

International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI)

Balapur P.O., Hyderabad – 500005, Telangana, India



Radiant Porous Burners

Overview

Increasing concern on fossil fuel depletion has paved a way for the energy efficient and eco-friendly energy management technologies in various vital sectors. Porous Medium Combustion through reticulated foam structures is considered to be one of the feasible options which got explored extensively in the industrial and domestic applications. A wide variety of ceramic foams are developed and explored for porous burner applications

Key Features

- Ceramic foam based Porous Combustion
- High energy efficiency
- Environmental friendly
- Short start-up time
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Potential Applications

- Energy efficient burning of gaseous fuels
- Industrial radiant burners

Intellectual Property Development Indices (IPDI)

- Concept proved on a laboratory scale
- Scale-up and prototype module fabrication in progress



Figure 1: Cordierite based porous burner

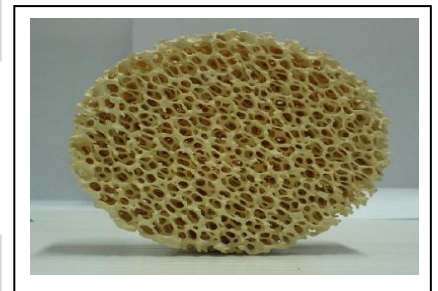


Figure2: Cordierite open-cell foam (ARCI)

Status	1	2	3	4	5	6	7	8	9	10
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Major Publications

1. Development of Cordierite based Reticulated Foams with Improved Mechanical Properties for Porous Burner Applications, Transactions of the Indian Ceramic Society-2016- In Press

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