



CHEM FRONTIER Issue 4

Department of Chemistry - Newsletter

Highlights of the issue

- Best Arise Department
- Ph.D. @ South Korea
- Summer research fellowship @ Science Academies Bengaluru.
- TNSCST Students project Scheme
- Best Teacher and Best Oral presentation awards
- Prof. ARV Fellowship to PG Students
- CHEMSPARK Competitions
- Best Arise Department
- Industrial Visit
- Internship by Students
- Prizes won at intercollegiate competition

To Read our previous issues, Scan the following image



Editor-in-Chief

Dr. S. Rayappan
Associate Professor
& Head



Editor

Dr. M. Amalraj
Assistant Professor



Message from the Editor-in-Chief

Welcome to the latest edition of our Chemistry Department Newsletter! As we venture into the heart of another academic year, it is with great enthusiasm that we present to you a compilation of the department's recent accomplishments, groundbreaking research, and insightful perspectives. In this issue, you will find a diverse range of articles that reflect our commitment to excellence in education and research.

Our esteemed faculty members continue to push the boundaries of knowledge, fostering an environment where curiosity knows no bounds. Their dedication to nurturing the next generation of chemists is evident in the success stories of our students who have gone on to excel in academia, industry, and beyond. As a department, we take immense pride in being a catalyst for their growth.

In this academic year 2022-23, various academic activities like organizing Bridge Course in Chemistry, CHEMFEST- an intercollegiate competition, an international conference on Expanding Frontiers in Chemistry (EFC 23), National Science Day celebration, various guest lectures and a new initiative Chemspark-intradepartmental competitions etc. were organized. In addition, our students brought laurels to the Department. The department was recognized as the **BEST ARISE DEPARTMENT** for the extension services and also won the **FIRST prize in Crib competition** organized by Arul Anandar College.

I extend my heartfelt gratitude to the Editor for their dedication in bringing this newsletter to life. Their meticulous efforts in capturing the essence of our department are truly commendable.

Thank you for your continued support and enthusiasm. Here's to another year of discovery and advancement in the realm of chemistry!

Dr. S. Rayappan
Editor-in-Chief

Awards and Achievements of Faculties



Mr. S.A. Deva Prince received the “**Best Teacher Award**” from Sri Arunachala Education Trust & Mangayarkarasi Educational organization on 28-10-2022.



Dr. M. Amalraj received the “**Best Oral Presentation Award**” from RTMM 2022 – Crystal Growth & Design-American Chemical Society (ACS) Publications.

He is also recognized as Reviewer in the International Journal of Hydrogen Energy – Elsevier Publications -Impact factor- 7.318



Dr. K. Kombaiah and Dr. M. Amalraj are recognized as the guest editor for the Special Issue "Energy Storage Applications using Nanomaterials" in the 'Applied Chemical Engineering'.

Research Funds Mobilized by Faculties



Dr. N. Savitha Devi received a research grant of Rs. 7500/- under “**Student Project Scheme**” at TNSCST, Tamil Nadu for the academic year 2022-23



Dr. M. Easuraja and Dr. K. Jansi Rani received a research grant of Rs. 7000/- under “**Seed Money Research Grant**” at Arul Anandar College for the academic year 2022-23



Research Publications by Faculty

Dr. M. Amalraj and Dr. A. John Jeevagan published a research article entitled “*Catalytic hydrolysis of sodium borohydride for hydrogen production using phosphorylated silica particles*” in the *Environmental Science and Pollution Research* 30 (2023) 21199-21212.

(<https://doi.org/10.1007/s11356-022-23672-8>). Impact Factor: 5.190.

Dr. M. Amalraj and Dr. A. John Jeevagan published a research article entitled “*Candle soot derived carbon dots as potential corrosion inhibitor for stainless steel in HCl medium*” in the *Journal of Applied Electrochemistry* (In press).

(<https://doi.org/10.1007/s10800-023-01941-9>). Impact Factor: 2.9

Dr. M. Amalraj and Dr. A. John Jeevagan published a research article entitled “*Simultaneous detection of uric and ascorbic acids by AuNPs electrodeposited on the GCE surface*” in the *Applied Nanoscience* (In press).

(<https://doi.org/10.1007/s13204-023-02869-4>). Impact Factor: 3.869



Google Scholar URL id of the Chemistry Department
<https://scholar.google.com/citations?user=TWfaMfUAAAAJ&hl=en&authuser=1>

Faculty as Resource Person

Dr. S. Rayappan

- Acted as **External Examiner** for Chemistry Practical Examinations at *Vivekananda College*, Madurai on 09-11-2022, 04-04-2023 and 06-04-2023.
- Acted as **Chair Person** for the Second International Conference on Frontiers in Chemistry and Material Science (ICFCMS-22) organized by *Mannar Thirumalai Naicker*, Madurai-04 on 15 December 2022.
- Acted as **External Examiner** for Practical Courses and viva-voce examinations at *Fatima College* and *SN College*, Madurai during 2022-23 academic year.
- Acted as **External Examiner** at *Thiagarajar College*, Madurai on 26-04-2023.
- Acted as **External Expert** to conduct the **External Academic Audit** at *Saraswathi Narayanan College*, Madurai on 10-05-2023.
- Acted as **Board of Studies external member** at *Saraswathi Narayanan College*, Madurai and *SVN College, Madurai* for UG and PG programmes on 28-04-2023 and 07-06-2023, respectively.
- Acted as **Chair Person in the Scrutiny Board** at *Mother Theresa Women's University Research and Extension Centre*, Keelakuilkudi, Madurai on 29-03-2023.

