

## ACHIEVEMENTS OF APPLIED SCIENCE & HUMANITIES

Department of Mathematics

Vanitha G R

### **1. Paper presented in journal:**

“Application of Graph Theory in Geoscience, Economics and Image Processing”

Janavi R, Vanitha G R, Rekha R, Anitha C V, Bhavitha B G

(JETIR) Volume 11 | Issue 5 | 2024-05-02. At City Engineering College.

### **Paper presented in Internal Conference:**

“Application of Graph Theory in Geoscience, Economics and Image Processing”

Janavi R, Vanitha G R, Rekha R, Anitha C V, Bhavitha B G

International Conference on Engineering Advancements and Sustainable Development (ICEASD 2024) held on 29th and 30th April 2024. At City Engineering College.

### **FDP**

1. Participated in FDP from 05/02/2025 to 12/02/2025 on LaTeX organized by Dayananda Sagar college of Engineering college, Bengalore with course material provided by spoken tutorial project, IIT Bombay

Successfully passed a LaTeX test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

Credits: 2 Score: 70%

2. Five Day FDP from 11-19 June 2024 on “Mathematical Foundation for AI, ML & Data Science” organized by Department of Mathematics, SRM Institute of Science and Technology.

3. Participated in a 5-day faculty development program on “advances in graph theory and linear algebra (AGTLA)” organized by department of mathematics, school of advanced sciences (SAS), VIT-AP university, India, from 1<sup>st</sup> to 5<sup>th</sup> October 2024.

4. Participated and completed AICTE training and learning (ATAL) academy faculty development program on “Basic mathematical and statistical foundation for cybernetics, criminal laws and cyber security” at city engineering college from 04/12/2023 to 09/12/2023.

- 5.Participated in five days faculty development program on “issues , opportunities and challenges in IOT” organized by department of computer science and engineering ,city college , Bengaluru during 21<sup>st</sup> march 2022-25<sup>th</sup> march 2022.
- 6.Attained an online one week faculty development program on “recent advances in material science and mathematical application” held during 15<sup>th</sup> June to 19<sup>th</sup> June 2020 organised by department of basic science , Ghousia college of engineering .
7. Participated in the webinar on “ Application of Statistics to Artificial Intelligence” held on June 18Th 2020. At Don Bosco institute of Technology, Bengaluru, in association with institution of Engineers(India), KSC and IEEE

Anitha C V

**Paper presented in journal:**

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International Conference on Engineering Advancements and Sustainable Development (ICEASD 2024) held on 29th and 30th April 2024.At City Engineering College.

**FDP:**

Five Day FDP from 23-28 September 2024 on “Graph Theory and Optimization Techniques” organized by Department of Mathematics, Ramaiah Institute of Technology.

Five Day FDP from 11-19 June 2024 on “Mathematical Foundation for AI, ML & Data Science” organized by Department of Mathematics, SRM Institute of Science and Technology.

Five Day FDP from 04-09 December 2023 on “Basic Mathematical and Statistical Foundation for Cybernetics, Criminal Laws and Cyber Security ” organized by City Engineering College.

Janavi R

**Paper presented in journal:**

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**Paper presented in Internal Conference:**

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International Conference on Engineering Advancements and Sustainable Development (ICEASD 2024) held on 29th and 30th April 2024.

**FDP:**

Five Day FDP from 05-11 February 2025 on “LaTeX” organized by Dayananda Sagar College of Engineering.

Five Day FDP from 23-28 September 2024 on “Graph Theory and Optimization Techniques” organized by Department of Mathematics, Ramaiah Institute of Technology.

Five Day FDP from 11-19 June 2024 on “Mathematical Foundation for AI, ML & Data Science” organized by Department of Mathematics, SRM Institute of Science and Technology.

Five Day FDP from 04-09 December 2023 on “Basic Mathematical and Statistical Foundation for Cybernetics, Criminal Laws and Cyber Security ” organized by City Engineering College.

Successfully passed a LaTeX test, remotely conducted by the Spoken Tutorial project, IIT Bombay, under an honour invigilation system. Self learning through Spoken Tutorials and passing an online test completes the training programme.

