



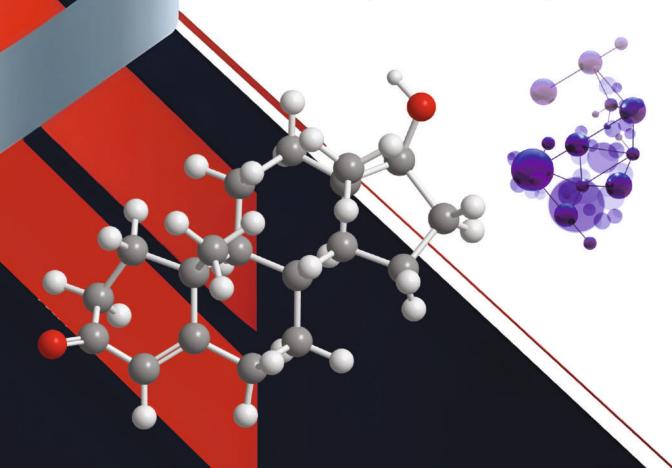
## RASATHANTHRA 2023

Vol-9

# NEWSLETTER

Department of Chemistry and Centre for Research
DBT STAR | DST FIST Supported

St. Teresa's College (Autonomous), Ernakulam, Accredited with NAAC A<sup>++</sup> Grade, 37<sup>th</sup> Rank in NIRF Ranking 2022





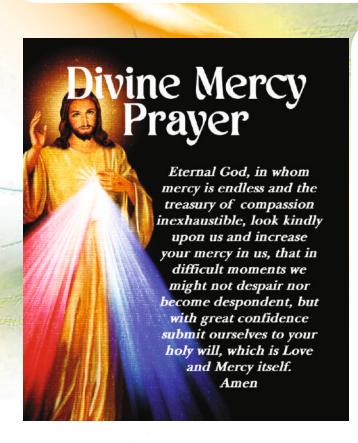


Dr. JAYA T. VARKEY

The Department of Chemistry and Centre for Research seeks to combine excellence in education with service to society. Department has always tried to

inculcate creativity, critical thinking, innovation and divergent thinking along with proper values of life for its students. The Department conducts an array of activities throughout the year bringing out all these skills among the students. We have organized many programs including Erudite lecture series by Prof. Gary Schuster from Georgia Institute of Technology, USA, International webinar by Prof. Jayan Thomas, University of Florida, USA, Science exhibition for school students and career guidance seminars. Department also initiated value-added courses on Chemistry in Everyday life, Computational Methods in Drug discovery and Sophisticated Instrumental Analysis. National science day was celebrated in a scientific way and an interdepartmental project presentation competition was also organized.

Our students excel both in academic and extra-curricular activities with exemplary performance. This could only be achieved by the combined efforts of teachers, students and parents. I express my sincere thanks to all the teachers of the department for their support, dedication and cooperation. I congratulate and appreciate Dr. Shanty A. A. the editor of "Rasathanthra 2023" for bringing out this newsletter on time.



#### **EDITORIAL BOARD**

(1st PG Chemistry)







SONA SAJEEV KUMAR (1st PG Chemistry)





Dr. SHANTY A.A.

"The Lord is my shepherd. I lack nothing. He lets me rest in grassy meadows; he leads me to restful waters; he keeps me alive. He guides me in proper paths for the sake of his good name." Psalm 23:1-3

We are delighted to present to you the 9<sup>th</sup> Volume of 'Rasathanthra', the annual newsletter of the Department of Chemistry, St. Teresa's College, Ernakulam. The editorial board extends its heartfelt and genuine gratitude to our HOD Dr. Jaya T. Varkey for her creative and invaluable inputs that guided and navigated us in the fruition of the newsletter. Special appreciation to the assiduous team of teachers and students who have endea voured to the hilt to the task at hand for days to ensure that newsletter stays current and vibrant. This year had been full of various activities by students in academics, co-curricular as well as extracurricular. Enjoy the journey of pictures and images within the pages that speaks volumes about the enriching events, activities, and celebrations held in the Department.