Dr. N. Savitha Devi

- Acted as **Jury for Model Making** competition in One Day International Seminar & Competitions on Preservation of the Ozone layer organized by *Yadava College*, Madurai on 16-09-2022.
- Acted as **Jury for Poster Making** competition in Commemoration of National Mathematics Day organized by Department of Mathematics, *Arul Anandar College*, Madurai on 19-12-2022.
- Acted as **External Examiner** for the practical examination at Department of Chemistry, *Lady Doak College*, Madurai on November 2022 and April 2023.
- Acted as **External Examiner** at Department of Chemistry, *Meenakshi College*, Madurai on 1-5-2023.

Mr. S.A. Deva Prince

- Acted as **Resource Person** and delivered a lecture entitled “**Tricks and Tips to crack competitive exams**” at *Vivekananda College*, Madurai on 28-07-2022.
- Acted as **Resource Person** and delivered a lecture entitled “**Exploring Problem Solving Skills in Chemistry**” at *Jayaraj Annapackiam College for Women*, Periyakulam on 18-10-2022.
- Acted as **Resource Person** and delivered a lecture entitled “**Interesting Facts in Chemistry**” at *Thiruvalluvar Arts and Science College for Women*, Madurai on 31-01-2023.

Dr. S. Martin

- Acted as **Resource Person** and delivered a lecture in **Awareness programme on Drug Addiction** organized by *National Service Scheme, Arul Anandar College*, Madurai on 09-09-2022.

Dr. M. Amalraj

- Acted as **Resource Person** and delivered a lecture entitled “**The Art of Learning Science**” in the First year Induction Programme 2022 organized by *Sri Venkateswaraa College of Technology*, Sriperumbudur on 21-11-2022.

Abstracts in National / International Conferences

Name of the Faculty	Name of the Conferences	Name of the Institution and Place	Title of the Paper	Date
Dr. N. Savitha Devi	International Conference on Functional Materials for Sustainable Energy and Environment	Department of Chemistry & Physics, Lady Doak College, Madurai	Domino synthesis of 4H-pyrans derived from ethyl 4-chloroacetoacetate and their antibacterial and anti-cancer activity	30, 31 January 2023
Dr. K. Jansi Rani	Two days International Webinar on Recent Advances in Chemical Sciences-RACS 2k22	Gandhigram Rural Institute, Gandhigram	Synthesis, characterization and biological activity of Schiff base metal complexes derived from 3,5-dichlorosalicylaldehyde and 2-amino-4-methy phenol	21, 22 July 2022
Dr. M. Amalraj, Dr. A. John Jeevagan			Anthocyanin Extract of Ixora Coccinea Flower as Potential Inhibitor for Mild Steel in Acid Solution and Volatile Gas Sensor	
Dr. M. Amalraj, Dr. A. John Jeevagan*	International Conference on Recent Trends in Materials and Magnetism (RTMM – 22)	Department of Chemistry, Loyola College, Chennai	Synthesis and Characterization of Peripheral Thiol Functionalized (NiII) Phthalocyanine and their Self-Assembly on Au Electrode for Electrochemical Sensing of L-Dopa	15, 16 – December 2022
Dr. A. John Jeevagan	International Conference Proceedings on Expanding Frontiers in Chemistry (EFC 23)	Department of Chemistry, Arul Anandar College, Karumathur	Enhancement of Visible Light Induced Hydrogen Generation on Sn ₃ O ₄ Loaded PdPb ordered Bimetallic photocatalyst	15, 16-February 2023
Dr. M. Amalraj			Preparation of antibiotic resistance fabric using NiFe ₂ O ₄ nanoparticles	
			Solvent Free Synthesis of Co/C Nanoparticles and Characterization for Hydrogen Generation from Sodium Borohydride Hydrolysis	
			Corrosion Inhibitive Features of Lippia nodiflora extract with Mn ²⁺ on Carbon Steel in 180 ppm of Chloride Ion Solution	

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Dr. M. Amalraj, Dr. A. John Jeevagan*	International Conference on Recent Trends in Material Science (RTMS 2023)	Department of Physics, Arul Anandar College, Karumathur	Facile Synthesis and Photocatalytic Activity of Visible Light Driven Tin Oxide (Sn ₃ O ₄) Supported Pd Based Dual-Co-catalyst	9, 10 March 2023
Dr. A. John Jeevagan, Dr. M. Amalraj*	International Conference on Millets: Ensuring Food Security and Sustainable Farming	Department of Food Science and Technology, Arul Anandar College, Karumathur	pH responsive anthocyanin filter paper as a visual indicator for volatile gases and food deterioration	16, 17 March 2023
Dr. F. Michaelraj,			Synthesis, characterization, biological activity of 1-Aryl-4-Phenylamino-1-Butanone Hydrochloride	
Dr. K. Jansi Rani			Synthesis, Characterization and Biological Activity of Schiff Base Metal Complexes Derived from 3-Ethoxysalicylaldehyde and 2-Amino-4-Chlorobenzoic Acid	
Dr. M. Easuraja			Synthesis, Characterization and Biological Activity of Furfuraldehyde Di-N-Butyl Acetal and its Action with Halocompounds at Low Temperature	