Credits: 2 Score: 66.25%

## **Department of Physics**

**Dr. Nagasree G**

### **Papers Published**

1. Diffusion limited quenching of 8-methoxy-3-[1-(4,5- dicarbomethoxy-1,2,3-triazoloacetyl)]coumarin and excited state charge transfer in binary solvent mixtures of acetonitrile and 1,4, dioxane.

Nagasree. G, Raju.P, Geethanjali. H S, Nagaraja.D,(UGC Care Journal) Sanbhodhi,:2249-6661, Vol-43, No.-04 (IV) July-September (2020)

2. Binding interaction between 4-Hydroxy-3-nitrocoumarin and metal ions-A spectroscopic approach .

G.Nagasree, H.S.Geethanjali, D.Nagaraja, Materialstoday Proceedings ,ScienceDirect, 2214-7853, <https://doi.org/10.1016/j.matpr.2022.03.015> ,Elsevier Ltd

3. Exploiting the Photo Stable Properties of Coumarin Derivative for the detection of Metal ions in solutions.

Nagasree. G, Geethanjali. H S, Nagaraja.D, Raju.P,  
The Indian Journal Of Technical Education,0971-3034,Vol-46-Special Issue-MAY,2023

### **Conferences Attended**

1. Diffusion limited quenching of 8-methoxy-3-[1-(4,5-dicarbomethoxy-1,2,3-triazoloacetyl)] coumarin in binary solvent mixtures.

G. Nagasree, H.S. Geethanjali, D. Nagaraja, Raju.P International Conference on Recent Advances in Applied Sciences (ICRAAS-2019), 17<sup>th</sup> -18<sup>th</sup> OCT 2019 at Reva University, Bangalore-560064

2. Spectroscopic analysis of binding interaction between4-Hydroxy-3-nitrocoumarinand metal ion Cu++

Nagasree. G, D. Nagaraja, Geethanjali HS, Raju.P  
International Conference on Advances in Chemical & Materials Sciences (ICCM - 2019)  
October, 2019

DEPARTMENT OF STUDIES IN CHEMISTRY Mangalore University Mangalagangothri-  
574 199 Karnataka, India

3. Spectroscopic studies of binding interaction between biologically active organic compound and metal ions

D. Nagaraja, H.S. Geethanjali, G Nagasree, P. Raju

The 8<sup>th</sup> Global Conference on Materials Science and Engineering (CMSE 2019), Nov 12<sup>th</sup> - 15<sup>th</sup>, 2019 at Sanya, China

4. Participated and presented a paper in the International Conference on Advanced Materials Science and Applications (online)

organized by Department of Physics and IQAC of RAMAIAH INSTITUTE OF TECHNOLOGY DURING 3-4 Sep, 2020.

5. Binding Interaction between 4-Hydroxy-3-Nitrocoumarin and Metal Ions-Evaluation of Binding constants (PC-49).

14<sup>th</sup> National Symposium on Radiation & Photochemistry, (NSRP-2021) held at Indian Institute of Technology Gandhinagar, India, 25<sup>th</sup> -26<sup>th</sup> June 2021

6. Solvatochromic and computational study of ground state and excited state dipole moments of coumarin dyes in polar and non-polar solvent environments

G. Nagasree, Raju P Geethanjali. H.S, Nagaraja D

International Conference on Recent Trends in Materials Science

(ICRTMS-2024) 6<sup>th</sup> & 7<sup>th</sup> March, 2024 Kristu Jayanthi College, Autonomous, Bangalore

7. Solvatochromic and computational study of ground state and excited state dipole moments of coumarin dyes in polar and non-polar solvent environments

G. Nagasree, Raju P Geethanjali. H.S, Nagaraja D, Dr. Chaluvaraju, Dr. Raghavendra U P

2nd International Conference on Applied Research in Engineering Sciences ICARES - 2025

held on 20th and 21st February 2025 at Ramaiah Institute of Technology, Bengaluru-560054

### **Faculty Development Program**

1. Attended FDP on “Modern Materials and their Applications” organized by Department of Physics BNMIT from 16th to 20th Jan 2018.