St. Teresa's College (Autonomous), Ernakulam, Kerala is a pioneering institution that has been the cause of evolution of many young women. The College was established on 15<sup>th</sup> June 1925 by the Carmelite sisters of St. Teresa under the leadership of the visionary foundress Servant of God, Mother Teresa of St. Rose of Lima.

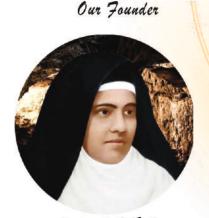
The institution is devoted to the empowerment and development of women through imparting knowledgeand life skills. St. Teresa's College envisi ons in creating, young and vibrant prodigies who are capable of achieving every accolade in their life and

turn as an asset for the society. The college has successfully transformed many young minds from a state of bewilderment to prudent, rational, assured, emotionally mature, socially committed, liberalised, confident and independent minds. St Teresa's College is the first women's college in Kochi and second in Kerala. It holds the prestige of being the first aided college for women in the state. St. Teresa's College has been bestowed with a lot of recognitions. It was granted the autonomous status in 2014 and reaccredited by NAAC with A++ grade and CGPA of 3.57 in the fourth cycle (2019) and ranked 37th by NIRF 2022.

#### 'Anyone who truly loves God travels securely'



SAINT TERESA OF AVILA
Our Heavenly patron



Servant of God MOTHER TERESA OF St. ROSE OF LIMA



Rev. Dr. Sr. Vinitha CSST Provincial Superior & Manager



Rev.Sr. Emeline CSST Director



Prof. Alphonsa Vijaya Joseph Principal



"I believe that the Science of Chemistry alone almost proves the existence of an intelligent creator"
-Thomas Alva Edison

The Department of Chemistry and Centre for Research, St. Teresa's College was established in 1966 under the charismatic leadership of Dr.(Sr.) Bertille. The Department has a research centre equipped with new scientific instruments. The Department's research groups are engaged in highly productive research work in some of the important areas of Chemistry such as Nanomaterials, Metal Complexes, Polymer Nanocomposites, Green Synthesis, etc. They have published their work in reputed International and National journals and have executed externally funded Research projects. The faculty members have also written textbooks based on the curriculum regularly. Over the years, the Department has conducted several excellent International, National, State and Regional level seminars and workshops on the frontier areas of Chemistry for students, faculty, and research scholars. The DBT and DST have recognized the excellent work of the Department, as can be identified through the award of DBT-STAR college status and DST-FIST funding. As a part of Green initiatives, micro scale analysis is introduced for core and complementary Chemistry practicals. This year in 2023, the Department has launched a new venture 'TERES', wherein 12 sanitary and body care products namely Bathing soap, Transparent soap, Bar soap, Detergents, Hair gel, Shampoo, Pain balm, Stiff and Shine, Hand wash, Dish wash, Toilet cleaner and Floor cleaners were prepared by trained students of our department. This was done as a part of value added course 'CHEMISTRY IN EVERYDAY LIFE' and through this we aim to inculcate entrepreneurship skills in our students.

#### **MILESTONES OF THE DEPARTMENT**



## PROGRAMMES OFFERED

- · B.Sc. Chemistry
- · M.Sc. Chemistry
- · Ph.D. in Chemistry

#### **COURSES OFFERED**

- · Certificate Courses
- · Value Added Courses
- · UGC NET Coaching

#### **Teresian International Journal of Chemical Sciences (TIJCS)**

Teresian International Journal of Chemical Sciences (TIJCS) is an Innovative Venture of the Department of Chemistry and Centre for Research, St.Teresa's College(Autonomous). This is a double blind peer-reviewed Journal and the mission is to submit to the readers, fresh fruit of academic studies leading to novel thoughts and current Innovative Research. The format of the Journal is designed reader-friendly. The Journal loves to deal knowledge in different fields in Chemical Sciences individually and in unison. The Journal caters to the needs of Science students with special reference to Chemistry Researchers for articles that demonstrate

clear and bold thinking. The Journal is registered with registrar of Newspapers of India with registration number - KERENG/2020/79700. Adding a new feather



to its cap, the journal was recognized with ISSN number 2583-2565 in 2021. We, the staff and students of Department of Chemistry, St Teresa's College express our heart felt gratitude and appreciation to Dr. Saritha Chandran A., Editor, TIJCS

for her sincere efforts and dedication towards achie ving this laborious task of establishing and develo ping this journal to its current state.



