

High-Value Added Ceramic Products Manufacturing Technologies

● Development Items

- 1. Additive Manufacturing:** Ceramic powder/slurry layer manufacturing for complex-shaped/hollow-structured products. Ceramic laser sintering which realizes concurrent forming and sintering.
- 2. Hybrid Coating:** Hybrid aerosol deposition (AD) and ultrafine-particle thermal spraying for highly adhesive coating onto 3D surfaces, enhancing design freedom and product functions.
- 3. Product Manufacturing:** Manufacturing technologies for various target applications based on the above.

Examples of Target Applications



● Strategy & Structure for Innovation

★ Founding Base for Innovative Ceramic Products Creation

- Strong alliance of “Morimura” Group (TOTO, NGK Insulators, NGK Spark Plug & Noritake)
- Effective R&D via. Core Research System
- World-class ceramic researchers
- Target applications for which each of the Group owns high potential.

★ Spreading Ceramics into New Fields

- Activating network of public institutes (non-profit/neutral functions)
- Interacting with different industries
- Transferring developed technologies

