



NANDHA ENGINEERING COLLEGE

(AUTONOMOUS)



DEPARTMENT OF AGRICULTURAL ENGINEERING

INDIVIDUAL FACULTY DATA SHEET

Name of the College : Nandha Engineering College
Name of the Department : Agricultural Engineering
Name of the Degree & Course : B.Tech (Agricultural Engineering)
Name of the Faculty Member : Dr. P. Komalabharathi
Regular or Adjunct : Regular
Designation : Assistant Professor
Mail Id : komalabharathi.agri@nandhaengg.org
Gender : Female
Date of Joining the present Post : 15.09.2022



Educational Qualifications:

Category	Name of the Degree	Specialization	Year of Passing	Name of the College	Name of the University	% of Marks / Grades obtained	Class obtained
UG	B.Tech. (Energy and Environmental Engineering)	Energy and Environment	2016	AEC & RI, TNAU	TNAU	84.2	First
PG	M. Tech. (Bioenergy)	Bioenergy	2018	AEC & RI, TNAU	TNAU	88.4	First
Ph.D	Renewable Energy Engineering	Renewable Energy	2022	AEC & RI, TNAU	TNAU	85.4	First

Title of Ph.D Thesis* : Nutrient Recovery of Wastewater using Functionalized Hydrochar produced through Artificial Coalification

Faculty in which Ph.D was awarded: Renewable Energy Engineering

Academic Experience:

Name of the college	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Nandha Engineering College	AsP	15.09.2022	Currently Associated	-	11	3

Industrial Experience:

Name of the Industry	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
Indian Geoinformatics Centre	Intern	Jan, 2016	March, 2016	-	3	-

Journal Publication Details :

- **Komalabharathi, P.,** Mathumithran, R., Poonguzhali, T., Ramanarayanan, S., & Shafnas, K. S. 2023. An analysis of zero energy cool chambers to evaluate life of fruits and vegetables. International Journal of Research and Analytical Reviews. 10(2): 666 – 672
- **Komalabharathi, P.,** Tharshiny, M. R., Divya, V., Dharunya, P., & Gandhi, N. M. 2023. A Comprehensive Review on Pyrolysis Modeling. International Journal of Research and Analytical Reviews. 10(2): 173 - 184
- **Komalabharathi, P.,** & Subramanian, P. (2022). Energy Densification of Groundnut Shell through Microwave-Assisted Hydrothermal Carbonization. Madras Agricultural Journal, 109(special), 1.

- **Komalabharathi, P.,** Subramanian, P., Ramesh, D., Karthikeyan, S and Duraisamy, M. R. 2022. Effect of hydrothermal temperature on sawdust hydrochar production produced through microwave assisted artificial coalification. *Pollution Research*. 41(2):421-424
- **Komalabharathi, P.,** Subramanian, P., Ramesh, D., Karthikeyan, S and Duraisamy, M. R. 2022. Optimization of microwave assisted artificial coalification for maximization of sawdust hydrochar production using Response Surface Methodology. *Chemical Science Review and Letters*. 11(42):165-169
- Subramanian, P., Boopathi, G., & **Komalabharathi, P.** (2021). Discerning the value-addition process of de-oiled cashew nut shell. *IJCS*, 9(1), 1194-1196
- **Komalabharathi, P.,** Pugalendhi, S., Subramanian, P., Karthikeyan, S., & Mahendiran, R. (2018). Thermal Performance Analysis and Prediction of Steam Production from Solar Paraboloid Concentrator using Multiple Linear Regression (MLR). *Madras Agricultural Journal*, 105, (1-3):117-119

Papers presented in National/International Conference:

- **Komalabharathi, P** and Subramanian, P. 2021. Energy densification of groundnut shell through microwave assisted hydrothermal carbonization. *Proceedings of 7th Agricultural Graduate Students Conference*. 415-416
- **Komalabharathi, P** and Subramanian, P. 2021. Exploring the Effect of Residence Time on Energy Qualities of Groundnut Shell Hydrochar. *Proceedings of International Conference on Environmentally Benign Processes, Products and Materials for Sustainable Ecosystem*. 34
- **Komalabharathi, P** and Subramanian, P. 2021. Effect of temperature on energy properties of paddy straw Hydrochar produced through microwave-assisted artificial coalification. *Proceedings of 3rd International Conference on Environmental, Chemical, Agricultural and Biological Sciences*.147

