

An experimentally-validated multi-scale materials, process and device modelling & design platform enabling non-expert access to open innovation in the Organic and Large Area Electronics Industry (MUSICODE)

Grand Agreement: 953187

Project Start Date: 01/01/2021

Project Duration: 48 months

Deliverable 6.9 Improved OVPD process for OLED devices based on the validated models

Date: 07-07-2024



This project has received funding from the European Union's Horizon 2020 Research and Innovation Programme under the Call DT-NMBP-11-2020 "Open Innovation Platform for Materials Modelling"

Project co-funded by the European Commission within Horizon 2020 Research and Innovation Programme				
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Draft Revisions: 28/06/2024 version v1.0 sent to coordinator 07/07/2024 version v2.0 finalized by coordinator

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Publishable summary

An improved and validated MUSICODE modelling platform is used to simulate a gas phase deposition system and processes to fabricate organic electronic material layers. The organic material is transported in a heated inert gas stream through the hot deposition system under vacuum conditions and gets deposited uniformly on a cold substrate. Computational Fluid Dynamics and Molecular Dynamics Calculations and evaluated experimental data are used to try to improve the experimental molecular deposition of the gas phase deposition process.