

**K.M.G. COLLEGE OF ARTS AND SCIENCE,  
(AUTONOMOUS)  
GUDIYATTAM.**



**P.G. AND RESEARCH DEPARTMENT OF CHEMISTRY  
ANNUAL REPORT [2024 - 2025]**

## ANNUAL REPORT [2024 - 2025]

### ACADEMIC ACHIEVEMENTS:

Results Produced by all classes of our department in the academic year (2023 – 2024) Even Semester):

II M.Sc. Chemistry	–	53%
I M.Sc. Chemistry	–	12%
III B.Sc. Chemistry	–	67%
II B.Sc. Chemistry	–	53%
I B.Sc. Chemistry	–	48%

### 1. CHEMISTRY ASSOCIATION INAUGURATION

The P.G. and Research Department of Chemistry was organized, “**CHEMISTRY ASSOCIATION INAUGURATION**” on 05.08.2024 [Monday] at 11.30 am in the KMG Seminar Hall. The program begins with Thamizhthai Valthu and lightning of Kuthu Vilakku, **Dr. S. Praveen Kumar**, Head P.G. and Research Department of Chemistry, Welcomes the gatherings. Our respected Principal **Prof. Dr. C. DHANDAPANI**, has honor the Chief Guest and given the presidential address. **Mr. B. Balaji**, Assistant Professor, P.G. and Research Department of Chemistry and IQAC Coordinator, has introduce the Chief Guest **Dr. K. GEETHA**, Head, P.G. and Research Department of Chemistry, Muthurangam Government Arts College, Vellore. Our Chief Guest has given the invited talk on “**Impact of Chemistry on Diverse Sectors**”. The association members have been introduced by Dr. S. Praveen Kumar, Head P.G. and Research Department of Chemistry. Mr. V. Umamageshwaran, Assistant Professor as Faculty In-Charge, Ms. K. Yamuna, II M.Sc., Chemistry, President, Ms. J. Shailaja, III B.Sc., Chemistry, Secretary, Mr. S. Mohanraj, II B.Sc., Chemistry, Join Secretary and Mr. Bharath Kumar, I B.Sc., Chemistry, Join Secretary. Then **Mr. V. Umamageshwaran**, Assistant Professor, P.G. and

Research Department of Chemistry has proposed the vote of thanks. Finally, the program ends with National anthem.



## 2. Freshers' Day

The PG and Research Department of Chemistry, K.M.G. College of Arts and Science (Autonomous), Gudiyatham, arranged "Freshers' Day" for the academic year 2024-2025 on 30<sup>th</sup> of August 2024(Friday). This day marked a momentous day for the new UG and PG students, this event, orchestrated by the dynamic "Chemistry Association", was a jubilant

occasion that brought together students to celebrate the commencement of their college journey.

The Freshers' Day celebration commenced with the Thamizh Thaaai Valthu, followed by lighting of a sacred lamp Kuthuvilakku by our respected Principal Dr. C. Dhandapani, Students Coordinator and Head Department of Thamizh Dr. J. Jayakumar, Dean Academics and Head PG and Research Department of Microbiology, Head PG and Research Department of Chemistry Dr. S. Praveen Kumar and Newly joined students.

Ms. K. Yamuna, President Chemical Association welcome the gatherings, our respected Principal Dr. C. Dhandapani given the presidential address, he encourage the newly joined students and explain the important of Chemistry, Students Coordinator and Head Department of Thamizh Dr. J. Jayakumar given the felicitation address our Head PG and Research Department of Chemistry Dr. S. Praveen Kumar, given the necessity of Freshers' Day celebration, how it create a good relation with juniors and seniors in the college campus. These memories will serve as a wellspring of inspiration, encouraging students to contribute to the nation's growth, prosperity, and unity. Finally the celebration of Freshers' Day ends with vote of thanks by Ms. B. Rakshitha, I M.Sc. Chemistry.