Professional Enrichment of Faculty

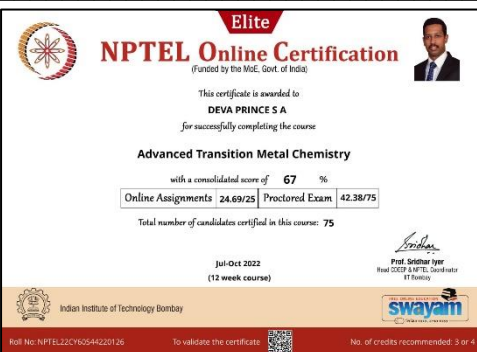
- **Dr. N. Savitha Devi** completed interdisciplinary two-week **Refresher Course** at Teaching Learning Centre, Ramanujan College, University of Delhi between 06-06-2022 to 20-06-2022.
- **Mr. S. A. Deva Prince** completed **Refresher Course in Chemistry** at Teaching Learning Centre, Ramanujan College, University of Delhi between 29-11-2022 to 13-12-2022.
- **Mr. S. A. Deva Prince** also completed online **FDP** on **Advanced Transition Metal Chemistry** organized by SWAYAM – NPTEL funded by MoE, Government of India during Jul-Oct 2022.
- **Dr. S. Martin** completed **Refresher Course in Chemistry** at UGC-Human Resource Development Centre, Pondicherry University, Puducherry between 01-06-2022 to 14-06-2022.
- **Dr. M. Amalraj** completed **Refresher Course in Chemistry** at UGC-Human Resource Development Centre, Bharathiar University, Coimbatore, Tamil Nadu between 07.10.2022 to 20.10.2022.
- **Dr. M. Amalraj** also completed **online FDP** on **Elementary Electrochemistry** organized by SWAYAM – NPTEL funded by MoE, Government of India during Feb-Apr 2023.
- **Dr. F. Michael Raj** and **Dr. K. Kombaiah** completed **National Level Online Faculty Development Program on Outcome Based Education (OBE)** organized by IQAC of JPM Arts and Science College, Kanchiyar, Idukki between 16-02-2023 to 22-02-2023.

Participation in Conferences / Seminars / Workshops by Faculty

- **Dr. S. Martin** has participated in a workshop on “*Microscale Experiments in Chemistry Practical*” organized by Department of Chemistry, Loyola College, Chennai on 8-10, December 2022. He also attended an Awareness/Training programme on “*National Intellectual Property Awareness Mission*” organized by Government of India, Ministry of Commerce and Industry, Department for Promotion of Industry and Internal Trade on 09-08-2022.
- **Dr. K. Kombaiah** attended International Short Term Training Programme V on “*Greener living: Reduce, Reuse and Recycle*” organized by Raj Rishi Govt. Autonomous College, Alwar, Rajasthan on 1-7, February 2023.
- **Dr. K. Jansi Rani** participated in the *Xaverian Chem Quiz Series (XCQS-XXVII)* organized by Department of Chemistry, St. Xavier’s College, Palayamkottai on 08-12-2022.

SWAYAM – NPTEL Courses Completed by Faculty

- **Mr. S. A. Deva Prince** and **Dr. K. Jansi Rani** also completed an online Course on *Advanced Transition Metal Chemistry* organized by **SWAYAM – NPTEL** funded by MoE, Government of India during Jul-Oct 2022.
- **Dr. K. Jansi Rani** completed an online course on Co-Ordination Chemistry (Chemistry of Transition Elements) organized by **SWAYAM – NPTEL** funded by MoE, Government of India during Jan-Apr 2023.
- **Dr. M. Amalraj** completed an online course in *Elementary Electrochemistry* organized by **SWAYAM – NPTEL** funded by MoE, Government of India during Feb-Apr 2023.



Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
DEVA PRINCE S A
for successfully completing the course

Advanced Transition Metal Chemistry

with a consolidated score of **67** %

Online Assignments	24.69/25	Proctored Exam	42.38/75
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Total number of candidates certified in this course: **75**

Jul-Oct 2022
(12 week course)

Prof. Srinath Iyer
Head, NPTEL, Coordinator
IIT Bombay

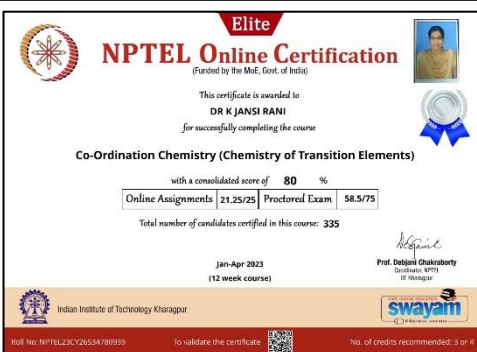
Indian Institute of Technology Bombay

swayam

Roll No: NPTEL22CY6544220126

To validate the certificate: [QR Code]

No. of credits recommended: 3 or 4



Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
DR K JANSI RANI
for successfully completing the course

Co-Ordination Chemistry (Chemistry of Transition Elements)

with a consolidated score of **80** %

Online Assignments	21.25/25	Proctored Exam	58.5/75
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Total number of candidates certified in this course: **335**

Jan-Apr 2023
(12 week course)

Prof. Debajit Chakraborty
Coordinator, NPTEL
IIT Kharagpur

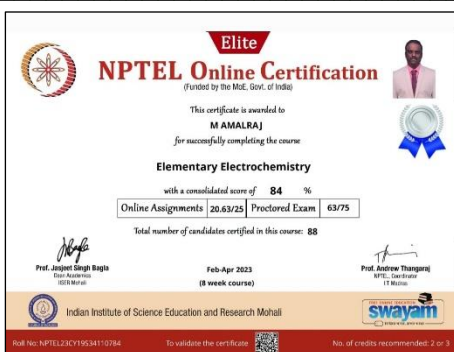
Indian Institute of Technology Kharagpur

swayam

Roll No: NPTEL23CY26334780939

To validate the certificate: [QR Code]