#### **TERES: BRAND LAUNCH**















A Manual for **Physical Chemistry Experiments** 







Dr. Ushamani M.

Dr. Saritha Chandran A.

#### **COLLABORATIONS AND MOU**

- 1. Inter University Centre for Nanomaterials and Devices, CUSAT
- 2. Department of Polymer Science and Rubber Technology, CUSAT
- 3. Department of Chemical Engineering, CUSAT
- 4. NYRO Research India Pvt Ltd, Kochi
- 5. Science Centre, Kodungallor, Thrissur
- 6. Institute of Industrial Training, Nettoor







### Who am I ...

**Everyday everytime** I ask my grumpyself Who am I.... Got random answers Someday's a toddler Who is desperate To be growup

Or sometimes, a grown up Who wants to find where Her inner child is... Most of the time I see new layers of myself Still....this is me.. This is who i am....

Jenifer John, I PG Chemistry

#### **DEPARTMENT ACTIVITIES 2022-23**

#### **WORLD ENVIRONMENT DAY WEBINAR – 17<sup>th</sup> June 2022**



The Department of Chemistry, Botany and Physics of St. Teresa's College Ernakulam conducted webinar 'WATER QUALITY AND HUMAN HEALTH: A MULTIDISCIPLINARY APPROACH' on 17th June 2022 for the UG students of Chemistry, Botany, Physics & Zoology in the Science Block of St. Teresa's College, Ernakulam. The Resource Person was Dr. N. Nandini Menon, Principal Scientist & Deputy Director of Nansen Environmental Research Centre India (NERCI). The speaker initiated her talk with a brief introduction on the need for water quality. She discussed the causes of water pollution and also about water borne diseases. She added that the change in climate, the increase in temperature has a direct impact on child survival through three direct channels: changing disease environments, greater food insecurity, and threats to water and sanitation. She concluded the session by discussing the initiatives needed to reduce Plastic pollution in coastal villages of India through Circular Economy.

### CERTIFICATE COURSE IN 'INDUSTRIAL PERSPECTIVES IN NATURAL PRODUCTS CHEMISTRY' - 8th July 2022

The Department of Chemistry and Centre for Research St. Teresa's College, Ernakulam conducted a Certificate course in "INDUSTRIAL PERSPECTIVES IN NATURAL PRODUCTS CHEMISTRY" for 50 UG students of Chemistry, on 8<sup>th</sup> July 2022. The Resource Person was Dr. Pushpakumari K.N., Assistant Vice President (R&D) at AVT Natural Products Limited. The talk was very informative and provided a deeper knowledge in natural products Chemistry.



#### ERUDITE LECTURE SERIES - 19, 21 and 25th July 2022



The Department of Chemistry and Centre for Research in association with School of Chemical Sciences, M. G. University, IUCND CUSAT and St.Paul's College, Kalamassery conducted ERUDITE LECTURE SPONSORED BY KERALA STATE HIGHER EDUCATION COUNCIL for UG, PG, Research Scholars and Faculty of Chemistry on 19<sup>th</sup>, 21<sup>st</sup> and 25<sup>th</sup> July 2022. The Resource Person was Prof. Gary B. Schuster, Vassar Woolley Professor, Emeritus of Georgia Institute of Technology. The objective of the program was to create awareness amongst students on the research areas in Chemistry and to inspire them to pursue further studies in Chemistry. The talk was about the latest findings in understanding the chemical evolution of life which not only tries to unravel the mysteries of origin of life on earth but also provides a deeper insight about the structure and functions of biomolecules.