### **3. International Conference**

The PG and Research Department of Chemistry, KMG College of Arts and Science (Autonomous), Gudiyatham, organized one day international conference on 24<sup>th</sup> September 2024 (Tuesday). This International conference organized in the title of *INTERNATIONAL CONFERENCE ON ADVANCE INNOVATIVE MATERIALS IN CHEMISTRY (ICAIMC – 2024)*, it has been inaugurated by our Respected Principal Dr. C. Dhandapani, Dr. J. Jayakumar, Student Coordinator & Head Department of Tamil, Dr. D. Manigandan, Dean Academics & Head Department of Microbiology. Our Respected Principal, delivered the keynote address emphasizing the challenges in synthesis of new materials using advance

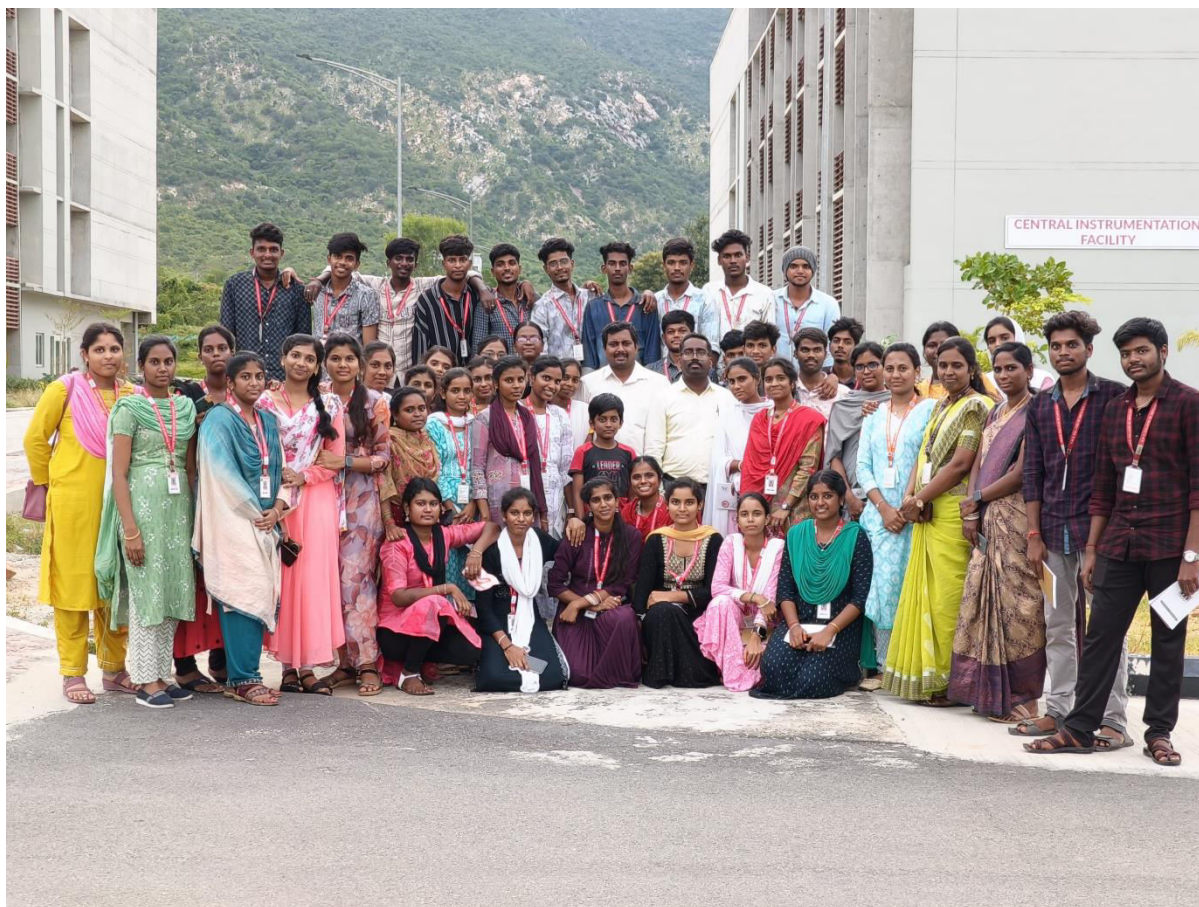
synthetic chemical approach and the factor involving enhancement of materials property. He also highlighted the key role of chemist in the materials synthesis and its applications in everyday life. The need of chemist in the current technological world is very crucial, hence we have to proud to be a chemist and sir also congratulated the chemistry department who organized the international conference in a needful title. Also, he released the Conference Proceedings with our Chief Guest Dr. R. Suresh, Associate Professor, Department of Chemistry, Karpagam Academy of Higher Education, Coimbatore and Dr. V. Sivakumar, Senior Scientist, Analytical Research and Development, Pfizer Health Care India Pvt.Ltd., Chennai.



