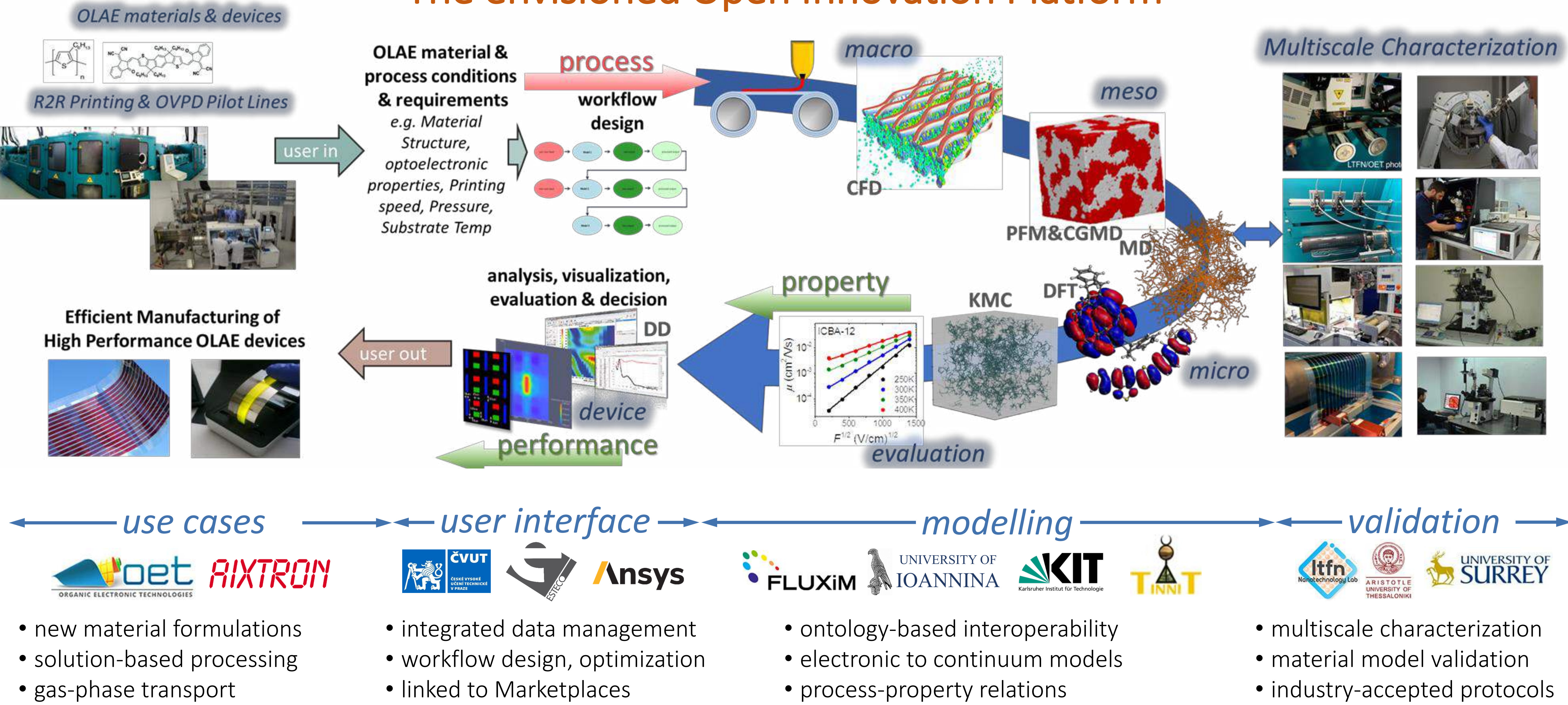


MUSICODE Open Innovation Platform For Materials Modelling



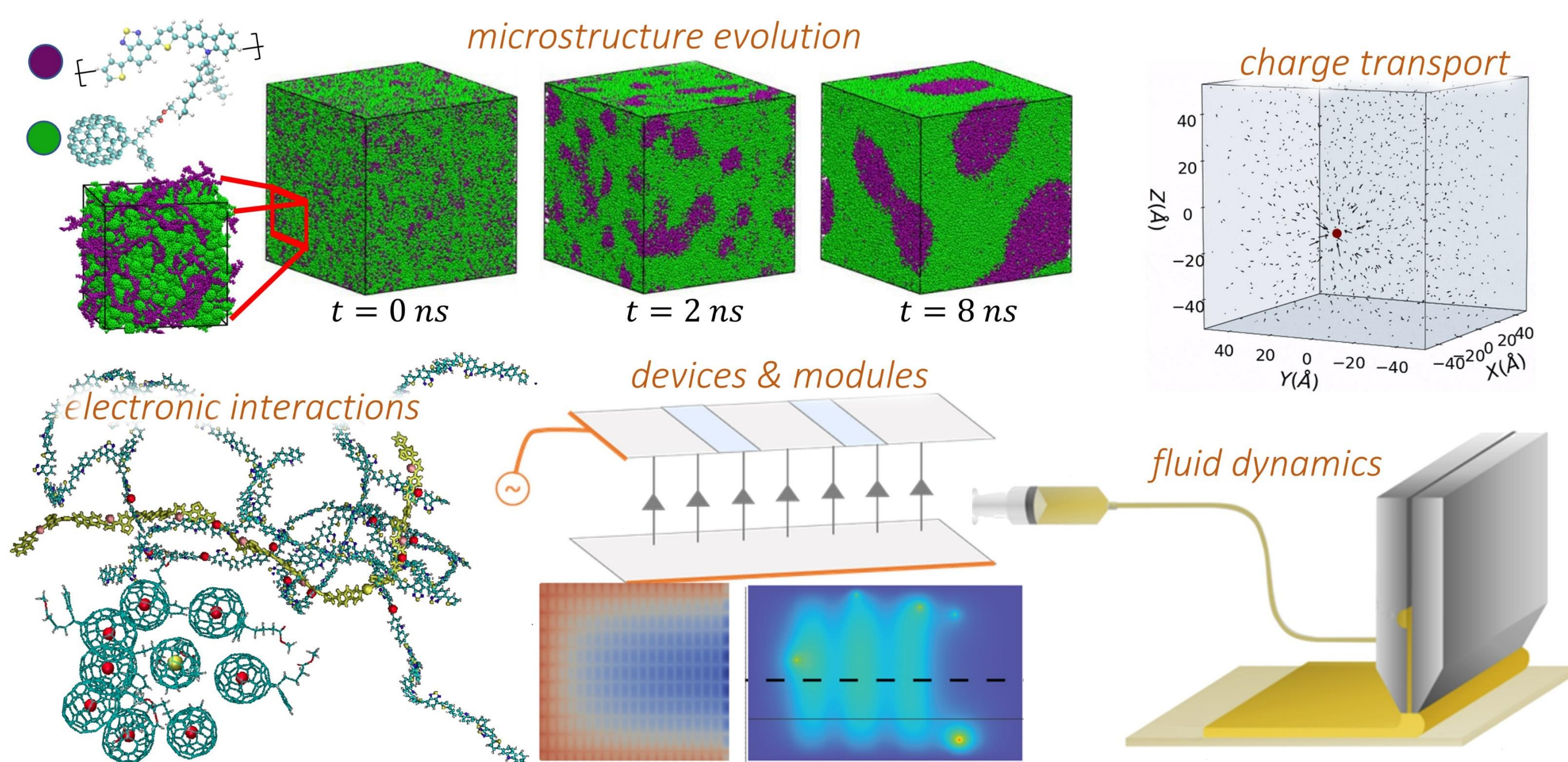
MUSICODE has the ambitious goal of developing an Open Innovation Materials Modelling Platform to expediate accurate and knowledgeable business decisions on materials design and manufacturing process optimization. The platform offers multiscale modelling capabilities, workflow editing and execution, data management and HPC support, being demonstrated in the Organics and Large Area Electronics application domain in four industrial use cases.

