

# RAJAGIRI SCHOOL OF ENGINEERING AND TECHNOLOGY (AUTONOMOUS) DEPARTMENT OF BASIC SCIENCES AND HUMANITIES

# SCIENTIA

VOLUME 7, ISSUE 2

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# ACADEMIC ACHIEVEMENTS AND ADMINISTRATIVE ROLES

#### Dr. Deepthi Jayan K

Guided two student projects on "Computational Modelling Study on Ternary Perovskite-based Solar cells" and "Theoretical Study on Rubidium Cation Containing Perovskite-based Solar cells" From March to August 2022 (Department of Physics, Nirmalagiri College).

Selected as an editorial member of the American Journal of Mechanical and Materials Engineering, on June 24, 2022.

Appointed as a member of the Raman International Optronics Society (RIOS), on October 24, 2022.

Received Research Co-supervisorship in Physics from A P J Abdul Kalam Technological University.

#### Dr. Rejeesh T Chacko

Appointed as the RSET Team Manager for the following KTU Inter - Zone Competitions:

Football (June 3 to 5)

Tennis (Men & Women, October 31)

Badminton (Men & Women, November 7 to 9)

Badminton (D Zone, Men & Women, November 4 to 5)

Appointed as Selector for KTU D Zone Kabaddi Championship at KMEA-Edathala, October 29 to 30.

#### Ms. Sinu Jacob

Appointed as Badminton Team Manager for Kerala College Games organised by Kerala State Sports Council at Regional Sports Centre Cochin, from June 4 to 5.

#### Dr. Anju C and Dr. Ragin Ramdas M

Received Research Co-supervisorship in Chemistry from A P J Abdul Kalam Technological University.

#### Dr. Rinku Jacob

Is guiding five post graduate students from the Department of Physics, Devamatha College, Kuruvilangadu for their MSc project on "Non-linear time series analysis of GRS1915+105 light curve".

#### **DEPARTMENT PROGRAMMES**



The discipline of English conducted an online workshop on "The Right Way to Write an Abstract", on November 26, 2022. Dr. Prabhu T, Assistant Professor, Department of English, LN Government College, Ponneri, Tamil Nadu, served as the resource person.

# WALL MAGAZINE COMPETITION

As a department initiative a wall magazine competition for first-year students was launched.

As a preliminary step, editorial teams, comprising seven students- an editorial head, five sub editors and a team coordinator, was formed for fourteen classes.

A judging panel of faculty was formed to assess the wall magazines.

The competition will begin in January 2023.

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# **FACULTY PUBLICATIONS**

#### Dr. Deepthi Jayan K

"Modelling and Performance Estimation of All Inorganic Double Perovskite Solar Cells", IEEE International Conference on Signal Processing, Informatics, Communication, and Energy Systems (SPICES), IEEE Xplore, May 16, 2022.

"Theoretical Modelling of Perovskite-Kesterite Tandem Solar Cells for Optimal Photovoltaic Performance", Energy Technology, Wiley, September 17, 2022.

Dr. Deepthi Jayan K, Prof. Ahmed Shaker, and Dr. Marwa S Salem

"Analysis and design of p-n homojunction Sb2Se3 solar cells by numerical simulation", Solar Energy, Elsevier, Vol. 242, pages 276-286, July 23, 2022.

Dr. Deepthi Jayan K and Prof. Amel Laref

"High-Efficiency Cs based Perovskite- Silicon Tandem Solar Cells- A Modelling Study", Physica Status Solidi A: Applications and Materials Science, November 15, 2022

#### **Book Chapter:**

Dr. Deepa K Baby &

Dr. Ragin Ramdas M

"Carbon Nanotube Green Nanocomposites as Supercapacitors", Frontiers of Nanoscience, Vol.1, First Edition, Navanila Maruthi Publication-ISBN 978888-81-951871-3-3, June 25, 2022.

# PAPER PRESENTATIONS

#### Mr. Rajeesh Rajkumar

Presented a paper titled "Conjuring Fears: Feeding Racial Anxiety and Faith to the American Psyche in *The Exorcist*"- "Of Remembering/Forgetting: Memory Studies Now"- Dan Thottakkara Memorial National Seminar 2022, September 26, 2022.