**Ananiya Robin, IIIDC Chemistry** 

### STUDENT ENRICHMENT PROGRAMME Sr. BERTILLE MEMORIAL LECTURE SERIES 2022-2023 - 2<sup>nd</sup>, 3<sup>rd</sup> and 5<sup>th</sup> August 2022

The Department of Chemistry and Centre for Research and Partnering Institution - St. Paul's College Kalama ssery conducted a webinar on "RECENT TRENDS IN CHEMICAL SCIENCES" on 2<sup>nd</sup>, 3<sup>rd</sup> and 5<sup>th</sup> August 2022. The Resource Person on the first day was Dr. Jayan Thomas, Professor of Nanoscience and Technology Center, University of Central Florida, USA. On 3<sup>rd</sup> August the Resource Person was T Govinda Raju, Professor of Bioorganic Chemistry Laboratory, JNCASR, Bangalore. On 5<sup>th</sup> August, the Resource Person was Dr. Akkattu T. Biju, Associate Professor of Department of Organic Chemistry, IISc, Bangalore. The outcome of the program was to create awareness amongst students on the research areas in Chemistry and to inspire them to pursue further studies in Chemistry. The speaker's sparkling words sparked students' interest in the field of study.



#### **INDEPENDENCE DAY CELEBRATION - August 2022**

On the occasion of 75<sup>th</sup> Independence Day of India, Department of Chemistry and Centre for Research, St.Teresa's College, Ernakulam organized



various competitions for students and faculty members of Chemistry Department on 17<sup>th</sup> August 2022. The events included Patriotic song, Group dance, and Drawing competition. The Overall winners of the event were III

UG students and the first runner up were II PG students. Cash prizes were awarded to the winners. The events were filled with beats, rhythms and colours of Patri otism and lighted up the Indepen dence Day Celebration.



## FRESHER'S DAY CELEBRATION: EUREKHA 2022 -13<sup>th</sup> September 2022



EUREKA 2022', Fresher's Day Celebration of the Chemistry Department was conducted on 13<sup>th</sup> September 2022. Harichandana. S. delivered the welcome speech. Dr. Jaya. T. Varkey, Head of the Depart ment of Chemistry had an interactive session with the students. Devika Rajesh was selected as the Miss Fresher UG and Jayalakshmi J. was selected as Miss Fresher PG.







#### SCIENCE EXHIBITION - 1st October 2022

To explore the innovative scientific minds among school students, a science exhibition 'MAGIC OF SCIENCE' was held at the Science block of St.Teresa's College on October 1<sup>st</sup>, 2022. It was organised by the cluster Departments of Botany, Chemistry, Home Science, Physics and Zoology to





#### RURAL OUTREACH

#### PROGRAMME- 8th October 2022

The Department of Chemistry and Centre for Research, St. Teresa's College, Ernakulam conducted the Rural Outreach Programme for IUG students on 8th October 2022 at the public park of Kumbalangi Panchayat as part of Gandhi Jayanthi celebration. The Resource



Person was Leeja Thomas Babu, Panchayat President, Kumbalangi. The objective of the program was to develop and enhance leadership qualities, self-confidence, communication skills and selfless service to the Nation. About 35 students joined to clean the Kumbalangi Park as part of Gandhi Jayanthi Sevana Varam.

### PROFILES IN SCIENCE- A WALK THROUGH THEIR SCIENTIFIC JOURNEY- 17th OCTOBER 2022



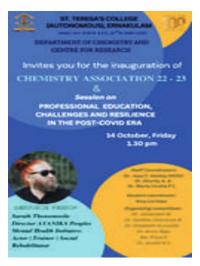
The Department of Chemistry and Centre for Research, St. Teresa's College, Ernakulam conducted 'PROFILES IN SCIENCE - A WALK THROUGH THEIR SCIENTIFIC JOURNEY' for PG, Research Scholars and Faculty of Chemistry on 17th October 2022. The Resource Person was Prof. J. N. Moorthy, Director and Prof. K. George Thomas, Dean of Faculty Affairs of IISER Thiruvananthapuram. The objective of the program was to create awareness about the research projects being carried out at IISER-Thiruvananthapuram. The talk was very informative and useful for the students.



create scientific awareness among children. Principal Dr. Alphonsa Vijaya Joseph inaugurated the exhibition and

Dr. Sajimol Augustine, Senior administrator and former Principal felicitated the event. Around 250 students from various schools of Ernakulam district visited the Science exhibition that showcased the models, charts and experiments performed by the students of St. Teresa's College. It was a celebration of the young talented minds creating magic with Science.

