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*Publications and  
Conferences*

**Publications**

**Roy, T.,** Sahani, S. and Sharma, Y.C., 2020. Study on kinetics-thermodynamics and environmental parameter of biodiesel production from waste cooking oil and castor oil using potassium modified ceria oxide catalyst. *Journal of Cleaner Production*, 247, p.119166. [**Impact factor: 9.297**]

**Roy, T.,** Sahani, S. and Sharma, Y.C., 2020. Green synthesis of biodiesel from Ricinus communis oil (castor seed oil) using potassium promoted lanthanum oxide catalyst: kinetic, thermodynamic and environmental studies. *Fuel*, 274, p.117644. [**Impact factor: 6.609**]

**Roy, T.,** Sahani, S., Madhu, D. and Sharma, Y.C., 2020. A clean approach of biodiesel production from waste cooking oil by using single phase BaSnO<sub>3</sub> as solid base catalyst: Mechanism, kinetics & E-study. *Journal of Cleaner Production*, 265, p.121440. [**Impact factor: 9.297**]

**Roy, T.,** and Sharma, Y.C., “Environmentally benign process of biodiesel production from waste cooking oil using a novel potassium- tin oxide catalyst: A smart liquid waste management” [Under Review in *Waste Management*, **Impact factor: 7.145**]

Sahani, S., **Roy, T.** and Sharma, Y.C., 2019. Clean and efficient production of biodiesel using barium cerate as a heterogeneous catalyst for the biodiesel production; kinetics and thermodynamic study. *Journal of Cleaner Production*, 237, p.117699. [**Impact factor: 9.297**]

Sahani, S., **Roy, T.** and Sharma, Y.C., 2020. Studies on fast and green biodiesel production from an indigenous nonedible Indian feedstock using single phase strontium titanate catalyst. *Energy Conversion and Management*, 203, p.112180. [**Impact factor: 9.709**]

Sahani, S., **Roy, T.** and Sharma, Y.C., 2020. Smart waste management of waste cooking oil for large scale high quality biodiesel production using Sr-Ti mixed metal oxide as solid catalyst: Optimization and E-metrics studies. *Waste Management*, 108, pp.189-201. [**Impact factor: 7.145**]

**List of conferences and workshops**

<b>Name of conference</b>	<b>Title</b>	<b>Oral/ Poster/ Participation</b>	<b>International/ National</b>
Chem-Conflux 2020	Synthesis and Characterization of K-Ceria oxide catalyst for biodiesel production from WCO	Oral	International
CONIAPS XXVI 2020	Synthesis of novel Potassium Tin oxide catalyst for base catalyzed transesterification of waste cooking oil: optimization & kinetics ( <b>Best Paper</b> )	Oral	International
CE <sub>2</sub> C-2019	K-promoted Lanthanum oxide catalyst synthesis for economical biodiesel production from castor oil.	Poster	International
CTFM-2019	A clean approach of biodiesel production from waste cooking oil by using single phase BaSnO <sub>3</sub> as solid base catalyst	Poster	National Symposium
NSETCS 2018	Economically viable biodiesel production from waste cooking oil : kinetic study and process optimization.	Poster	National Symposium
Chemistry World Webiner	Faster drug delivery and optimization with physics-based computational methods.	Participate	International
ICC conference 2014	33 <sup>rd</sup> Annul National Conference of Indian Council of Chemists	Participate	National

**Workshops**

1. Indo-UK Workshop on “Valorization of agro-Waste for energy and Nutrient Recovery”
2. 5 days FDP on “Recent in Material Characterization Techniques”