

High-Value Added Ceramic Products Manufacturing Technologies

● Background

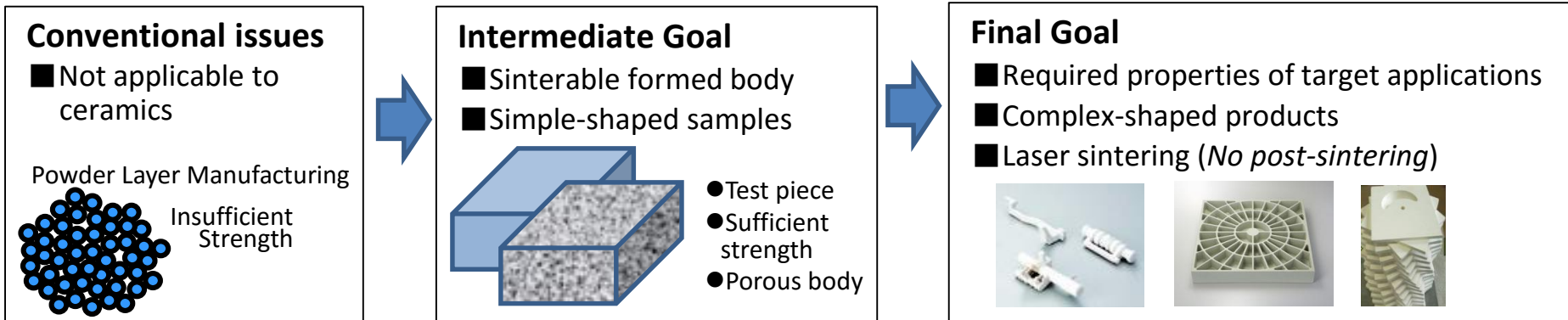
- Ceramics are key for advanced basic industries.
- Ceramic industry is Japan's strength.
- Critical needs for manufacturing of more complex shaping and more versatile coating.
- Industrial competitiveness in global markets.

● Objectives

Removing restrictions of conventional manufacturing.

- Additive manufacturing, "Mold-Free"
 - Complex shaping. Reducing working-processes
 - Rapid prototype. Saving cost, energy & resources
- Hybrid ceramic coating on 3D polymers/metals
 - Enhancing reliability of polymers/metals
 - Functionalizing polymers/metals

E.g., As for Additive Manufacturing



TOTO, NGK Insulators, NGK Spark Plug, Noritake, AIST, Osaka Univ., JFCC (re-commission: Kyushu Univ., Tohoku Univ.)