No. of credits recommended: 3 or 4



Elite
NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
M AMALRAJ
for successfully completing the course

Elementary Electrochemistry

with a consolidated score of **84** %

Online Assignments	20.63/25	Proctored Exam	63/75
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Total number of candidates certified in this course: **88**

Feb-Apr 2023
(8 week course)

Prof. Aniket Singh Bagla
Chair, NPTEL
IIT Madras

Prof. Anand Thangaraj
NPTEL, Coordinator
IIT Madras

Indian Institute of Science Education and Research Mohali

swayam

Roll No: NPTEL23CY1933410784

To validate the certificate: [QR Code]

No. of credits recommended: 2 or 3

Chemistry Association Activities

The Chemistry Association has been a dynamic hub of academic and extracurricular activities, fostering a deep passion for chemistry among students. This academic year, the association organized a series of enriching events that both educated and entertained.

The highlight was the International Conference on "Expanding Frontiers in Chemistry", where renowned guest speakers delved into the application of chemistry in our daily routines.

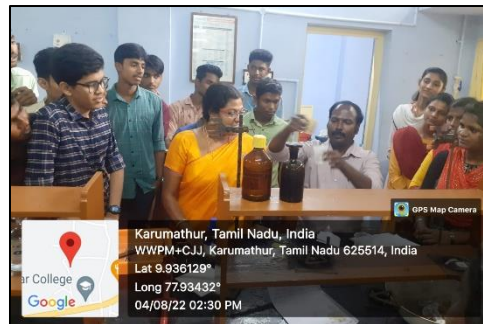
Seminars, and guest lectures were organized, catering to diverse interests within the field. These events provided a platform for students to engage with esteemed researchers and professionals, gaining insights into cutting-edge developments.

In addition, Bridge Course for UG and Orientation Programme for PG, Prof. ARV Fellowship, National Science Day celebration, CHEMSPARK- an Intracollegiate competition and CHEMFEST – an Intercollegiate competition helped the students to learn many new concepts and ideologies in Chemistry.

Bridge Course in Chemistry

A Bridge Course for first-year undergraduates was held at AV Hall in the Chemistry Department on August 4th and 5th, 2022. **Dr. S. Rayappan**, *Head of the PG Chemistry Department*, welcomed and introduced students. **Rev. Dr. John Pragasam S.J.**, *Rector*, delivered the inaugural address.

The programme featured diverse sessions like "Chemistry in Life," "Introduction to Inorganic, Physical, and Organic Chemistry," "Job Opportunities," and "Competitive Exams." The valedictory function hosted Vice Principal **Dr. A. Durai Singam**, while **Dr. F. Michael Raj** expressed gratitude. Notably, 43 first-year B.Sc. students benefited from the program, which also included an Entry Level Test on August 3rd, 2022. The Bridge Course not only established a strong foundation but also fostered interactions among students and faculty.



Orientation Programme for PG

The Orientation Program for first-year postgraduate students was held at the Chemistry Department on August 12th, 2022. **Dr. S. Rayappan**, *Head of the PG Chemistry Department*, extended a warm welcome and introduced both students and faculty. **Rev. Dr. John Pragasam S.J.**, *Rector*, delivered the inaugural address. Chemistry Department faculty conducted sessions on "Job Opportunities," "Higher Education Prospects," and "Competitive Exams in Organic, Inorganic, and Physical Chemistry." The program greatly benefited 16 first-year M.Sc. students, offering valuable insights and guidance.



Fresher's Day celebration

A vibrant Fresher's Day celebration was orchestrated by the II UG, III UG, and II PG students to warmly welcome the incoming first-year undergraduates and postgraduates on 13th August, 2022. **Dr. S. Rayappan** initiated the event by extending a warm welcome to the fresher students and introducing the department's esteemed faculty to them. **Rev. Dr. John Pragasam SJ** followed suit by honoring both students and faculty members. The department's faculty offered words of encouragement and best wishes for the future success of the first-year students. The festivities continued with an engaging cultural program organized by the II and III UG students. As a lasting gesture, senior students of the department presented the fresher students with meaningful tokens of remembrance.



Prof. ARV fellowship

In the academic year 2021-22, the Prof. ARV Scholarship was inaugurated for students pursuing M.Sc. in Chemistry, thanks to the initiative of **Dr. Mohamed Ibrahim**, Ph.D., a Senior Scientist based in the USA, **Dr. Prapha Ibrahim**, Ph.D., another Senior Scientist from the USA, and **Prof. S. Ponnudurai**, the former Head of the Department of Chemistry at H. H. Rajah's College, Pudukkottai – 622 001. This year, **Prof. S. Ponnudurai** graciously agreed to continue the scholarship for the same recipients, namely **Mr. F. Arun Pratheepan** and **Mr. S.P. Vijayan**, each of them received **Rs. 25,000/-**. The scholarship award ceremony took place on 29th September 2022. During the event, **Rev. Dr. Godwin Rufus S.J.**, Principal, extended a warm welcome and expressed gratitude to **Prof. S. Ponnudurai** and his spouse for their contribution to the campus in facilitating the **Prof. Dr. A. R. Venkitaraman Scholarship**. In a subsequent development, the **Prof. ARV Fellowship** was bestowed upon two first-year M.Sc. students, namely **Mr. M. Gokula Krishnan** and **Mr. S. Claretraja**, on 7th March 2023. Similar to their peers, they each received a scholarship amount of Rs. 25,000.