### CHEMISTRY ASSOCIATION INAUGRATION 2022-23 - 14<sup>th</sup> OCTOBER 2022



Chemistry Association Inaug uration and a session on 'PROFE SSIONAL EDUC ATION.CHALLE NGES AND RESILIEN CE IN THE POST COVIDERA' was held on 14<sup>th</sup> October 2022. The event was officia ted by the Head of Department, Dr.

Jaya T Varkey. The Inaugural ceremony commenced through, lighting of the lamp by the HOD, Staff coordinators and the student coordinator. The office bearers, UG and PG repre sentatives, pledged an oath taking responsibility on their respective roles for the year 2022-23. The cere mony was followed by a seminar and other cultural events. The seminar was presided over by Mr. Sarath Thenumoola, Director of AYANIKA People's Mental Health Initiative, actor, trainer and social rehabilitator. The topics discussed in the seminar covered grounds of struggles on a socioeconomic level and neuropsychiatric health issues like clinical depression, anxiety disorder, PTSD, disturbed sleep patterns and muscle weakness etc before and after corona.



### THE ENTREPRENEURIAL PATH TOWARDS POLYCOLORS - 4<sup>th</sup> November 2022



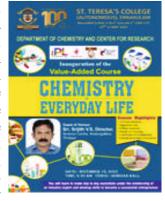
The Department of Chemistry and Centre for Research, St.Teresa's College, Ernakulam conducted 'THE ENTREPRENE URIAL PATH TOWARDS POLY COLORS' on 4th November 2022. The Resource Person was Dr. Bindu Sathyajith, Managing Dire ctor of PolyColors International. The main objective of the program

was to impart a basic idea on the entrepreneurial path, to motivate and give hope to students in selecting their career as an entrepreneur, the seen and unseen struggles of it, the challenges, etc. The path to entrepreneurship was explained how to search for a problem, to reach their innovation/start-up to the commoners, various search portals etc.

#### THE VALUE-ADDED COURSE ON 'CHEMISTRY IN EVERYDAY-

18<sup>th</sup> November 2022

The Department of Chemi stry and Centre for Resea rch, St.Teresa's College, Ernakulam conducted Value Added Course on Chemistry in Everyday Life for UG students on 18<sup>th</sup> Nove mber 2022. The Resource Person was Sri. Sreejith V.S, Director of Science Centre, Kodungalloor. The value-added course on 'Chemistry



in Everyday Life' is highly relevant in the daily life of a human being. This course details the Chemistry of food additives, soaps, and detergents, sanitizers, disinfectants, dyes, cosmetics, pain relief creams etc.

The main objective of the programme was to motivate students to become entrepreneurs by utilising their knowledge in their subject of study. The students were so enthusiastic to learn the manufacturing process of the products they daily use at home. They could identify the opportunity of starting a small-scale business which has potential to expand too.





### COMMUNITY OUTREACH PROGRAMME

#### -13<sup>th</sup> December 2022

On 13th December 2022, the students of Chemistry Department, St. Teresa's College, Ernakulam visited the Nirmala Shishu Bhavan, Kaloor. The visit was part of the community outreach program of the Department. The place was a shelter for orphan children up to 5 years. Essentials and eatables were handed over to the nuns who were taking care of the orphanage.



### POSTER COMPETITION - 14<sup>th</sup> December 2022

The Department of Chemistry and Centre for Research, St. Teresa's College, Ernakulam has organized Poster Competition on the topic 'SAY NO TO DRUGS' to create aware



ness among student community about the ill effects of drug abuse as part of Anti-narcotics campaign phase II. UG and PG students had participated in the competition. Ms. Ananiya Robin. K. R and Ms. Abhirami Pareekandy Parambil of III DC Chemistry were the winners of the competition.

