July 2025

OrChESTRA - Organ-on-a-chip Focused Strategic Partnership

Newsletter

Issue: 2025/7





OrChESTRA

This month, we highlight our researchers' visits carried out in July as part of the OrChESTRA project. These visits aimed to strengthen collaboration, share expertise, and support ongoing developments.

As part of the HORIZON WIDERA Twinning project OrChESTRA, Dr. Ezgi Salmanlı and Oğulcan Güngör from ODTÜ MEMS Center visited the Microsystems Section at Eindhoven University of Technology (TU/e) between July 7–23, 2025. During visit, they participated in the fabrication of microfluidic electrodes using soft lithography, received introductory training on femtosecond laser machining, and observed Brain-on-a-Chip cell culture models. The exchange enhanced technical collaboration and knowledge sharing within the OrChESTRA consortium.





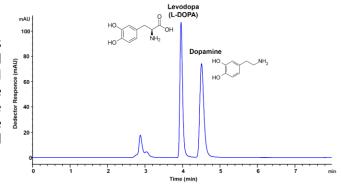
Dr. Vildan Şanko visited the Department of Microsystems Engineering (IMTEK) at the University of Freiburg this month as a part of staff exchange. The visit focused on developing electrochemical sensing concepts for microfluidic and organ-on-chip platforms, paving the way for future collaborative research activities within the consortium.





HPLC analysis to distinguish L-dopa and dopamine

As part of the project, a reliable HPLC-UV analysis method was established to clearly distinguish and quantify L-DOPA and dopamine, two closely related neurotransmitters. This method complements the ongoing electrochemical studies, ensuring more accurate cross-validation of results and paving the way for future applications in organ-on-chip-based neurotransmitter monitoring.





This Project has received funding from the European Union's Horizon Europe Programme under grant agreement N° 101079473. The dissemination of results herein reflects only the author's view and the European Commission is not responsible for any use that may be made of the information it contains.