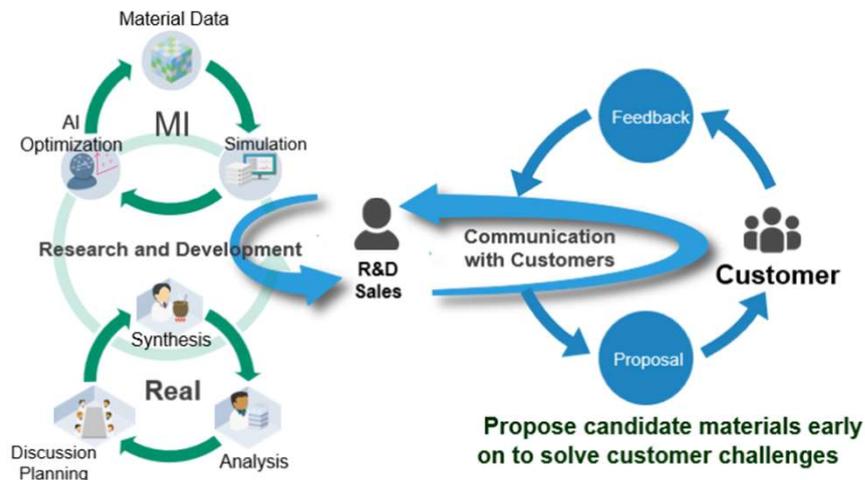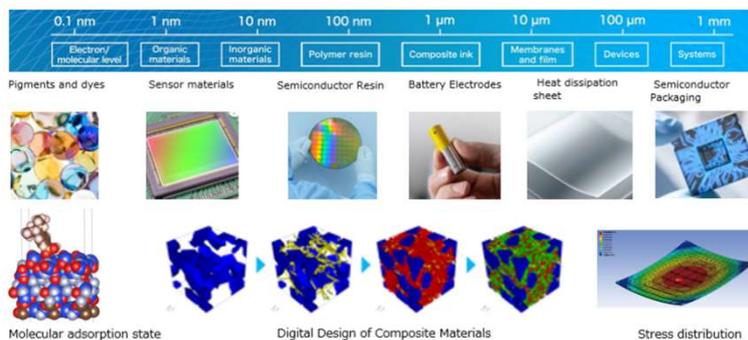# Digital x Materials: Pioneering Future Semiconductor Materials
～Co-creation Development Utilizing Materials Informatics and Generative AI～

By introducing AI, we achieve rapid co-creation proposals with our customers.

We engage in close communication with customers from the early stages of the process development to identify improvement challenges. By combining AI with material data and leveraging "material intelligence and simulation" in material development, we propose solutions.
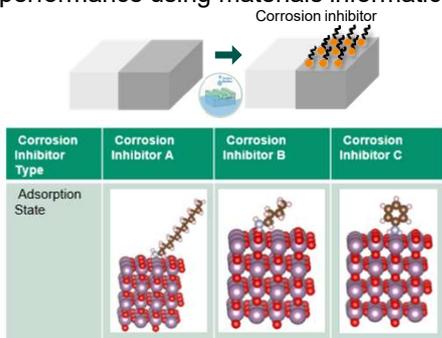

Propose candidate materials early on to solve customer challenges

We support our customers with digital design technologies spanning from the nanoscale to the macroscale, covering all processes from FEOL to BEOL.

Molecular adsorption state   Digital Design of Composite Materials   Stress distribution

Examples of Materials Informatics

We digitally modify molecular structures that achieve desired performance using materials informatics.

Corrosion Inhibitor Type	Corrosion Inhibitor A	Corrosion Inhibitor B	Corrosion Inhibitor C
Adsorption State			

Examples of Generative AI

We rapidly translate customer challenges into material designs using generative AI.