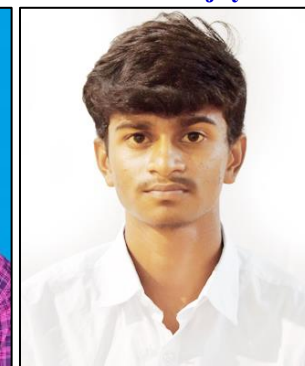
Mr. F. Arun Pratheepan



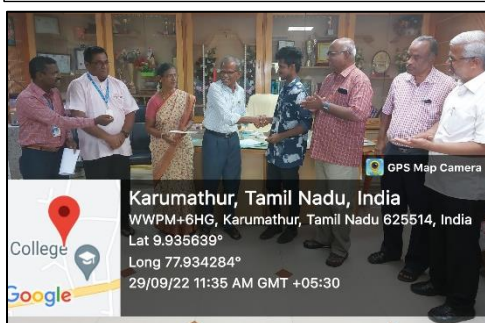
Mr. SP. Vijayan



**Mr. M. Gokula
Krishnan**



Mr. S. Claretraja



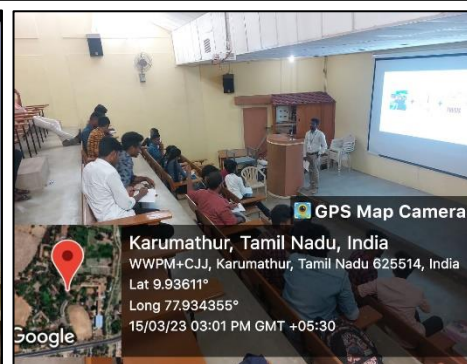
Alumni Meeting

On 5th November, 2022, AACAA held an Alumni Day with around 10 Chemistry Department alumnae. Before the 2022-2023 General Body Meeting, alumni were invited to reconnect and pay homage to late **Dr. S. Arockiadoss**, who taught Chemistry from 1984 to 2008. **Dr. D. Thenraja**, Former Head, highlighted his contributions. The event was attended by faculty, non-teaching staff, alumni, and current students. **Mr. K. Chandren** (1987-1990) and **Mrs. Akila** (2001-2004) became AACAA Executive Committee members during the subsequent General Body Meeting, serving from 2023 to 2025.



CHEMSPARK – An Intradepartmental Competition

The Department of Chemistry launched **CHEM SPARK**, an intracollegiate event aimed at inspiring student engagement in diverse competitions and uncovering latent talents. The inauguration took place on September 7, 2022, at AV Hall, Arul Anandar College, officiated by **Rev. Dr. Godwin Rufus S.J.** On the same occasion, chemistry students organized a Teacher's Day Celebration to honour their faculty. The inaugural CHEM SPARK activity, Chem Meme, was hosted by **Dr. K. Kombaiah**, seeing participation from 18 student teams on September 7, 2022. Additionally, **Chem Connection and Chem Charade** were conducted on March 15, 2023, by **Dr. F. Michael Raj** and **Dr. M. Amalraj**, respectively. Eight student teams engaged in both events. Subsequently, **Chem Lab** event took place on March 16, 2023, co-organized by **Dr. M. Easuraja** and **Dr. K. Jansi Rani**, with eight participants. Prize winners received their awards and certificates during the National Science Day celebrations held on March 21, 2023.



CHEMFEST 2022-23 – An Intercollegiate Competition and Release of CHEM FRONTIER Newsletter Issue 3

Department of Chemistry, Arul Anandar College arranged **CHEMFEST (2022-23) - an intercollegiate competition** on October 28, 2022. Colleges from across Tamil Nadu participated, showcasing their students' talents. During the inauguration of the event, **Rev. Dr. John Pragasam SJ, Rector**, launched the third newsletter, **CHEM FRONTIER (issue 3)**. The first copy was received by **Rev. Dr. M. Anbarasu SJ, Vice Principal**. Diverse competitions like **Chem Quiz UG, Chem Quiz PG, Chem Rangoli, Chem Song, Chem Meme, Chem Connection, Chem Hunt, Chem Adact**, and **Mr. / Ms. Chemist** were held. With 191 students from 18 colleges, the event emphasized skill development, experiential learning, and talent exposure. **Dr. S. Amalraj**, Headmaster of Government High School, served as a jury. Ayya Nadar Janaki Ammal College, Sivakasi, secured the overall championship.



International Conference on Expanding Frontiers in Chemistry – EFC 2023

The PG Department of Chemistry, Arul Anandar College (Autonomous), Karumathur, Madurai, organized the International Conference on Expanding Frontiers in Chemistry (EFC 23) on February 15th and 16th, 2023.

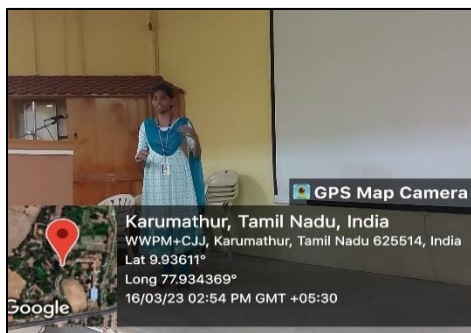
Dr. K. Muruga Poopathi Raja, Professor at the Central University of Kerala, inaugurated the conference. The abstracts of the conference proceedings, with ISBN 978-93-94448-02-5, were released by Rev. Dr. Godwin Rufus S.J., and the first copy was received by Rev. Dr. John Pragasam S.J.

