

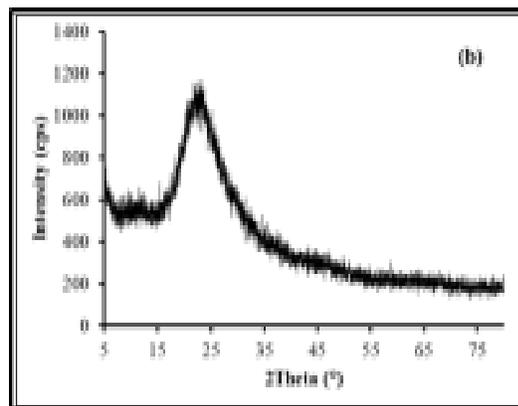
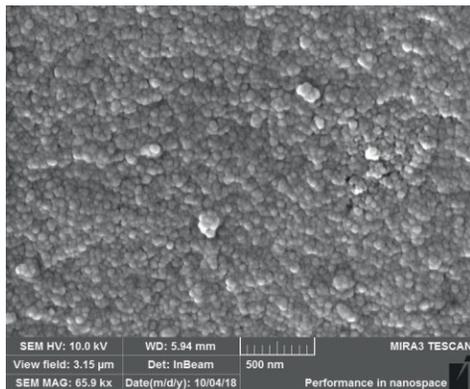
Process Know-how for Manufacturing of Silica Nano Particles (SNPs)

Technology in Brief

Nanomaterials are gaining wide spread attention in the construction sector so as to exhibit enhanced performance of materials in terms of smart functions and sustainable features. Silica nanoparticles (SNPs) are being used for achieving high performance in the cementitious system thereby enhancing the service life of concrete structure.

Salient Features/Advantages

- Speedy Construction.
- Enhanced durability.
- Improved ITZ.
- Reduced GHG emission.
- Natural resource conservation.
- A cost-effective, facile, and eco-friendly process for preparing SNPs.
- Eco friendly as the process involves using inorganic precursors and consumes much less mineral acid.
- Energy efficient as the steps like washing and calcinations are removed from the process.



Properties & Standards	A cost effective, facile and eco-friendly process for the Preparation of nanosilica
End Product(s)	Powder Form
License/Commercialization	1) M/s Poysha Nano Tech. LLP., Haridwar 2) M/s S.P Concure Sangle
TRL	8
Environmental Impact	a) Eco-friendly as the process involves using inorganic precursors and consumes much less mineral acid b) Energy efficient as the steps like washing and calcinations are removed from the process
Setup - Equipment required	Agitator Vessel and Filter Press
Awards/Recognitions	Director's Best Technology Award

Linkedin Video Link	https://www.linkedin.com/posts/csircbri_nanotechnology-advancedmaterials-silicananoparticles-ugcPost-7432967100098592768-EMTj?utm_source=share&utm_medium=member_desktop&rcm=ACoAAD_9kj4B2jUfyt81pCfAIZ1Ld-pdHpEo7m4
Youtube Video Link	https://youtu.be/zjxa37zNTFg?si=9rN3Isd77ccDC0JS