

# SHAGUFTA RIZWANA

Research Scholar

Food Engineering and Technology, Tezpur University

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## CURRICULUM-VITAE

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### CAREER OBJECTIVE

To obtain a creative and challenging position in a teaching and research organization that gives me an opportunity for self-improvement, while contributing to the symbolic growth of the institution with my technical, innovative, and logical skill.

### ACADEMIC PROFILE

Name of Course	Course & Branch	Board/University	Year of Passing	Percentage/CGPA
Ph.D.	Food Engineering and Technology	Tezpur University	2023	8.06 (Pre thesis presented)
M. Tech	Food Engineering and Technology	Tezpur University	2019	9.10
B. Tech	Food Engineering and Technology	Tezpur University	2017	8.61
12th	Physics, Chemistry, Mathematics, Biology	AHSEC	2013	86.4%
10th	ALL	SEBA	2011	77.5%

### PRACTICAL EXPOSURE / PROJECT EXPERIENCE

- **Ph.D.:** Near Infrared based Solutions for Quality Assessment during Processing and Storage of *Komal Chawal*
- **M. Tech:** Application of Near Infrared Spectroscopy for rice characterization using Machine Learning
- **B. Tech:** Kinetic Modeling and Reaction Engineering Approach (REA) for the processes involved in paddy parboiling
- **Miscellaneous:** Biochemical analysis of indigenous fruit of Assam, Study on respiration of paddy and its effect on quality attributes

## PUBLICATIONS

### Research Papers

Title of the Paper	Journal Name	Volume (Issue/Pages)	Year	ISSN/ISBN No.
1. Drying kinetics and image-based identification of drying end point during parboiling of Komal chawal	Journal of Agriculture and Food Research	13(100646)	2023	2666-1543
2. Mapping of nutraceutical and sensorial properties of stuffed red chilli pickle: Effect of storage on quality	Journal of Agriculture and Food Research	11(100504)	2023	2666-1543
3. Near infrared-based process analytical technology module for estimating gelatinization optimal point	Journal of Food Process Engineering	45(3)	2022	1745-4530
4. Application of Flavor Network Principle of Food Pairing to Assamese Cuisine from Northeast India	International Journal of Gastronomy and Food Science	26(100426)	2021	1878-450X
5. Application of Near-Infrared Spectroscopy for Rice Characterization Using Machine Learning	Journal of The Institution of Engineers (India): Series A	101(579-587)	2020	2250-2149

### Book chapters

Title of the chapter	Title of the Book	Pages	Publisher	Year
1. Biodegradable polymers-a greener approach for food packaging	Green Sustainable Process for Chemical and Environmental Engineering and Science	317-369	Elsevier	2023
2. Artificial Intelligence-based Quality Inference for Food Processing Industry Applications	Intelligent Systems and Machine Learning for Industry: Advancements, Challenges, and Practices,	223-240	CRC Press	2022
3. Modeling of the Shelf Life of Foods	Shelf Life and Food Safety	61-76	Taylor and Francis	2022

### Full length paper in Conference

Title of the Paper	Title of the Conference	Organizer	Year
1. Kinetic analysis of hydration and gelatinization processes during parboiling of paddy for end point estimation	National Conference on Advances in Science Engineering and Technology (ASET)	GIMT, Tezpur	2018
2. Respiration of Paddy under Different Storage Conditions	International Conference on Emerging Technologies in Agricultural and Food Engineering (ETAF)	IIT Kharagpur	2016

### QUALIFYING EXAMS

- Obtained All India Ranking of 104 in **GATE** 2018 in Engineering sciences category (March 2018).
- Obtained All India Ranking of 480 in **GATE** 2019 in Engineering sciences category (March 2019).
- Qualified for Junior Research Fellowship (JRF) and eligibility for Assistant Professor in the National Eligibility Test (**UGC-NET**) conducted for December 2020 and June 2021 (merged session)

### AWARDS/ ACHIEVEMENTS

- Second position in the Technical Session on "Modeling and Simulation Approaches in Food Processing & Drying and Dehydration of Foods" at Virtual International Conference SAFETy-2022 organized by the Department of Food Engineering & Technology, Tezpur University, India, and Department of Soils, Water & Agricultural Engineering, Sultan Qaboos University, Oman in Association with AFST(I) Tezpur Chapter (October 2022).
- Second position in Recipe Making Competition on World Food Day celebration at Department of Food Engineering & Technology, Tezpur University (October 2022).
- **SHORTLISTED** for the Grand Finale of Smart India Hackathon 2022, organized by Ministry of Education's Innovation Cell (MIC) and the All-India Council for Technical Education (AICTE), India (July 2022).
- First position in the Technical Session on "Modeling and Simulation Approaches in Food Processing" at Virtual International Conference SAFETy-2021 organized by the Department of Food Engineering & Technology, Tezpur University, India, and Department of Food Science and Technology, University of Georgia, USA (June 2021).
- Selected for AICTE National Doctoral Fellowship for pursuing PhD in the department of Food Engineering and Technology, Tezpur University (July 2019).
- First position in poster presentation (Food Engineering category) in an International Conference on Technological Innovations for Integration of Food & Health, Tezpur University (February 2019).
- First position in Foodenix poster presentation held at Tezpur University during Techxetra

(October 2015).