Distinguished experts like Dr. Eng. Chitiphon Chuaicham from Kyushu University, Japan (Virtual Presentation), Prof. Dr. K. Sethuraman from the Central University of Tamil Nadu, and others, delivered lectures spanning various domains of chemistry. A total of 81 abstracts were presented, including submissions from Malaysia and two from Taiwan. With 90 participants from various institutes and approximately 160 students from Arul Anandar College's Chemistry Department, the conference fostered a vibrant exchange of knowledge.



National Science Day Competitions & Celebrations

The Department of Chemistry at Arul Anandar College has celebrated **National Science Day** annually since 2017. This included *speech and poster-making competitions* for science students on March 15 and 16, 2023, respectively. The speech topic was "*Pros and Cons of Science and Technology*" while the poster theme was "*Global Science for Global Wellbeing*." Prizes were awarded during the National Science Day event on March 21, 2023. On the same day, a special lecture on "**Hydrogen as Future Fuel**" was delivered by **Dr. A. Elangovan** from Thiagarajar College, followed by prize distribution for CHEMSPARK and National Science Day Competitions.



Guest Lectures

The Chemistry Association at the Department of Chemistry arranged a series of enlightening guest lectures during the academic year 2022-23.

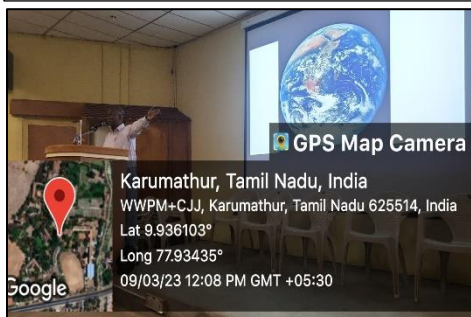
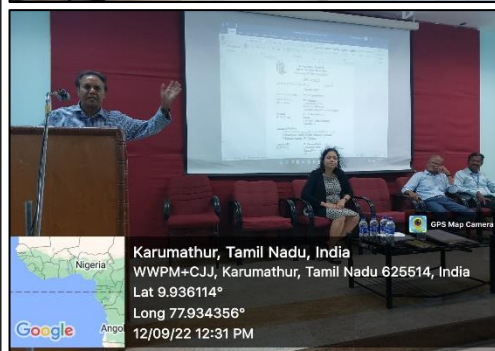
Guest Lecture 1, held on 01-09-2022, featured **Dr. G. Rajkumar** from Vivekananda College, Madurai, speaking on "The Important Aspects of Asymmetric Synthesis." This lecture concluded with a quiz and encouragement for competitive exams.

Guest Lecture 2, held on 12-09-2022 at MTH, welcomed **Dr. Mohammed Ibrahim** and **Dr. Prabha Ibrahim**, along with **Prof. S. Ponnudurai**. They motivated students and shared opportunities in Chemistry. **Prof. S. Ponnudurai** highlighted the achievements of the donors, while fellowship recipients expressed gratitude.

Guest Lecture 3 on 30-01-2023 at AV Hall featured **Dr. N.S.K. Gowthaman** from *Monash University, Malaysia*, discussing "Functionalized Carbon Nanomaterials: Fundamentals to Applications in Sensors." He also engaged with students about higher education.

Guest Lecture 4 on 09-03-2023 at AV Hall hosted **Dr. K. Anandaratchagan** from *Islamiah College*, who spoke on "OUT RUN GLOBAL CITIZENS," interacting with students.

Furthermore, a joint workshop on **Material Science** was conducted by the Departments of Physics and Chemistry. **Dr. A. Somanathan**, former Head of *Polymer Science & Technology at CLRI*, Chennai, delivered a lecture on "The Importance of Smart Polymers," fostering research collaboration.



Industrial Visit – BioMe Analytics and CECRI

Chemistry Department organized a day-long visit to **CSIR-Central Electrochemical Research Institute (CECRI)** and **BIOME ANALYTICS** in Karaikudi on September 26, 2022. 37 students from I and II M.Sc. classes, along with faculty **Dr. N. Savitha Devi, Dr. S. Martin, and Dr. A. John Jeevagan**, visited CECRI and BioMe Analytics, Karaikudi. Students explored hydrogen fuel technology, glass welding methods, batteries, and fuel cells, along with CECRI's research labs. Mr. Hariharan and Mr. Loganathan from II M.Sc. Chemistry attended an open quiz competition at CECRI. The visit continued to BioMe Analytics, where CEO Dr. Jagadeesan introduced facilities. Students also explored the Cell Biology lab and Analytical Laboratory in BioMe Analytics, Karaikudi



Industrial Visit – Chocolate & Tea Factory

An industrial visit was organized for III B.Sc. Chemistry and II M.Sc. Chemistry students to Munnar, Kerala on March 4-5, 2023. On March 4th, students explored the **Macofa chocolate factory** (Manna's Sweets) in Anachal, Munnar. They gained insights into chocolate production from raw materials like cacao, sugar, and milk powder, and also explored the R&D laboratory. On March 5th, the students visited **Kannan Deven Hills Plantations and the Mattupetty Tea Factory**, learning about tea dust preparation and quality analysis. Apart from industry visits, the students also explored local attractions. Faculty members **Mr. S. A. Deva Prince, Dr. F. Michaelraj, and Dr. K. Jansi Rani** accompanied the students.



