

Dr. FENILA F.'s PROFILE



Dr. FENILA F. M.Tech, Ph.D.

DESIGNATION: Assistant Professor

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Date of Joining : 23/05/2022

Academic Background

| Degree | University | Year |
|------------------------|--|------|
| Post-doctoral research | Technical University Braunschweig, Germany | 2021 |
| Ph. D. | Indian Institute of Technology Bombay, India | 2020 |
| M.Tech | National Institute of Technology Tiruchirappalli, India | 2013 |
| B.Tech | Anna University, Tirunelveli (Kamaraj College of Engineering and Technology, Virudhunagar), India | 2011 |

Research Interests:

1. Bioprocess Engineering
 2. Biomass to Bioenergy
 3. Stochastic Optimization
 4. Hybrid Modeling
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Publications:

Journal Articles:

1. **F. Fenila**, F. Kubannek, and R. Schenkendorf. Hybrid process models in electrochemical syntheses under deep uncertainty, *Processes*, 9(4), 704 , 2021.
2. **F. Fenila**, and Y. Shastri. Stochastic optimization of enzymatic hydrolysis, *Computers and Chemical Engineering*, 2020.
3. **F. Fenila**, and Y. Shastri. Optimization of cellulose hydrolysis in a non-ideally mixed batch reactor, *Computers and Chemical Engineering*, (128) 340-351, 2019.
4. E.M. Nithiya, **F. Fenila**, K.K. Vasumathi, and M. Premalatha. Cultivation of *Scenedesmus* sp. using optimized minimal nutrients and flocculants - a potential platform for mass cultivation. *Environmental Technology* (3) 1-14, 2018.
5. S.K. Verma, **F. Fenila**, and Y. Shastri. Sensitivity analysis and stochastic modelling of lignocellulosic feedstock pretreatment and hydrolysis, *Computers and Chemical Engineering*, (106) 23-39, 2017.
6. S. K. Verma, **F. Fenila**, A. Soren, and Y. Shastri, "Impact of uncertainties on biomass to biofuel systems," *CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources*, (12) 2–11, 2017.
7. **F. Fenila** and Y. Shastri. Optimal control of enzymatic hydrolysis of lignocellulosic Biomass, *Resource Efficient Technologies*, (2) S96-S104, 2016.

International and National Conferences:

1. **F. Fenila** and R. Schenkendorf. The 1st international electronic conference on processes: processes system and innovation, Model-based design and optimization of electrochemical processes for sustainable aviation fuels, *SciForum*, May 2022.
2. **F. Fenila** and Y. Shastri. Optimization of cellulose hydrolysis in a non-Ideally mixed batch reactor, 28th European Symposium on Computer Aided Process Engineering, Graz (Austria), June 2018.
3. **F. Fenila** and Y. Shastri. Optimal control of enzymatic hydrolysis of lignocellulosic biomass, *Technoscape*, VIT Vellore (India), October 2016.
4. **F. Fenila** and Y. Shastri. Impact of uncertainties on hydrolysis of lignocellulose, *Chemcon*, IIT Guwahati (India), December 2015.
5. S.K. Verma, **F. Fenila**, and Y. Shastri, Impact of uncertainties on lignocellulosic ethanol production. *ASABE Annual Meeting*, New Orleans, LA, 2015.
6. **F. Fenila**, K.K. Vasumati, and M. Premalatha, Studies on optimization of nutrients for growth of microalgae (*Scenedesmus* sp.) by Response Surface Methodology (RSM), *International Conference on Algal Biorefinery (ICAB)*, IIT Kharagpur (India), January 2013