### INNOVATION: LAB TO MARKET PLACE - 10th January 2023





The Department of Chemistry and Centre for Research & Department of Physics and Centre for Research together organised a program INNOVATION: LAB TO MARKET PLACE on 10<sup>th</sup> January 2023.The Resource Person was Prof. Suresh Pillai.

Director of Health and Biomedical (HEAL) centre & Head of nanotechnology and Bio Engineering Research group, Atlantic Technological University, ATU Sligo, Ireland. The students got a vivid idea about patents, about the difference between invention, discovery, innovation and creativity. The speaker's sparkling words ignited the students' interest in the field of innovation.

#### SASTHRAYAAN 2023 - 24th January 2023

On 24th January 2023, IIIrd year B.Sc. Chemistry students of St. Teresa's College (Autonomous), Ernakulam visited Cochin University of Science and Technology (CUSAT), Kalamassery, as a part of the programme 'Sasthrayaan 2023'. Exhibitions and sessions conducted by various Departments of CUSAT were open to all participants. A short video was presented by the Department of Applied Chemistry, CUSAT that explained the activities and programmes conducted and achievements in various research works carried out by them. Students visited various research labs under the Department of Applied Chemistry. They showed various instruments used for different reactions and procedures including different types of furnaces, ovens, stirrer, chromato graphic techniques for identification and separations,



sonicators etc. They explained the areas they specialize and the works which were in progress. Different fluorescent materials synthesized by them and fluorescent behaviour under fluorescence spectrometer were shown. The students also visited STIC (Sophisticated Test and Instru mentation Centre) where they witnessed different

characterization techniques like SEM-EDAX, TEM, FTIR, XRD, UV-Vis Spectro photometer, CHNS analyser, Mass Spectrometer etc. The principle and procedure for these all techniques were explained to them.

#### ALUMNI MEET 'THIRIKE' 2023 - 26th January 2023

The Department of Chemistry and Centre for Research, St. Teresa's college, Ernakulam conducted Alumni meet 'THIRIKE' on 26<sup>th</sup> January 2023. The Program was a reunion of former students of the Department across different parts of world, where students shared their memories of college and Department. The program focused on formulation of alumni action plan for centenary celebrations of the college. Students organized various cultural programs and games. For the centenary





celebration action plan, they proposed different programs like training sessions, scholarships, webinars etc.

#### CHEMISTRY IN EVERYDAY LIFE: VALUE ADDED COURSE-PRODUCT LAUNCH -26<sup>th</sup> January 2023

The Department of Chemistry and Centre for Research organised a value-added course program 'CHEMISTRY IN EVERYDAY LIFE'. A Total of 120

beneficiaries attended the course which comprised PG and UG stud ents, alumni members, reti red faculty and faculty of Chemistry Dep artment. The value added course on 'Chemistry



in Everyday Life' is highly relevant in the daily life of a human being. This course details the Chemistry of food additives, soaps, and detergents, sanitizers, disinfectants, dyes, cosmetics, pain relief creams etc. The main objective of the programme was to motivate students to become entrepreneurs by utilising their knowledge in their subject of study. The resource person, Sri. Sreejith V.S., inaugurated the value-added course: 'Chemistry in Everyday Life', and demonstrated the preparation of the above-mentioned products and trained the students to prepare the same. The course included theory and practical classes and the course duration was 36 hours. The trained students of Chemistry Department prepared 12 products namely bathing soap, Transparent soap, Bar soap, detergents, Hair gel, Shampoo, Pain balm, Stiff and Shine, Hand wash, Dish wash, Toilet cleaner and Floor cleaner. The inauguration of the store was done by Rev. Dr. Sr. Vinitha CSST. The Principal Dr. Alphonsa Vijaya Joseph felicitated the function. Senior Administrator Dr. Sajimol Augustine, appreciated the hands behind the hard work. Alumni members, retired faculty and our UG and PG students attended the inaugural session. Products were launched under the name 'TERES'.

