

Thermally Cyclable Glass Sealant Composition For Intermediate Temperature Solid Oxide Fuel Cell (IT-SOFC)

IPR STATUS
Patented

APPLICATION/USES

High temperature sealant for application in SOFC stack

SALIENT FEATURES

- User Sector: Stationary power, Defence, Transport
- Thermally cyclable between room temperature and 800oC (typical operating temperature for IT-SOFC)
- Devoid of any toxic raw materials like oxides of lead, cadmium etc which are often used in glass industry

- Co-efficient of thermal expansion matches well with cell and SOFC stack components
- Suitable for application as sealant in SOFC stack

LEVEL/SCALE OF DEVELOPMENT

Lab scale development upto 1kW.

LINE MINISTRY MAPPING/USER SECTOR

- Department of Atomic Energy
- Ministry of New and Renewable Energy Sources
- Ministry of Power



1kW SOFC Stack fabricated and demonstrated at CSIR-CGCRI wherein the developed sealant has been used as one of the components

