

Profile Page



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Department : Chemical Engineering

Qualification : Ph.D. Chemical Engineering (Indian Institute of Technology Bombay)
M.Tech Chemical Engineering (Indian Institute of Technology Roorkee)
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Research Interests :

CO₂ Sequestration, Multiphase Reactions, Mineral Carbonation, Waste Utilization and Management, Analytical, Numerical and Soft Computing Modeling and Optimization of Reaction Processes, Social and Economic Engineering, Edible films and coatings

Other Profile Links :

Google Scholar Link :

Shashikant Yadav [Click Here](#)

Personal Web Link :

ORCID iD [Click Here](#)

Facebook [Click Here](#)

Personal website [Click Here](#)

Publons [Click Here](#)

Vidwan [Click Here](#)

SCOPUS [Click Here](#)

Journal Publications :

Year	Journal	Publication
2023	ACS Omega 2023, 8, 5, 4802–4812	Rajib Nandi, Mithilesh Kumar Jha, Sujit Kumar Guchhait, Debanjan Sutradhar, Shashikant Yadav, Impact of KOH Activation on Rice Husk Derived Porous Activated Carbon for Carbon Capture at Flue Gas like Temperatures with High CO ₂ /N ₂ Selectivity

2022	International Journal of Polymer Science, Volume 2022 Article ID 7816333	Raj Kumar, Naina Gautam, Shashikant Yadav, T Venketesh, Nasir Awol, Structural and physicochemical properties of an active film based on potato starch, silver nanoparticles, and rose apple (<i>Syzygium samarangense</i>) extract
2022	Journal of Food Quality, Volume 2022 Article ID 8606104	Raj Kumar, Naina Gautam, Shashikant Yadav, Venkatesh Thulasiraman, Anil Yadav, Nasir Awol, Moth Bean, Gelatin, and <i>Murraya Koenigii</i> Leaves Extract-Based Film and Coating: Effect of Coating on Shelf and Quality of <i>Solanum Melongena</i>
2022	Starch/Stärke, Volume 74, Issue 3-4	Naina Gautam, Sangeeta Garg, Shashikant Yadav, Development of Flexible and Thin Films From Underutilized Indian Finger Millet (<i>Eleusine coracana</i>) Starch
2021	Environmental Science and Pollution Research volume 28, pages 12202–12231 (2021)	Shashikant Yadav, Anurag Mehra, A review on ex situ mineral carbonation
2021	International Journal of Food Science & Technology, 56 (10) 4823-4833	Faiqa A Wani, Rukhsana Rashid, Abida Jabeen, Bethania Brochier, Shashikant Yadav, Thameed Aijaz, HA Makroo, BN Dar, Valorisation of food wastes to produce natural pigments using non-thermal novel extraction methods: a review
2021	Journal of Food Science and Technology volume 58, pages 4411–4419 (2021)	Naina Gautam, Sangeeta Garg, Shashikant Yadav, Underutilized finger millet crop for starch extraction, characterization, and utilization in the development of flexible thin film
2020	Materials Science for Energy Technologies Volume 3, 2020, Pages 494-500	Neeraj, Shashikant Yadav, Carbon storage by mineral carbonation and industrial applications of CO ₂
2019	Materials Science for Energy Technologies, Volume 2, Issue 3, December 2019, Pages 647-656	Vijeta Arora, Rishabh Kumar Saran, Raj Kumar, Shashikant Yadav
2019	Journal of CO ₂ Utilization, 31 (2019) 181–191	Shashikant Yadav, Anurag Mehra, Mathematical modelling and experimental study of carbonation of wollastonite in the aqueous media
2018	Global NEST Journal, Vol 20, No 3, pp 497-503	Saran R. K., Arora V., Yadav S.*, CO ₂ sequestration by mineral carbonation: a review
2017	Waste Management, 64, 348–357	Yadav S, Mehra A. Experimental study of dissolution of minerals and CO ₂ sequestration in steel slag
2017	Environmental Science and Pollution Research, 24:16305–16315.	Yadav S., Mehra A., Dissolution of steel slags in aqueous media

Conference Publications :

Year	Conference	Publication
2019	6th International Conference on Production & Industrial Engineering CPIE 2019, Dr B R Ambedkar National Institute of Technology, Jalandhar (Punjab) India, June 8-10, 2019	Sheetal Singh, Rishabh Kumar Saran, Shashikant Yadav, Mineral Carbonation Using Natural Minerals And Industrial Waste
2018	BIOSPECTRUM 2018, 2nd International Conference on Biotechnology & Biological Sciences, held on 27th-28th July 2018 at University of Engineering & Management (UEM), Kolkata	Raj Kumar ¹ , Vijeta Arora ² , R. K. Saran ³ , Shashikant Yadav ^{4†} , Potential of converting various biomass resources into biofuels and related bioproducts
2018	BIOSPECTRUM 2018, 2nd International Conference on Biotechnology & Biological Sciences, held on 27th-28th July 2018 at University of Engineering & Management (UEM), Kolkata	Vijeta Arora, D.P Tiwari, Shashikant Yadav, Preparation and characterization of Activated Walnut Powder for the degradation of Brilliant Red dye in water