#### 4. Industrial Visit

The PG and Research Department of Chemistry, KMG College of Arts and Science (Autonomous), Gudiyatham had organized an industrial visit on 25<sup>th</sup> September 2024 (Wednesday) to Indian Institute of Technology, Tirupati, Andhra Pradesh. The visit was organized and coordinated by Dr. S. Praveen Kumar, Head of the Department, PG and Research Department of Chemistry, KMG College of Arts and Science (Autonomous) and

Dr. P. Gandeepan, Associate Professor, Department of Chemistry, Indian Institute of Technology, Tirupati. We started travelling from the college campus at 6.30 am through bus. Totally 50 students along with 3 coordinators faculty namely Dr. S. Praveen Kumar, Mrs. K. Gandhimathi and Ms. P. Pavithra were there in the journey.



## 5. Science Exhibition

The PG and Research Department of Chemistry, KMG College of Arts and Science (Autonomous), Gudiyatham, organized Science Exhibition for School Students on 10<sup>th</sup> October 2024. 25 project models were displayed from 13 different schools around Gudiyatham. Among these 25 models best of three were selected and honored with cash award. First Prize won by Govt. Boys Hr. Sec., School, Nellorepet, Second Prize won by Ashirwad's International School, Gudiyatham, Third Prize won by Jothi Hr. Sec., School,

Gudiyatham and a Special prize won by Shiksha Kendra International School, Pallikonda.



## 6. QUIZ PROGRAMME

P.G. and Research Department of Chemistry was organized, a QUIZ PROGRAMME in CHEMISTRY on 29.01.2025 (Wednesday). There are six teams had participated in the programme. The first three teams were awarded with momentums. **Dr. S. Praveen Kumar.,** Head, P.G. and Research Department of Chemistry, Welcomes the gatherings, our respected Principal

**Prof. Dr. C. DHANDAPANI** has given the presidential address. **Mr. B. BALAJI**, and **Mr. V. UMAMAGESHWARAN** both the faculties regularized the QUIZ programme. **Mrs. K. GANDHIMATHI** and **Mr. E. JAGAN** were acted as judge for the QUIZ programme.

Winning Teams Enclosed.

Winners

First Prize – Team

- |    |                   |   |                    |
|----|-------------------|---|--------------------|
| 1. | N. P. Sugitha     | – | I M.Sc Chemistry   |
| 2. | S. Janani         | – | I M.Sc Chemistry   |
| 3. | S. Gokulakrishnan | – | III B.Sc Chemistry |
| 4. | M. Monisha        | – | II B.Sc Chemistry  |
| 5. | S. Sornalatha     | – | I B.Sc Chemistry   |

Second Prize – Team

- |    |            |   |                    |
|----|------------|---|--------------------|
| 1. | C. Jothi   | – | II M.Sc Chemistry  |
| 2. | B. Deepika | – | I M.Sc Chemistry   |
| 3. | D. Vanisri | – | III B.Sc Chemistry |
| 4. | K. Mukesh  | – | II B.Sc Chemistry  |
| 5. | V. Bharath | – | I B.Sc Chemistry   |

Third Prize – Team

- |    |                |   |                    |
|----|----------------|---|--------------------|
| 1. | R. Sneha       | – | II M.Sc Chemistry  |
| 2. | B. Dineshkumar | – | I M.Sc Chemistry   |
| 3. | B. Anitha      | – | III B.Sc Chemistry |
| 4. | A. Harisha     | – | II B.Sc Chemistry  |
| 5. | M. Harini      | – | I B.Sc Chemistry   |



## 7. Educational Tour and Industrial Visit

P.G. and Research Department of Chemistry was organized, an educational tour and industrial visit on 6<sup>th</sup> Feb 2025 to 8<sup>th</sup> Feb 2025 in Kerela (Kochi port Visit). The Educational





#### **OUT-CAMPUS ACHIEVEMENTS:**

1. Our Head of the Department Dr. S. Praveen Kumar, has presented his research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Electrochemical determination of 4-nitrophenol with the aid of nickel(II) Schiff base complex modified GCE”**

2. One of our Faculty Mrs. K. Gandhimthi, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis, characterization and antimicrobial activities of cobalt(II) Schiff base complexes”**

3. One of our Faculty Mr. V. Umamageshwaran, has presented his research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis and characterization of rare earth element doped ZTS Single Crystal”**