Parent – Teacher Meeting

Arul Anandar College's Department of Chemistry conducted *parent-teacher meetings* on October 8, 2022, for III B.Sc., October 29, 2022, for II B.Sc. and II M.Sc., and March 4, 2023, for I B.Sc. and I M.Sc. Chemistry students. **Dr. S. Rayappan**, the Head of the Department, extended a warm welcome to the parents. The parents were subsequently provided the opportunity to have one-on-one discussions with the teachers to inquire about their ward's attendance and academic progress.



Farewell to III B.Sc. and II M.Sc. Students

On April 13, 2023, I, II UG and I PG students collaborated to meticulously organize a farewell ceremony. It provided departing students a poignant moment to reminisce about their journey at Arul Anandar College. Faculty members extended well-wishes and aspirations for their future. The event turned lively with cultural performances and enjoyable fun games to enhance the joy of the farewell.



Academic Achievements of Students

Ph.D. Admission @ Pusan National University

We're excited to share the success story of one of our own! Former student **Mr. R. Rahul (2019-21)** has embarked on a remarkable journey by joining the Ph.D. program at **Pusan National University, South Korea**. With roots at Arul Anandar College, Mr. R. Rahul is pursuing their passion on an international stage.



Swayam – NPTEL Course

Mr. M. Gokula Krishnan (I PG) successfully completed NPTEL course on “*Co-Ordination Chemistry (Chemistry of Transition Elements)*” during Jan-Apr 2023 and scored 58%.



IAS/INSA/NASI Summer Internship

Mr. F. Arun Pratheepan, II M.Sc. Chemistry chosen for a summer research fellowship by Science Academies (**IAS/INSA/NASI**), Bengaluru, successfully concluded his project under the mentorship of **Dr. Debaprasad Mandal** at the *Indian Institute of Technology, Ropar*, from June to August 2022. During his two-month tenure at IIT, Ropar, he was granted a summer fellowship of **Rs. 12500/- per month**.

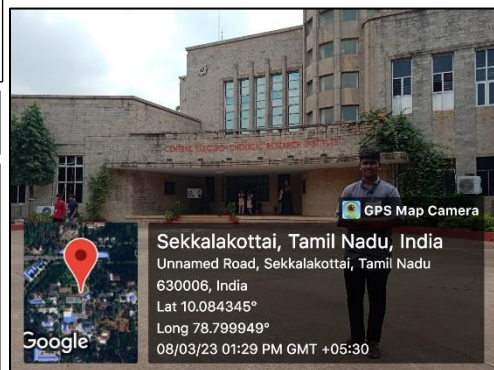


TNSCST – Student Project Scheme

In the 2022-23 academic year, **Mr. JP. Hariharan** and **Mr. R. Ajaydev**, both pursuing II PG Chemistry, achieved selection in the esteemed student project scheme offered by **TNSCST, Chennai**. Guided by **Dr. N. Savitha Devi**, they secured a research grant of **Rs. 7500/-** from TNSCST to support their project endeavors.

Skill Development Programme at CECRI, Karaikudi

Mr. AS Karmugil and **Mr. S. Rejoy**, students of *II B.Sc. Chemistry*, secured positions in the 5-day **Skill Development Training Programme** at CECRI, Karaikudi. The program encompassed hands-on training in fundamental electrochemical techniques along with instruction on essential characterization instruments.



Higher Education and Placement

Mr. Mohammad Ismail (II PG) joined Ph.D., under the guidance of **Dr. P. Suresh**, Madurai Kamaraj University. In addition, **Mr. N. Ajay**, **Mr. G. Assisi Abisheik**, **Mr. S. Deepak Manikandan**, **Mr. S. Sudeep** (III UG) and **Mr. M. Anish**, **Mr. O. Pandiyaraja**, **Ms. M. Sambika**, **Mr. Samuel Joseph** and **Mr. A. Vishwanath** (II PG) were placed in various companies.

Presentation of Research work in Conferences by Students

- On February 15-16, 2023, **Mr. K. Loganathan** showcased his research at the *International Conference on Expanding Frontiers in Chemistry*, hosted by the Department of Chemistry, Arul Anandar College, Karumathur.
- **Mr. F. Arun Pratheepan, Mr. JP. Hariharan, Mr. Michael Aruldoss, Mr. Sivanandhakumar, and Mr. M. Mariya Kishore** presented their research in the *International Conference on Millets: Ensuring Food Security and Sustainable Farming*, held by the Department of Food Science and Technology, Arul Anandar College, on March 16-17, 2023.
- **Mr. M. Maria Kishore and Mr. M. Gokula Krishnan** participated in a paper presentation at *Amalchem Club-UG*, organized by the Department of Chemistry, *Lady Doak College, Madurai*, on November 4, 2022.

Prizes won at Intercollegiate Competitions

Overall Championship @ Yadava College

Won the Overall Championship at Intercollegiate competition organized by **Yadava College, Madurai**.

Mr. M. Gokula Krishnan & Mr. A. Tokophilus (I PG) – won I Prize in *Model Making*

Mr. S. Joel Kevin & Mr. S. Sujendran (II UG) – won II Prize in *Model Making*

Ms. M. Selvi (III UG) & Mr. K. Satheesh Kumar (II UG) – won I Prize in *Chem Rangoli*

Ms. M. Anjali & Ms. M. Monica Indra (II UG) – won III Prize in *Chem Rangoli*

Intercollegiate Competition @ Jayaraj Annappaikiam College

Mr. R. Muthu & Mr. T. Prathiv (I UG) – Won I Prize in *Chem Charade*

Mr. JP Hariharan (II PG) – Won I Prize in *Chem Quick*.

