

Published on *Joint Center for Energy Research* (<http://www.energy.psu.edu/jcer>)

[Home](#) > [Personnel](#) > Sarma V. Pisupati

Sarma V. Pisupati



Associate Professor, Energy and Mineral Engineering
Program Officer, Energy Engineering Program

E-mail: sxp17@psu.edu

Research Areas:

- Fundamental understanding of carbon conversion and the mineral matter transformations in entrained flow gasifiers.
 - Chemical kinetics of thermal decomposition, gasification, and combustion of coal, biomass, coal and various biomass blends.
 - Mechanism/s by which biomass mineral matter catalyses or inhibits thermal decomposition of coal-biomass blends under high temperature and high pressure conditions and catalytic effects during gasification
- Modify the existing char-oxidation kinetics sub-model in a commercially available CFD tool FLUENTTM , and use more appropriate intrinsic rate parameter to accurately account for the contribution from char-CO₂ reaction for the prediction of char burnout and CO emissions.
- Identify coals that are more suitable for oxy-coal
- Study the effect of rank during oxy-coal combustion

©2015 [EMS Energy Institute](#), [The Pennsylvania State University](#) | [Privacy and Legal Statements](#) | [Copyright](#) | [Accessibility Help](#)

This site is maintained by the EMS Energy Institute. If you have questions about this site, please contact eiwebmaster@ems.psu.edu

Source URL (retrieved on 01/30/2015 - 16:34): <http://www.energy.psu.edu/jcer/personnel/SarmaPisupati>