



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)

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Publishable summary

MUSICODE develops a novel Open Innovation Materials Modelling Platform for the Organic and Large Area Electronics Industry to expediate accurate and knowledgeable business decisions on materials design and processing and optimize the efficiency of device manufacturing. Modelling the processing of materials requires hierarchical workflows spanning the micro- to macro-scales and thus spanning across different disciplines: chemistry, physics, engineering. Understandably, the data generated by these simulations will be vast and of many different types. Data will need to be exchanged between different models within modelling workflows, between different modelling workflows, and across different HPC platforms. Data need to be stored and transferred to and from the Data Management System. This deliverable summarizes the ontological data formats (schemata) created by MUSICODE to facilitate all the above requirements, the corresponding data services created automatically by the data schema, as well as the data containers used for storage and exchange.