the groups for S. Piletsky in Leicester and K. Haupt in Compiègne. It will cover different analytes ranging from small molecules and peptides to nano- and microsized structures.



**Peter A. Lieberzeit** is a professor at the Department of Physical Chemistry of the University of Vienna. He obtained his PhD from the same university in 1999 and his “habilitation” in Analytical Chemistry in 2007. His work centers around biomimetic sensing, mainly using molecularly imprinted polymers (MIP) for that purpose. Aside of analytical/sensing approaches and in bringing them closer to applications, he is also interested in elucidating the processes leading to recognition. To date, he has more than 200 papers indexed in Web of Science and Scopus with an h-factor of h=42 in Scopus. Currently, he serves on the editorial board of *Sensors and Actuators B: Chemical* and as the Chair of the International Steering Committee of the IMCS conference series.