

Peer review Articles

1. Pradeep Sahu, Prabu Vairakannu, **Techno-economic analysis of co-combustion of Indian coals with municipal solid waste in subcritical and supercritical based steam turbine power generating carbon-negative systems.** *Energy*
2. Pradeep Sahu, Prabu Vairakannu, **Synergistic reaction effects with energy and exergy (2E) analysis of high-density polyethylene with high ash bituminous coal for syngas production.** *Fuel*
3. Pradeep Sahu, Prabu Vairakannu, **Techno-economic analysis on oxy-fuel based steam turbine power system using municipal solid waste and coals with ultrasonicator sulfur removal.** *Waste Disposal & Sustainable Energy*
4. Pradeep Sahu, Prabu Vairakannu, **CO₂ based co-gasification of printed circuit board with high ash coal.** *Energy*
5. Pradeep Sahu, Prabu Vairakannu, **CO₂ pyrolysis and gasification of COVID-19 based wastes (overall gown) with Indian high ash coal.** *Asia Pacific Journal of Chemical Engineering*
6. Nilesh Lokare, Pradeep Sahu, Prabu Vairakannu, **CO₂ based spouted fluidized bed gasification of kitchen waste: Experimental investigation with process modelling.** *Canadian Journal of Chemical Engineering*
7. Pradhan, Chinmaya Kumar, Pratyasha Patra, Krishna Kamini, Shilpi Das, Sarat Chandra Patra, Pradeep Sahu, and Himadri Sahu. **"Production of acid-activated biochar from Spanish cherry seeds."** *Indian Chemical Engineer*
8. Bhui, Barnali, Pradeep Sahu, and Sanjeev Yadav. **"Evaluation of Torrefied Food Waste as a Renewable Feedstock for Power Production: Techno-Economic and Environmental Insights."** *Waste and Biomass Valorization (2026): 1-17.*

Book Chapter Published

1. Pradeep Sahu, Roni Mallick and Prabu Vairakannu, “**Thermochemical treatment of wastes for power generation.**” In *Valorization of Wastes for Sustainable Development* ISBN: 978-0-323-95417-4
2. Pradeep Sahu and Barnali Bhui,” **Plastic recycling for energy production.**” In *Biodegradable Waste Processing for Sustainable Developments* eISBN: 9781003502012

Conferences Attended

1. Pradeep Sahu, Prabu Vairakannu. **Pyrolysis and Gasification of Municipal Solid Waste (MSW).** *Recycle 2018*, 22 February 2018-24 February 2018. Indian Institute of Technology, 2018
 2. Pradeep Sahu, Prabu Vairakannu. **Thermogravimetric analysis on Co-gasification of Municipal Solid Waste with Indian Coals and Pet coke.** *Advances in Chemical Engineering (ACES 2019)*, 7 March 2019-8 March 2019. Indian Institute of Science Education and Research, Bhopal, 2019
 3. Pradeep Sahu, Prabu Vairakannu. **Co-pyrolysis and co-gasification of kitchen waste with Indian coals.** *Sustainable energy and green technology SEGT 2019, Bangkok*, 11-14 December 2019.
 4. Pradeep Sahu and Prabu Vairakannu, **Thermogravimetric analysis kitchen waste under pyrolysis and gasification conditions.** *3rd Sustainable Waste Management Conference August 4-6, 2021. AICHE Conference*
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