

CSIR-CENTRAL GLASS & CERAMIC RESEARCH DIVISION

BUSINESS DEVELOPMENT & PUBLICATION DIVISION

i. **Name of Technology:** Converting Fish Waste into Phosphate-Based Fertilizer

ii. **Details of technology**

Abstract:

Triple super phosphate TSP is a commonly used phosphate fertilizer synthesized from mined rock phosphates and has traces of heavy metals in them. The present technology provides an alternate, environment-friendly and cost effective method to synthesize triple super phosphate (TSP) with no traces of heavy metals. The present technology provides a method of synthesis of triple super phosphate (TSP) from fish waste by a route of chemical treatment using phosphoric acid.

Deliverables: Triple Superphosphate Fertilizer from bio-waste

iii. **Year of Development:** 2025

iv. **TRL:** TRL 4 (1 kg batch) [Lab Testing/Validation of Alpha Prototype Component/ Process]

v. **Patenting Status:** Patent filed (Application number 202511074647, Dtd. 05/08/2025)

vi. **Name of the nodal scientist submitting EOI:** Dr. Mitun Das, Sr. Pr. Sct., BMDD, CSIR-CGCRI