2018	BIOSPECTRUM 2018, 2nd International Conference on Biotechnology & Biological Sciences, held on 27th-28th July 2018 at University of Engineering & Management (UEM), Kolkata	Raj Kumar, Gargi Ghoshal, Meenakshi Goyal, Shashikant Yadav†, Preparation and evaluation of functional properties of tannic Acid loaded corn starch film
2018	71st annual session of the Indian institute of Chemical Engineers IICHE, CHEMCON-2018 held at NIT Jalandhar	Naina Gautam, Shashikant Yadav*, Sangeeta Garg, Fabrication, Characterization of chitosan/Tulsi extract based biodegradable film for coating application
2018	5th International Conference on Production and Industrial Engineering" (June 26-29, 2018) at Bangkok, Thailand	Rishabh Kumar Saran, Shashikant Yadav, Significance of Electronic Waste Management for Sustainable Industrial Production
2017	5th International Conference on "Recent Development in Engineering Science, Humanities and Management (ESHM-17)", Chandigarh	Yadav S, Choudhary S, Kumar R, Saran RK. Utilization of alkaline industrial wastes for CO2 sequestration, 2017, p. 27–35
2017	Climate change : mitigation strategyby various CO2 sequestration methods. 3rd International Conference on "Latest Innovations in Science, Engineering and Management", Goa	Saran RK, Kumar R, Yadav S. Climate change : mitigation strategyby various CO2 sequestration methods, 2017, p. 227–36
2017	3rd International Conference on "Latest Innovations in Science, Engineering and Management" held at International Centre Goa	Yadav S, Choudhary S, Saran RK. Demonetization conundrum : a harbinger of growth or the ominous sign of looming slowdown, 2017, p. 237–41
2017	3rd International Conference on "Latest Innovations in Science, Engineering and Management", Goa	Yadav S, Saran RK. Surgical strikes : challenging or destabilizing the status-quo?, 2017, p. 151–6
2017	Research Scholars' Symposium 2017 organised by Department of Chemical Engineering, IIT Bombay	Yadav S, Mehra A, Carbonation of wollastonite under CO2 saturated water
2017	ReSConAm'17 held at IIT Bombay	Yadav S, Mehra A, Numerical modelling for carbonation of wollastonite rocksunder an aqueous environment
2017	ReSConAm'17 held at IIT Bombay	Yadav S, Mehra A, Evaluation of sequestration potential of steel slags under mild operating conditions
2017	BIOSPECTRUM 2017, International Conference on Biotechnology and Biological Sciences, University of Engineering & Management, Kolkata, India	Yadav S, Rao S, Impact of microbial contaminants and their removal strategy in the effluent wastewater
2013	Radical Emission Reduction Conference held at Royal Society London and organized by Manchester University, United Kingdom	Yadav S, Mehra A, Experimental study of leaching and CO2 sequestration in steel slags

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISS N No.	Year
Book Chapter	Feasibility Evaluation of Reactive Distillation Process for the Purification of Bioethanol	Springer International Publishing	Ankur Kumar Gupta, Shashikant Yadav	978-3-030-96554-9	2022
Book Chapter	Preparation and Evaluation of Functional Properties of Tannic Acid Loaded Corn Starch Film	Nova Science Publishers	Shashikant Yadav Raj Kumar, Gargi Ghoshal, Meenakshi Goya	978-1-68507-985-7	2022
Book Chapter	Extraction Characterization and Production of Biofuels From Algal Biomass	John Wiley & Sons, Inc.	Neeraj, Shashikant Yadav	9781119818816	2022

Book Chapter	Significance of Electronic Waste Management for Sustainable Industrial Production	Springer	Rishabh Kumar Saran, Shashikant Yadav	978-981-13-6476-1	2019
Book Chapter	Treated Sewage Effluents as A Source of Microbiological Contamination on Receiving Watersheds	Springer	Shashikant Yadav, Suhana Rao	978-981-13-6846-2	2019
Book Chapter	Environmental Issues in Textiles, Advanced Functional Textiles and Polymers: Fabrication, Processing and Applications	John Wiley & Sons, Inc.	Rishabh Kumar Saran, Raj Kumar, Shashikant Yadav	9781119605843	2019

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	R&D	Development of starch/cellulose based coating on fresh vegetables/fruits using waste biomass	TEQIP - III	03-12-2018	02-12-2019	Rs. 2,00,000	Running	Dr. Amit D. Saran
Co-Principal Investigator	R&D	Moderate Electric Field and Pressure Assisted Extraction (MEFPAE) of Colorants from Food Waste	National Project Implementation Unit (NPIU)	18-06-2019	30-09-2020	Rs. 14,09,000	In-progress	Dr. HILAL MAKROO, IUST Kashmir
Principal Investigator	R&D	Recovery Sucrose from Bagasse	TEQIP - III	08-07-2019	07-07-2020	Rs. 1,00,000	In-progress	None
PI	R&D	Use of waste biomass for the development of edible coating	Department of Scientific and Industrial Research, Government of India	14-03-2022		Rs. 2,23,000	Running	None

Events Organized :

Category	Type	Title	Venue	From	To	Designation
International Conference	International	CHEMCON 2018	Dr. B.R. Ambedkar National Institute of Technology, Jalandhar	27-12-2018	30-12-2018	Coordinator

Conference	National	2nd National Conference on advances in Chemical and Environmental Engineering (ACEE' 19)	Dr. B. R. Ambedkar National Institute of Technology Jalandhar	23-03-2019	24-03-2019	Organizing Committee
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PhD Supervised :

Scholar Name	Research Topic	Status	Year	Co-Supervisor
Naina Gautam		In progress	2018	Dr. Sangeeta Garg

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
Kirandeep Kaur	Degradation of methyl orange using boron and copper doped ZnO photocatalyst	Completed	2020	Dr. Renu Gupta