### **FACULTY ACHIEVEMENTS**

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202341076471 A

(19) INDIA

(22) Date of filing of Application :09/11/2023

(43) Publication Date: 22/12/2023

(71)Name of Applicant :

1) TKM INSTITUTE OF TECHNOLOGY

Kollam - - 691 505, Kerala, India Kollam -----

### **Patents**

#### (54) Title of the invention : DEVELOPMENT OF INSTANT RICE PORRIDGE

		1)TKM INSTITUTE OF TECHNOLOGY
		Address of Applicant : Karuvelil Post, Kollam - 691505,
		Kerala, India Kollam
		Name of Applicant : NA
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		(72)Name of Inventor :
		1)Angel Elizabeth Shine
	A 221 00071 00000 A 221 0010200000	Address of Applicant :UG Student, Department of Food
( \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	:A23L0007100000, A23L0019200000,	Technology, TKM Institute of Technology, Karuvelil Post,
ciassification	A23P0020200000, A23L0033100000, A23L0007143000	Kollam - 691505, Kerala, India Kollam
	A25L000/145000	2)Sneha Sajeev
(86) International	:NA	Address of Applicant :UG Student, Department of Food
Application No Filing Date	:NA	Technology, TKM Institute of Technology, Karuvelil Post,
(87) International		Kollam - 691505, Kerala, India Kollam
Publication No	: NA	3)Hamdhan Hamza
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(61) Patent of Addition to Application Number	:NA	Technology, TKM Institute of Technology, Karuvelil Post,
Filing Date	:NA	Kollam - 691505, Kerala, India Kollam
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Application Number Filing Date	:NA	Technology, TKM Institute of Technology, Karuvelil Post,
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		5)Dr. R. Sindhu
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		6)Dr. Surendhar. A
		Address of Applicant : Associate Professor & Head, Department of
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#### (57) Abstract:

Rice (Oryza sativa) is the staple food in many Asian countries such as India, China, Japan, Korea, etc. It is rich in carbohydrates and other essential nutrients. Consumption of rice provides sudden boost of energy and can satisfy basic human hunger effectively Porridges made from rice is a soul and comfort food when people fall ill. The project mainly focuses on product development, where the rice is packed in a pouch and placed inside a cup like that of instant cup noodles. Required amount of boiled hot water should be poured into the cup so that the rice gets cooked. It comes along with side dishes such as pickles, spice mixes, salt pouch etc. Also, the porridge can be further added with pulses, other food components such as chicken pieces, dried fish and so on. It focuses on all section (12) PATENT APPLICATION PUBLICATION

(22) Date of filing of Application :16/04/2024

(19) INDIA

(21) Application No.202441030406 A

(43) Publication Date: 19/04/2024

(54) Title of the invention : DEVELOPMENT OF GRANOLA BAR FROM JACKFRUIT SEED

(51) International classification	:A23L0007126000, A23L0025000000, A23L0033120000, A23L0007100000, A23L0025100000
(86) International Application No Filing Date	NA NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	'NA 'NA
(62) Divisional to Application Number Filing Date	:NA :NA

#### 71)Name of Applicant:

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#### 3)Alfina T

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#### 4)Amal Benny

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#### 5)Brita Benny

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#### 6)Ms. Lava Liz Kuriakose

Address of Applicant : Assistant Professor, Department of Food Technology, Tkm Institute of Technology, Karuvelil P.O., Kollam - 691505. Kerala. India Kollam ------

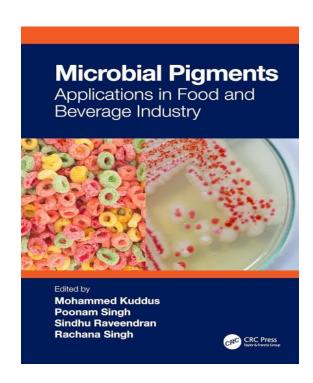
#### 7)Dr. R. Sindhu

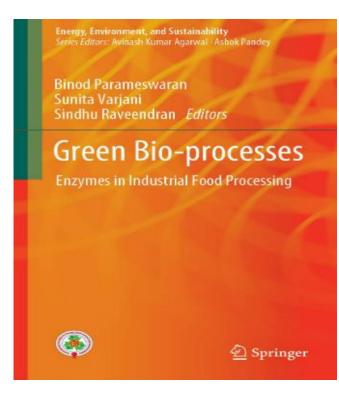
Address of Applicant :Professor And Dean Research Department of Food Technology, TKM Institute of Technology, Karuvelil P.O. Kollam - 691505, Kerala, India Kollam -----