Mr. K. Aravindhkumar (III UG) – Won I Prize in *Chem Presentation*.

Mr. R. Karthik Nagaraja (III UG) – Won I Prize in *Image Conveys a Message*

Virtual Intercollegiate Competition @ Loyola College

Mr. A. Micheal Arul Dass (II PG) – Won II Prize in *Chem Quiz*.

Runner up @ Ayya Nadar Janaki Ammal College

Mr. M. Mariya Kishore (II PG) – won II Prize in *Chem Star*.

Mr. JP Hariharan (II PG) & Mr. S. Calretraja (I PG) – Won I Prize in *Chem Quiz*.

Mr. M. Gokula Krishnan & Mr. A. Tokophilus (I PG) – Won I Prize in *Chem Hunt*.

Ms. M. Monika Indra & Mr. S. Ananth (II UG) – Won III Prize in *Chem Rangoli*

Mr. K. Satheesh Kumar (II UG) – Won III Prize in *Chem Song*.

Mr. S. Joel Kevin (III UG), Mr. M. Gokula Krishnan, Mr. A. Jakob & Mr. A. Tokophilus (I PG), Mr. K. Harishkumar (III UG) – Won III Prize in *Chem Ad-act*

Intercollegiate Competition @ Vivekananda College

Mr. K. Aravindkumar (III UG) – Won I Prize in *Smart Lecture*.

Mr. A. Duraipandi & Mr. Maria Kishore (II PG) – Won I Prize in *Lab Rockers*.

Mr. R. Kirubakaran & Mr. R. Karthik Nagaraja (III UG) – Won I Prize in *Chem Director*.

Mr. R. Karthik Nagaraja – Won I Prize in *Image Conveys a Message*

Mr. S. Joel Kevin (II UG), Mr. S. Dhinavarasan, Mr. M. Mariya Aathin, Mr. P. Simiyon, Mr. T. Prathiv, Mr. R. Muthu (I UG) – Won I Prize in *Non-Vocal Reaction*.

Prizes won at Intercollegiate Competitions

Intercollegiate Competition @ Holy Cross College

Mr. JP Hariharan & Mr. K. Loganathan (II PG) – Won III Prize in *Chem Quiz*.

Mr. A. Micheal Arul Dass (II PG) – Won I Prize in Chem Cartoon & II Prize in *Chem Photography*

Mr. JP Hariharan, Mr. F. Arun Pratheepan, Mr. K. Loganathan (II PG) – Won I Prize in *Chem Connection*.

Mr. M. Rahul Gowtham (I PG), Mr. T. Prathiv (I UG) – Won III Prize in *Chem Charade*.

Intercollegiate Competition @ Mary Matha College

Mr. P. Kowsick & Mr. P. Jothimurugan (III UG) – Won II Prize in *Chem Quiz*.

Mr. S. Joel Kevin, Mr. M. Balakrishnan, Mr. S. Sujendran (II UG) and Mr. N. Jenix Heart & Mr. A. Maria Anish (III UG) – won I prize in *Chem Ad-act*

Photo Gallery - Prizes won at Intercollegiate Competitions



Photo Gallery – Convocation Ceremony & Board of Studies



Best ARISE Department for Extension Activities

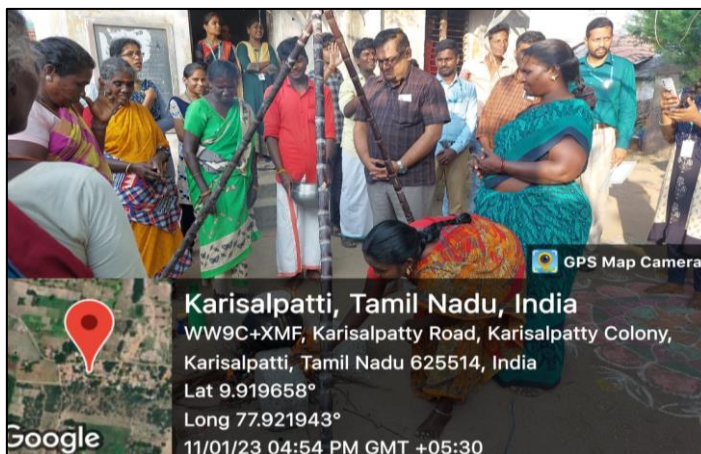
Department of Chemistry was recognized as the **“BEST ARISE DEPARTMENT”**

for their Extension Services for the academic year 2022-23.

The Department of Chemistry congratulates the **II UG students** and **Dr. F. Michael Raj** (ARISE Coordinator) for their excellent contribution.



Dr. F. Michael Raj
(ARISE Coordinator)



Students of Department of Chemistry won the I Prize in **“GRIB COMPETITION”**

The Department of Chemistry congratulates the **student participants** and **Ms. M. Selvi** (Secretary) for their excellent contribution in Crib Competition as well as all Association Activities.



Ms. M. Selvi (Secretary)

Department of Chemistry thank the management and all our stake holders for their contributions for the growth of the Department as well as *Arul Anandar College*.

Dear Readers,

As we wrap up this edition of our newsletter, we're grateful for the opportunity to connect with you. Your continued support and engagement drive us to curate valuable content. Remember, your feedback shapes the future of our newsletter. Stay tuned for exciting updates, insightful articles, and inspiring stories in our upcoming releases. Let's keep the conversation going – together, we'll explore new horizons and embrace knowledge. Thank you for being a part of our community, and until next time, stay informed and stay inspired!

Dr. M. Amalraj (Editor)