

TECHNOLOGY FOR SCALE-UP AND DEMONSTRATION

Process for the Preparation of Calcium Silicate

Background and Current Challenges

- Calcium silicate has wide applications in healthcare, oil adsorption, building and nuclear industry.
- Currently, calcium silicate synthesized through state reaction, co-precipitation, and sol-gel methods. However, in the synthesis of low-density calcium silicate from calcium salts and silicates, many challenges have been faced

Features of CSMCRI Process

CSMCRI process comprises of a single step route starting from inexpensive raw material

- The tapped bulk density (0.011 g/cc) of calcium silicate
- The calcium to silica ratio is 1:2
- Scaled up to 1 kg level
- The process is consistently reproducible and thus, reliable for industrial scale production



Business Scope

Owing to the cost-competitiveness and environmentally benign nature, the commercialization of the process is expected to result in import substitution of calcium silicate

TRL 2

DEMONSTRATION @ 1 KG