- Third prize in a two-day workshop on “Web page designing” conducted by the School of Engineering, Tezpur University during Techxetra (October 2013).
- First position in an essay competition conducted by Rastriya Mission Siksha Abhijan, Assam (2012).

### **CONFERENCE/SEMINAR PARTICIPATIONS**

- Oral Presentation at Virtual International Conference SAFETy-2022 organized by the Department of Food Engineering & Technology, Tezpur University, India, and Department of Soils, Water & Agricultural Engineering, Sultan Qaboos University, Oman (October 2022).
- Paper presentation in the International Conference on Emerging Techniques in Food Processing-II (ETFP-2022) organized by the Department of Food Processing Technology, Ghani Khan Choudhury Institute of Engineering and Technology Malda WB (March 2022).
- Attended ATAL-FDP (online) on “Material Science and Engineering Approaches for Food System Design (MSEAFSD-2021)” organized by the Department of Food Engineering & Technology, Tezpur University, India (December 2021).
- Oral Presentation at Virtual International Conference SAFETy-2021 organized by the Department of Food Engineering & Technology, Tezpur University, India, and Department of Food Science and Technology, University of Georgia, USA (June 2021).
- Attended Virtual National webinar on “Practical Rheology for the Food Technologists”, Department of Food Technology, HBTU Kanpur (June 2020).
- Presented poster at 27<sup>th</sup> ICFOST (Indian Convention of Food Scientists and Technologists), hosted by the Department of Food Engineering and Technology, Tezpur University in association with AFSTI, Mysuru (January 2020).
- Training program on Analytical Instruments, Department of Chemical Sciences, Tezpur University (January 2020).
- Attended a symposium on Prebiotics and Functional Foods, Tezpur (March 2019).
- Presented poster (Food Engineering category) in an International Conference on Technological Innovations for Integration of Food & Health, Tezpur University (February 2019)
- Presented a paper in a National conference on Advances in Science, Engineering and Technology held in GIMT, Tezpur (November 2017).
- Presented a poster in a national conference on “Recent Trends in Food Processing, Dept. of FET, Tezpur University, sponsored by UGC and SAP (March 2017).
- Attended a two-day National seminar cum workshop on “Integration of Engineering and Biological Sciences” at Tezpur University (March 2015).
- Attended a two-day workshop on “Scientific Writing Skills” at Tezpur University (February 2015).
- Participated and won third prize in a two-day workshop on “Web page designing” conducted by the School of Engineering, Tezpur University during Techxetra (October 2013).

## INTERNSHIP / TRAINING

- **1 month** Worked as a JRF in Defence Research Laboratory, DRDO, Tezpur (2019)
- **15 days** Training on Machine Learning using R and Python, Tezpur University (2018)
- **5 days** Training on Bakery Processing organized by Adani Wilmer Limited (2018)
- **1 month** Summer Internship at Indian Institute of Technology, Kharagpur under Ishan Vikas Scheme (2016)
- **1 month** Summer Internship at Indian Institute of Crop Processing Technology (IICPT), Regional Centre Guwahati, Assam (2015)

## IT KNOWLEDGE

Proficiency in computer applications like Python, MATLAB, C, MIT App Inventor, SPSS, and MS office.

## PERSONAL DETAILS

**Date of Birth:** 4<sup>th</sup> of Dec 1994

**Gender:** Female

**Category:** General

**Father's Name:** Saifur Rahman

**Mother's Name:** Asrufa Begum

**Nationality:** Indian

**Permanent Address:** Bidyapara Station Road, W/N-10, P.O: Dhubri, District: Dhubri, Assam.  
Pin Code: 783301

**Present Address:** Pobitora Womens Hostel, Tezpur University, Napaam, District: Sonitpur, Assam. Pin Code: 784028

## DECLARATION

I hereby declare that the information furnished above by me is true and correct to the best of my knowledge and belief.

Date: 13/06/2023

Shagifta Rizwana