The envisioned Open Innovation Platform

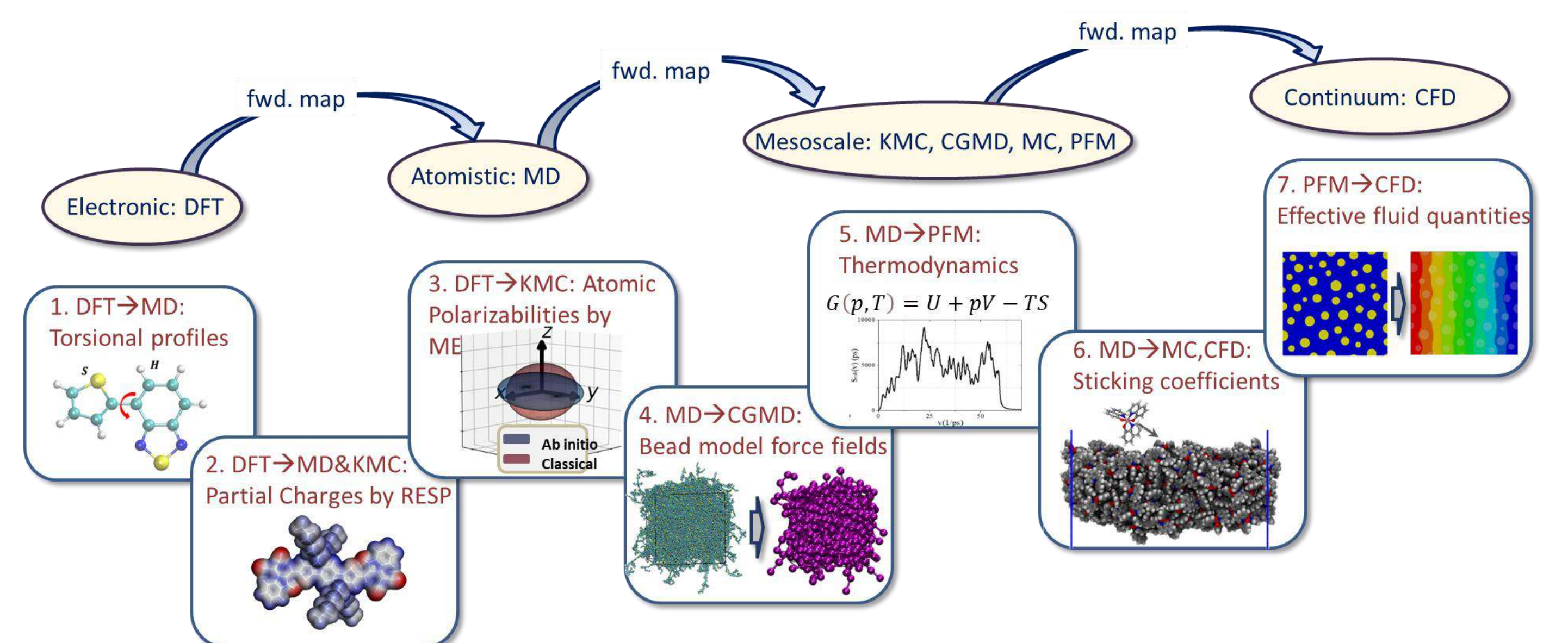


The offered modelling capabilities

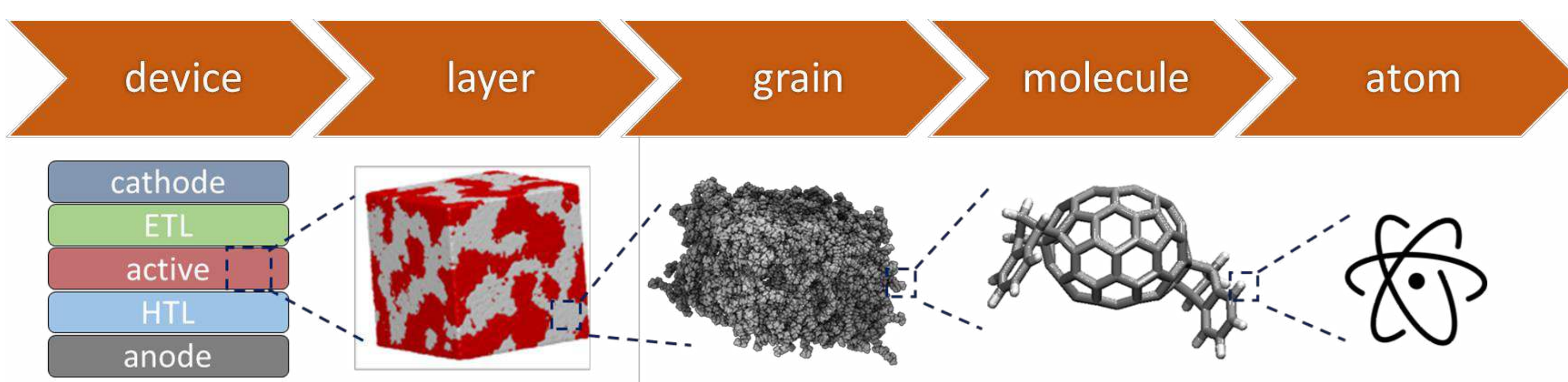
Multiscale modelling and simulations



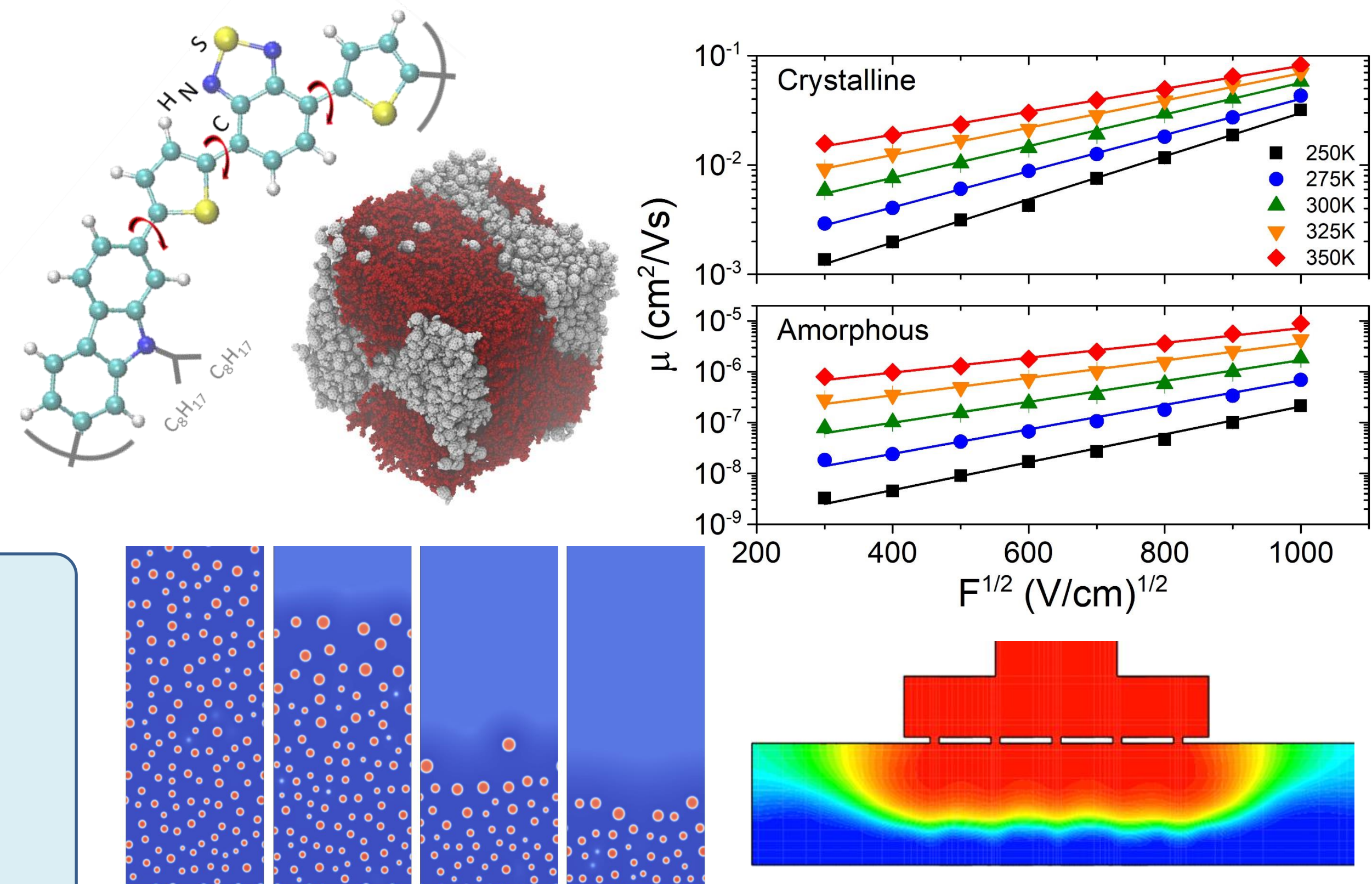
Forward and backward mappings between scales



Ontology and semantically linked data structures



Process-structure-property-performance relations



The industrial use cases to be demonstrated:

- Effect of n/p-type dopants into OPV and OLED active materials
- Optimization of ternary donor/acceptor molecular systems for OPVs
- Gas-phase processing and optimization of vapor deposition parameters for OLEDs
- Solution-based processing and optimization of slot die printing parameters for OPVs

Acknowledgement:



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