Trainings and Symposiums Attended

- Attended workshop on “Big data analytics for agricultural sciences workshop, technical writing skills, career planning, advanced statistics for technical enhancement in agricultural research and stress management” organized by SPGS, TNAU on February, 2020
- Participated in the conference cum exhibition on “Energy Efficiency for a Sustainable Future” on December 2018 at SITRA, Coimbatore
- Attended workshop on “Planning, executing and writing an international quality Ph.D. thesis and original research papers” on December, 2017 at TNAU
- Participated in the National Technical Symposium –Transpire 2K15 on March 2015 at TNAU
- Attended National Conference on “Green fuels from biomass: Biorefinery approach” on November, 2014 at TNAU
- Organized **ECOFEST’15- Envisioning Feasibility**, 9th National Symposium on September 16, 2015, at AEC&RI, TNAU
- Co-Organizer of **Eco Fest’14, A New Outlook for Sustenance**, organized by AEC & RI, TNAU, Coimbatore on 13th August, 2014
- Attended the training conducted by the Center of Excellence for Training in Energy Efficiency at PSG College of Technology, Coimbatore
- Participated in the All India seminar on “Engineering Interventions for Profitable Agriculture” on September 2012 at TNAU
- Attended the Basic life support workshop at Erode organized by the Nursing home board of IMATNSB & conducted by IMA Erode on September, 2008

Area of Expertise :

S.No	Subject of Area
1	Biomass valorization
2	Thermo chemical conversion
3	Biochemical conversion
4	Solar energy
5	Remote sensing and GIS

Book chapters Published

- **Komalabharathi, P.**, Karuppasamy Vikraman, V., Praveen Kumar, D., Boopathi, G and Subramanian, P. 2022. Hydrochar – sustainable and low-cost biosorbent for contaminant removal. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) Encyclopedia of Green Materials. Springer, Singapore.
- Praveen Kumar, D., Karuppasamy Vikraman, V., Boopathi, G., **Komalabharathi, P** and Ramesh, D. 2022. Nanocellulose from lignocellulosic biomass: Synthesis. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) Encyclopedia of Green Materials. Springer, Singapore.
- Karuppasamy Vikraman, V., Praveen Kumar, D., Boopathi, G., **Komalabharathi, P** and Subramanian, P. 2022. Biobased polymer electrolytes for supercapacitor applications. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) Encyclopedia of Green Materials. Springer, Singapore.
- Nithiya, K., Subramanian, P., Praveen Kumar, D., **Komalabharathi, P.**, Karuppasamy Vikraman, V. 2022. Bio-Oil: A Green Biofuel. In: Baskar, C., Ramakrishna, S., Daniela La Rosa, A. (eds) Encyclopedia of Green Materials. Springer, Singapore.

NET Exam:

Qualified for Assistant Professor in UGC - NET (December 2020 & June 2021 cycle)

Awards :

S.No	Awards
1	Awarded Senior Research Fellowship under the scheme entitled "All - India Coordinated Research Project on Energy in Agriculture and Agro based Industries (AICRP on EAAI)" , Government of India during the doctoral research period (2020 -2022)
2	Won Young Scientist Best Oral Presentation award for presenting paper in 3rd International Conference on Environmental, Chemical, Agricultural and Biological Sciences.
3	Won best poster award at the 7th Agricultural Graduate Students Conference (2021)
4	Participated in District level & State level General Knowledge competition and secured DISTRICT FIRST Prize and won " EXCEL AWARD 2008 "
5	Secured STATE FIRST prize in National level yoga competition (2007) and awarded as " YOGAMANI " by Indian Board of Yogic Science and Naturopathy
6	Active volunteer in "The Bharat Scouts and Guides" from 2006 - 2012 and Secured the " RAJYAPURASKAR " Award as a Guide