Presented a paper titled "The Trauma of Transition and the Transition of Trauma: The Quest for Identity and Honour in *Trans Figured: My Journey from Boy to Girl to Woman to Man*" - Three Days International Conference on Gender, Culture and Society, November 27, 2022.

# **DEPARTMENT SEMINARS**

The following faculty seminars were conducted from May to December

**Ms. Parvathy N** - "A Cyber Space of One's Own: Contextualizing Woolf's idea of 'Room' in the Digital Era", May 28, 2022.

**Ms. Joann Jose N** - "Remaking of Gendered Spaces: An analysis of the Malayalam film *Varathan*", August 6, 2022.

**Ms. Divya Saju** - "Patenting of Innovations: An Analysis of Intellectual Property Rights", August 27, 2022.

**Ms. Manisha Bhadran** - "Discursive Violence in the Digital Public Sphere: The Germ of a Genocidal Continuum?", September 27, 2022.

**Ms. Meera P S** - "Quantum Entanglement: Understanding and Harnessing", October 29, 2022.

**Mr. Jose Antony V J** - "From Water to Hydrogen through Photocatalytic Water Splitting: Challenges & Opportunities", November 26, 2022.

#### FACULTY AS RESOURCE PERSON

#### Dr. Rejeesh T Chacko

Resource person in the APJAKTU Sponsored 5-day FDP on "Propagation of Emerging Trends in Physical Education & Sports Sciences" organised by FISAT, Angamali, August 26, 2022.

Observer in 5-a-side futsal tournament organised by S. Vellaichamy Nadar Polytechnic College, Virudhunagar - Tamil Nadu, from September 5 to 9, 2022.

# FACULTY APPOINTMENTS OUTSIDE RSET

 $\mbox{\bf Dr. Deepthi Jayan K}$  was selected as the Reviewer for the following Journals:

Solar Energy, Elsevier, June 19, 2022

Scientific Reports, June 10, 2022

IJER, June 10, 2022

Journal of Computational - Electronics, Springer, August 5, 2022

Physica Scripta, IOP Science, August 20, 2022 Micro and Nanostructures, Elsevier, August 30, 2022 Advanced Theory and Simulations, Wiley, September 20, 2022

Indian Journal of Physics, October 3, 2022

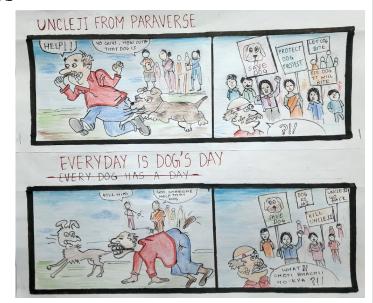
Energy Technology, Wiley, November 20, 2022

ChemPhysChem, November 25, 2022

# **COMPETITION FOR STUDENTS**

In the month of October, the discipline of English organised an online comic illustration competition, *Bow Wow!*, connecting the popular annual art challenge 'Inktober' with the stray dog issue in our state.

Ms. Gopika M of S3 CS Beta secured the first prize.



## **CHRISTMAS CELEBRATION**

On December 19, 2022, the department hosted a Christmas celebration at the Chemistry Lab, which was beautifully decorated by the faculty members to create a festive atmosphere. Faculty from the Department of Mathematics were also invited to be a part of the festivities, thus adding to the merriment of the event. The celebration was initiated with a Christmas message by Dr. Ramkumar P B, Head of the Department of Mathematics, which was followed by carols and gift exchange.



## PROGRAMMES ATTENDED BY FACULTY

Sl.	Name of Faculty	Conference/Sem-	Course	Workshop/	Training/
No	No	inar		Symposium	FDP
1	Sr. Alphonsa Thomas				1
2	Dr. Anju C		1		1
3	Dr. Deepthi Jayan K		2	1	1
4	Dr. Diana Joe K			1	1
4	Dr. Deepa K Baby				1
5	Ms. Joann Jose Neelamkavil	1			
6	Ms. Meera Sudheer	1			1
7	Dr. Ragin Ramdas M				1
8	Mr. Rajeesh Rajkumar	1			
9	Dr. Shibu P P				1

## EDITORIAL TEAM

DR. RAGIN RAMDAS M MR. RAJEESH RAJKUMAR MS. SARITHA V MS. SINU JACOB MR. SUJITH S



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