4. One of our Faculty Mr. E. Jagan, has presented his research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis, characterization and optical properties of chalcogen based single crystal”**

5. One of our Faculty Mr. B. Balaji, has presented his research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Chromatographic Separation of Bioactive Compounds from Indigofera aspalathoides: A Phytochemical Approach”**

6. One of our Faculty Mr. S. Sathiesh, has presented his research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis, molecular structure, Experimental and theoretical characterization of methyl pyridine Compound -Carcinopreventive activity – in Silico Investigation”**

7. One of our Faculty Ms. P. Pavithra, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Analysis of the protein binding nature of copper(II) Schiff base complexes towards BSA”**

8. One of our Faculty Ms. M. Bhuvaneshwari, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis, characterization and protein binding studies of manganese(II) Schiff base complexes”**

9. One of our Student from II M.Sc., Chemistry, Ms. K. Yamuna, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis, characterization and protein binding studies of Ferrous Schiff base complex”.**

10. One of our Student from II M.Sc., Chemistry, Ms. C. Jothi, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Synthesis, characterization and antimicrobial studies of nickel(II) Schiff base complex”.**

11. One of our Student from I M.Sc., Chemistry, Ms. N. P. Sugitha, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Green Synthesis and characterization nickelvanadate using Solanum nigrum (Manathakkali) leaf extract”.**

12. One of our Student from III B.Sc., Chemistry, Ms. N. P. Pavana, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Determination of Photocatalytic degradation activity of cobalt oxide synthesized by using Galinsoga parviflora (Mookuthipoo) leaf extract”**

13. One of our Student from III B.Sc., Chemistry, Ms. B. Anitha, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Determination of Photocatalytic degradation activity of cobalt oxide synthesized by using Galinsoga parviflora (Mookuthipoo) leaf extract”**

14. One of our Student from III B.Sc., Chemistry, Ms. S. Sakthi, has presented her research work in the International Conference on Interdisciplinary Approach for Sustainable Development (ICIASD-2025), on 18<sup>th</sup> Feb 2025, Organized by School of Life Sciences & Physical Sciences, Marudhar Kesari Jain College for Women (Autonomous), Vaniyambadi.

**“Green Synthesis and characterization of strontium oxide using Phyllanthus niruri (keezhanelli) extract”**

#### **Faculty Development Programme**

1. One of our Faculty Mr. S. Sathiesh attended Nan Muthalvan Faculty Development Programme, during 18<sup>th</sup> December 2024 to 24<sup>th</sup> December 2024 Organized by Thiruvalluvar University, Vellore.

**100% Result in Nov/Dec – 2023, Apr/May 2024 and Nov/Dec – 2024**

S.No	Subject	Class	Faculty Name
1	ORGANIC CHEMISTRY-I (23PCH11)	I M.Sc., Chemistry	Mr. S. Sathiesh
2	INORGANIC CHEMISTRY (23PCH12)	I M.Sc., Chemistry	Mr. V. Umamageshwaran Dr. S. Praveen Kumar
3	ELECTROCHEMISTRY (23PECH13B)	I M.Sc., Chemistry	Mr. E. Jagan
4	PHARMACEUTICAL CHEMISTRY (CECH 65A)	III B.Sc., Chemistry	Mr. S. Sathiesh
5	ORGANIC CHEMISTRY (GCH 41)	II M.Sc., Chemistry	Mr. E. Jagan
6	PHYSICAL CHEMISTRY (23PCH22)	I M.Sc., Chemistry	Mr. E. Jagan
7	BIOINORGANIC CHEMISTRY (23PECH24A)	I M.Sc., Chemistry	Mr. V. Umamageshwaran
8	INDUSTRIAL CHEMISTYR (23PSCH25)	I M.Sc., Chemistry	Ms. P. Pavithra
9	ORGANIC PHOTO CHEMISTRY (23PCH31)	II M.Sc., Chemistry	Mr. V. Umamageshwaran
10	COORDINATION CHEMISTRY (23PCH32)	II M.Sc., Chemistry	Mrs. K. Gandhimathi
11	BIOMOLECULES AND HETEROCYCLC COMPOUNDS (23PECH33A)	II M.Sc., Chemistry	Dr. S. Praveen Kumar

**100% ATTENDANCE SECURED BY STUDENTS:**

Most of our department students, both UG and PG secured 100% attendance