#### WATER QUALITY TESTING

11th September 2022 to 31st January 2023

The Department of Chemistry and Centre for Rese arch conducted a water analysis in KUMB ALANGI Panchayat. A total of 100 ben eficiaries attended the event. The objective of the activity was to analyse various parameters like pH, alkalinity, hardness, ammonia, chlorine, E.coli and thus to deter



mine the water quality of Kumbalangi Panchayat. The activity was carried out as part of Teresian Rural Outreach Programme. The samples were analysed in our department lab. Findings were handed over to Panchayat office and necessary remedial measures were suggested.

#### Farewell 2023- 21st March 2023



"Things may end, but memories last forever", this beautiful quotation echoed the corridors of Chemistry Department as it organized the farewell party 'LIGHTS CAMERA ACTION' for the outgoing batch of UG and PG. The event was success fully organized on 21<sup>st</sup> March 2023. All the final year students of UG and PG came beautifully attired and looked mesmerizing.

Prayer song marked the beginning of the day which was then followed by the acknowledgement of the achievers. The dancing stars of I<sup>st</sup> year and II<sup>nd</sup> year justified their roles with splendid performances and the singers showcased the soothing effect of their vocals. The sweet and bitter memories of the college days and the love for their college family was shared by some of the students. The ending of the cultural event was the most exciting one, which was a talent hunt that made the beauties to walk the ramp and the winners were announced from each outgoing batch who were crowned as "La Reine", The Queen. Delicacies were served towards the end of the programme with a dessert that cooled the hot afternoon. With the efforts of the organising team, teachers and non teaching staff the farewell party turned out to be a success that maintained an aesthetic aura throughout.







## SCIENCE DAY 2023 - 28<sup>th</sup> February 2023

The Department of Chemistry and Centre for Research of St Teresa's college, Ernakulam conducted 'SCIENTIA 2023 - INNOVATIVE IDEAS ON GLOBAL SCIENCE FOR GLOBAL WELL BEING' on 28th February 2023 which was an Inter



Departmental project Presentation competition. The





Resource Person for the day was Dr. Anantha Padmanabhan The program gave the students a clear understanding of how they can improve their project work. As part of competition the external expert as well as the other students interacted with them and they were able to spot the dents in their work. Students greatly benefited from Dr. Anantha Padmanabhan Sir's advice and suggestions for improving their ideas.



സ്കൂൾ വെക്കേഷൻ ചിലവഴിക്കാനായി നീതു അവളുടെ തറവാട്ടിൽ പോകുവാൻ തീരുമാനിച്ചു . ഒറ്റക്ക് തറവാട്ടിൽ അവരോടൊപ്പം സമയം ചിലവഴിക്കാൻ വന്നതായിരുന്നു അവൾ. വെറുതെ ഇരുന്ന് മുഷിഞ്ഞ പ്പോൾ അവൾ അമ്മയുടെ പഠനമുറിയിൽ കയറി.

മേശപ്പുറത്തുള്ള ബുക്കുകളുടെ ഏറ്റവും താഴെയായി പൊടി പിടിച്ച ഒരു ഡയറി കാണാ നിടയായി. ഡയറിയുടെ പുറം ചട്ടയിൽ വർണ്ണ കടലാസുകൾ ഒട്ടിച്ച് ആകർഷണീയമാക്കിയിരുന്നു. ഡയറിയെടുത്ത് അവൾ മറിച്ചു നോക്കുവാൻ തുടങ്ങി. അതിനിടെ അവൾ ഒരു കുറിപ്പു ശ്രദ്ധിച്ചു. അവൾ അത് വായിക്കാൻ തുടങ്ങി.