2. Attended One day workshop entitled “Materials Characterization by SEM and XRD held at CIIRC Jyothi Institute of Technology, Bengaluru on 22nd Mar 2019.

3. Participated in the Webinar on “Third generation Biofuel, Algae Biodiesel-A Potential Future Fuel” organized by Department of Basic Science, Sri Krishna Institute of Technology, Bengaluru on 24th July 2020.

4. Participated in the Webinar on:” Nano-materials: The Materials with Multi-functional Potential” conducted by Department of Physics, Sai Vidya Institute of Technology, Bengaluru held on 27th July 2020.
5. Participated in the National Level Invited talk on “Covid 19 Awareness” organized by R.R Institute of Technology held on 24th July 2020.
- 6.Participated in the Webinar on “QUANTUM COMPUTING: FUNDAMENTALS AND PRACTICAL IMPLIMENTATION” organized by Department of Physics, GSSS Institute of Engineering and Technology for Women, Mysuru on 28th July 2020.
7. Participated in the Webinar on “Secrets to Combat covid-19” conducted by BMS Institute of Technology and Management, Bengaluru held on 29th July 2020.
8. Attended Online Workshop on “SWAYAM – NPTEL” on 28th July 2020 jointly organized by NPTEL IIT Madras, VTU, Belagavi and Bheemanna Khandre Institute of Technology, Bhalki.
9. Attended five days FDP on “Issues opportunities and challenges in IOT” in City Engineering during 21/03/2022 to 25/04/22.
10. Attended three days FDP on “Physics of Quantum Computation and Animation” in BIT during 2nd - 4th Feb 2022.
11. Attended three days FDP on “Materials Characterizations and hands on training onMaterials simulation Software” organized by DSCE,Bengaluru during 26th Feb to 28th FEB 2024.

Kavitha A

### **Faculty Development Program**

1. Attended 10days FDP on High impact teaching skills conducted by WIPRO
2. Attended five days FDP on LATEX programme conducted in SJBIT Bangalore.

### **Projects:**

Radon measurement in ground water, project work done in BARC(Baba Atomic Research Center) under the guidance of scientific officer Dr.Eapen in Mumbai.

Department of Chemistry

**Dr. Sunitha N**

1. Evaluation of Corrosion Studies of as Casted Aluminum 6065 Metal Matrix Composite by Weight Loss Method, International Journal of Innovative Research & Development, ISSN 2278 – 0211 (Online), Vol 5 Issue 11, 19-22, October, 2016 (Special Issue).

2. Evaluation of Corrosion Studies of as Casted and Heat Treated Aluminum 6065 Metal Matrix Composite by Weight Loss Method, Science Direct, Materials Today: Proceedings 5 (2018) 22727–22733, <https://doi.org/10.1016/j.matpr.2018.06.651>.

3. Study of SiC/graphite particulates on the corrosion behavior of Al 6065 MMCs using tafel polarization and impedance, SN Applied Sciences (13<sup>th</sup> August, 2019) 1:1024, <https://doi.org/10.1007/s42452-019-1063-6>.

4. Synthesis of PANI-vinylpolyester composite coatings for corrosion protection of Al6065 M M Cs, J. Electrochem Soc. India Vol: (70) 1/2 Jan-April 2021, 81-86.

5. Comparison of Parameters of Corrosion Using Gravimetry and EIS Technique in Aluminum 6065 Composites, AIP Conf. Proc. 2399, 030035 (2023), 7<sup>th</sup> Dec. 2023, [doi.org/10.1063/5.0131857](https://doi.org/10.1063/5.0131857).

6. Corrosion Inhibition of Al-7075 Alloy/SiCp/Gr Composites Using Epoxy-Polypyrrole in Hydrochloric Acid Medium, AIP Conf. Proc. 2399, 030003 (2023), [doi.org/10.1063/5.0132065](https://doi.org/10.1063/5.0132065).

7. Tafel Polarization and Impedance studies of Al-7075 alloy and its composites in different medium, Int. J. Adv. Res. 7(9), 779-794, Sept. 2019, ISSN: 2320-5407,

[dx.doi.org/10.21474/IJAR01/9728](https://dx.doi.org/10.21474/IJAR01/9728).

