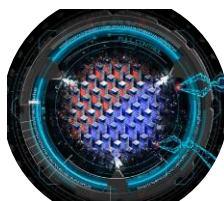
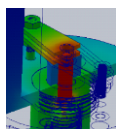


Chemia is accelerating the R&D of advanced materials to impel technological performance and sustainability.



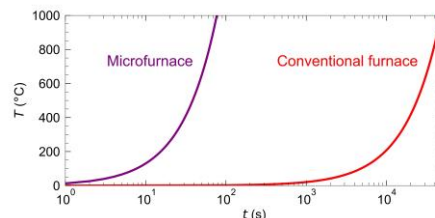
Technology: An intelligent, integrated, automatic, and high-throughput material synthesis and characterization platform to explore millimetric crystalline disks of materials with an unprecedented speed. Based on a proprietary microfurnace and microanalyzer network.



Specifications

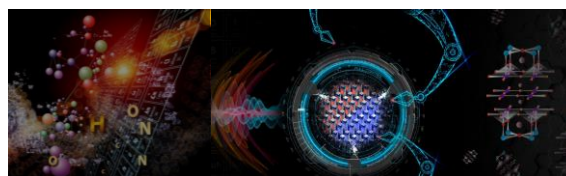
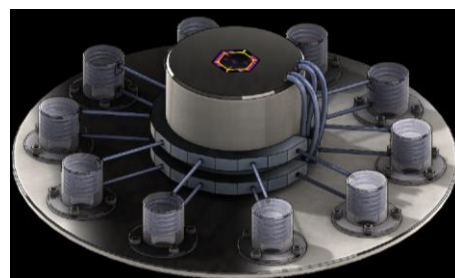
➤ Synthesis:

- Temperature range: 50 C to 1500 C
- Synthesis time can vary between 5 min to 400 h
- Atmosphere: inert gases, vacuum, and N_2 .
- Possibility of mixing up to 4 different raw materials
- Possibility of synthesizing all materials that are available in fine powder forms with a grain size $< 10 \mu m$
- Weight measurement accuracy $< 10 \mu g$.



➤ Characterization:

- Temperature range: $-190 \text{ }^\circ\text{C}$ to $1000 \text{ }^\circ\text{C}$
- Measurements on all samples:
 - Electrical resistivity
 - Thermal conductivity
 - Thermal expansion
 - Magnetization
 - Thermoelectricity
- Measurements on select samples (room- T):
 - X-ray powder diffraction



Other features: Optimization of synthesis parameters based on measured physical properties using reinforcement learning.

Access to a comprehensive material database with the physical and chemical properties of new and existing materials with application cues*.

*Terms and conditions apply

Possibility of consultation for R&D on advanced materials with strong electronic correlations and electrochemical properties.

Current speed and capacity:
50 Samples per month (min order)
400 samples per quarter

Future capacity:
+2500 samples per quarter

