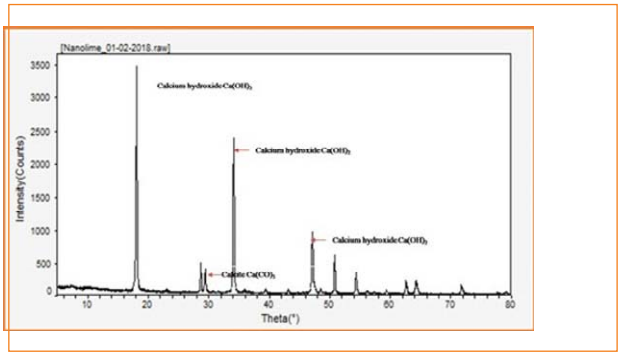
Process Know-how for Manufacturing of Nano-Lime

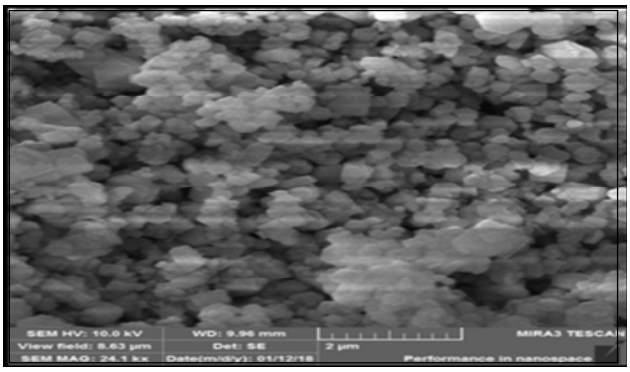
Technology in Brief

The recent development of nanoscience and nanotechnology has opened the way to new applications in many scientific fields, including that of the conservation of cultural heritage. One such example of a Nanomaterial developed over the last decades is the so-called 'Nanolime', Nanoscale particles of Ca $(OH)_2$ with potentially superior consolidation properties compared to traditional lime-based treatments.

Salient features/Advantages

- Higher surface area/volume ratio allows for high reactivity and fast reactions (such as Carbonation) in the treated zones.
- The smaller particle size of nanolime has the advantage of achieving greater penetration Into the pores.
- High purity and defined composition.
- Conservation and restoration of lime mortar in heritage buildings.
- A cost effective, facile and eco-friendly process for the preparation nanolime.
- The prepared product will help the conservation and restoration of lime mortar in heritage building.
- Eco-friendly as the process involves the use inorganic precursor energy efficient.





Properties & Standards	A cost effective, facile and eco-friendly process for the preparation of nanolime
End Product(s)	Powder Form
License/Commercialization	M/s Poysha Nano Tech. LLP., Haridwar
TRL	8
Environmental Impact	Conservation and restoration of lime mortar in heritage buildings
Setup - Equipment required	Agitator Vessel and Filter Press