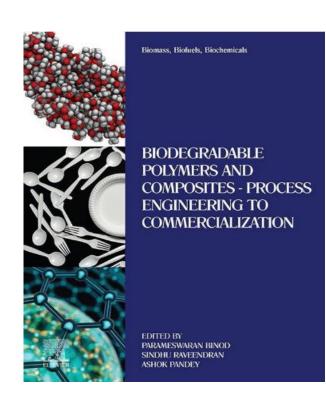
The jackfruit seed, often underrated despite its rich nutrient profile, originates from tropical regions like South and Southeast Asia. It's packed with protein, fiber, B-complex vitamins, and essential nutrients, offering notable health advantages. Our project emphasizes convenience and innovation, utilizing jackfruit seed powder to craft a nourishing granola bar—an easy breakfast choice. Adding jackfruit seeds boosts the bar's nutritional quality, complemented by dates, almonds, pumpkin seeds, peanut butter, and honey for taste and texture. Additionally, substituting oats with jackfruit seeds not only enhances nutrition but also reduces expenses and minimizes

No. of Pages: 26 No. of Claims: 10

# **Books Edited by Faculty Members**









# Product Development by Faculty members



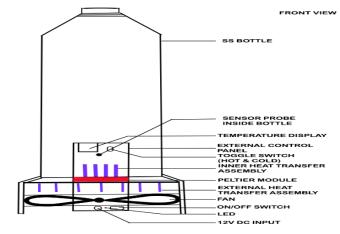
**Cryogenic Dispenser Prototype** 



Fish Descaler



E-Spoon



**Multifunctional bottle** 

# **Faculty Pursuing Ph.D.**

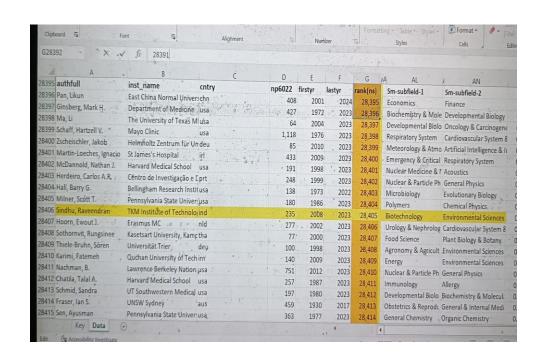
Name	University	Year of Admission	
Ms. Shijarath T R	Cochin University of Science &	2020	
	Technology.		
Ms. Lakshmipriya P R	Kerala University of Fisheries &	2023	
ivis. Laksiiiiipiiya i ik	Ocean Studies	2025	
Ms Akhila J Chand	National Institute of Technology,	2023	
ivis Akillia J Clialiu	Calicut		

## **Faculty Acheivements**

- ▶ Dr R Sindhu Listed among top 2% scientists in the world for the year 2019 -2022 (study conducted by Stanford University, USA)
- ▶ Dr R Sindhu Visiting Professor- Federal University of Parana, Brazil
- ▶ Dr. Surendhar A Secured 1<sup>st</sup> prize in paper presentation at Chemfest 2K23 on the topic "Treatment of dairy wastewater using CNT-SPEEK as membrane in MFC" held on 28<sup>th</sup> April 2023.
- ► Raveendran Sindhu- Most Downloaded Article Award Journal of Environmental Management (Elsevier)
  Impact factor 8.0
- ▶ Dr. Surendhar A Acted as technical session chair for the stream "Chemical Engineering & Biotechnology" in the 5<sup>th</sup> International Conference on "Recent Innovations in Science & Technology (RIST 2023)" organized by Holy Grace Academy of Engineering, Thrissur, Kerala, India in with ISET Research, India

# **Global Recognition**







 Dr. R. Sindhu, Department of Food Technology - Included in the list of Top 2% Scientists of the world consistently for the fourth year (2019, 2020, 2021 and 2022)



**Biotechnology Research Excellence Award 2024** 



Visiting Professor at Federal University of Parana, Curitiba, Brazil (Ministry of Brazil Fellowship) – April 2023



#### **Key note Speaker at DIC Kollam**



Women in Science, Technology, Engineering and Maths (STEM) 2024

# **Faculty Interaction with Outside World**

- Visiting Professor/ Scientist
- Chairperson APJAKTU/ IEC
- Editor/Reviewer
- Scrutiny Board Member
- Advisory Board Member
- Interview Board Member
- Board of studies Panel Expert / Member

- Subject Expert
- State Convener
- Resource person
- PhD Examiner
- Conference chair
- Project Reviewer DST-BIRAC/ KSCSTE