8. Oceanic Impact: The Ecological toll of Plastic pollution, Journal of Emerging Technologies and Innovative Research, JETIR, 72-75, May 2024, Volume 11, Issue 5, ISSN-2349-5162.

**FDP Attended:**

1. ATAL Online FDP on Nanomaterial and Energy Storage -Sustainable future - KSSEM, 3rd to 8th Feb. 2025.

2. One day Faculty Orientation Program for VTU affiliated college teachers on Revised Chemistry Syllabus - 2022” organized by the Department of Chemistry, JSS Academy of Technical Education, Bengaluru in association with VTU, Belagavi on 24th November 2022.

3. FDP on Metal Air batteries: Electro catalysts Challenges and opportunities organized by the Department of Chemistry- Basic Sciences and Humanities, New Horizon College of Engineering Bangalore, on July 17th 2020.

**Conferences Attended:**

1. International conference on Applied Research in Engineering Science - ICARES-2025 in MSRIT , 20 & 21 Feb. 2025.
2. Oceanic Impact: The Ecological Toll of Plastic Pollution CONVENOR at two days "International Conference on Engineering Advancements and Sustainable Development (ICEASD 2024)" held on 29th and 30th April 2024.

**Workshop Attended:**

1. Online workshop on Universal Human Values on the theme "Inculcating Universal Human Values in Technical Education" during 26-30 October, 2020 as organized by All India Council for Technical Education(AICTE).
2. one day workshop "Chemistry Syllabus in Engineering and B.Sc. (Hon's) Course", On Saturday 11/06/2022 at City Engineering College, Bangalore.
3. Online workshop on SWAYAM-NPTEL on 28th July 2020 jointly organized by NPTEL IIT Madras, Visvesvaraya Technological University (VTU) Belagavi and Bheemanna Khandre Institute of Technology, Bhalki.
4. National Webinar on "Metallic Corrosion and Graphene Based Anti-Corrosion Coating Materials" organized by Department of Chemistry, Vidyavardhaka College of Engineering, Mysuru on July 17th 2020.
5. Interdisciplinary technical webinar on progress of Nano materials and its application in New Technologies on 13th July 2020 at AMC Engineering College, Bangalore.
6. Participated in Knimbus online training on Effective Utilization for Research Publication through Knimbus Digital Library held on 1st June 2020 organized by Library and Information center and R&D cell.

Department of Humanities

Meghana D

**1. Paper presented in Journal:**

"Oceanic Impact: The ecological toll of plastic pollution" - JETIR-ISSN UGC Approved (Journal No:63975), Volume 11 Issue 5, 2024-05-15. International Conference on Engineering Advancements and Sustainable Development (ICEASD 2024) held on 29,30-04-2024.

**2. Author in book chapter:**

Co-author of a book chapter "Phyllanthus: Bhumi-Amalaki/ Keezh-kai-nelli, A wonder plant" (Multi-Disciplinary Research & Innovation. ISBN-13: 9798885551854)(2022)



Co-author of a book chapter “Medicinal Plants Of India And Their Uses”.

Book - Biodiversity And Sustainable Resource Management (Basic To Research And Applied  
Vol – II . ISBN: 978-93-91681-79-1) (2022)

### **3.Conferences Attended:**

International conference on Applied Research in Engineering Science - ICARES-2025 in  
MSRIT ,20&21-02-2025

Presented Paper titled “Preliminary Phytochemical and Nutritional Analysis of *Launaea  
acaulis* (Roxb.) Babc. Ex kerr” in International conference on “Approaches towards affordable  
clean energy, good health and well-being” Organized by the department of Life Sciences,  
Garden City University (March 2023)

### **4. FDP Attended:**

ATAL Online FDP on Nanomaterial and Energy Storage -Sustainable future - KSSEM, 03-02-  
2025 - 08-02-2025

Swaroopini B S

1.Thesis: “ Post Colonialism and Transgender View in Arundhati Roy’s Novel The Ministry of  
Utmost Happiness”

2.FDP: Indian English Literature Themes, Techniques and Theories

Organized By: Dr SNS Rajalaxmi College of Arts and Science. Coimbatore

From 05/08/2024 to 9/08/2024