'ഇന്ന് എന്റെ ജീവിതത്തിലെ ഏറ്റവും വേദന നിറഞ്ഞ ദിവസമായിരുന്നു.എന്റെ അമ്മ എന്നെ വിട്ടുപോയിരിക്കുന്നു. ഹൃദയത്തിലെ ഒരു ഭാഗം അടർന്നുപോയ പോലെ തോന്നുന്നു. സാധാരണ അമ്മാരെപ്പോലെയായിരുന്നില്ല എന്റെ അമ്മ. തീരുമാനങ്ങളിലും നിലപാടുകളിലും വ്യത്യസ്തത് പ്രക്ടിപ്പിച്ചിരുന്നു. ഞങ്ങളെ ഉപേക്ഷിച്ച് കുടുംബത്തിലെ നെടും തൂണായിരുന്ന അച്ഛൻ പോയതിനു ശേഷം അമ്മയ്ക്ക് ഏറെ മാറ്റങ്ങൾ വന്നു തുടങ്ങിയിരുന്നു. എന്റെ അമ്മയെ പോലുള്ള അമ്മയെ കിട്ടിയിരുന്നെങ്കിൽ എന്ന് എന്റെ കൂട്ടുകാർ പറഞ്ഞിരുന്നു. ഒരിക്കൽ അമ്മ ഒരു ചോദ്യം ചോദിച്ചു: 'നിനക്ക് കടലിന്റെ ആഴം അളക്കുവാൻ സാധിക്കുമോ?' എന്ന്. ഞാൻ അന്ന് ചെറിയ 'കുട്ടിയായിരുന്നു. അന്ന് എന്റെ ഉത്തരം 'ഇല്ല' എന്നായിരുന്നു. 'ശരിയാണ്. നീ ഇന്ന് ഒരു കുട്ടിയാണ്. വലുതാവുമ്പോൾ നിനക്കതിന് കഴിഞ്ഞേക്കും. ശരിയാണല്ലോ, ഞാൻ കുട്ടിയല്ലേ എനിക്ക് എങ്ങനെ കഴിയാനാണെന്ന് ഞാൻ ആലോചിച്ചു. ഇന്ന് ഞാൻ മനസ്സി ലാക്കുന്നു അമ്മ തന്ന ഓരോ അറിവിലും പ്രവ്യത്തികളിലും മഹത്തായ ആഴം ഉണ്ടായിരുന്നെന്ന്.ആ ആഴം നിറഞ്ഞുനിന്ന സ്നേഹത്താൽ മാത്രമാണ് ഞാൻ ഇവിടെ വരെ എത്തിയത്. അഞ്ചാ, നിങ്ങളാണ് യഥാർത്ഥമായ ആഴം എന്ന് ഞാൻ മനസ്സിലാക്കുന്നു. ഇനിയും അമ്മയുടെ മകളായി ജനിക്കാൻ സാധിക്കട്ട...

വായിച്ചതിനു ശേഷം എന്തോ മനസ്സിലേക്ക് പടരുന്ന പോലെ നീതുവിനു തോന്നി. ജനൽ പാളികളിലൂടെ ഭൂമിയിലേക്ക് വെളിച്ചം പകരുന്ന നിലാവിനെ നോക്കി മൗനമായി അവൾ നിന്നു....

Amritha E.A. II DC Chemistry

## Publications in International / National Peer-Reviewed Journals 2022-23





A review on the synthesis and biological relevance of benzo[b]thiophene derivatives

T. M. Dhanya, G. Anjali Krishna, D. P. Savitha, A. A. Shanty, K. M. Divya, Shenoi K. Priya & P. V. Mohanan

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Effect of Silver nanoparticles on the biodegradation of Banana Peel based Bioplastics

Saritha Chandran A<sup>†</sup>, Ushamani M<sup>†</sup>

12 Department of Chemistry and Centre for Research, St. Teresa's College (Autonomous), Ernakulam,
Kerala, India

DNA Binding and α-amylase Enzyme Activity Studies of Cu(II) Complexes Derived from Heterocyclic Schiff bases



Dr. Shanty A. A. Assistant Professor, Department of Chemistry St. Teresa's College (Autonomos), Ernakulam

Theoretical and Experimental Study on Third Order Nonlinearities and Optical Limiting Properties of Anthracene Picrate



Dr. Anju Linda Varghese Assistant Professor, Department of Chemistry Baselius College, Kottayam-686001 Kerala, India Email: anjulindavarghese/baselius.ac.in



Dr. Maria Linsha P. L. Assistant Professor, Department of Chemist St. Teresa's College (Autonomous) Ernakulam-682011, Kerala, India



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Analysis of Nanosized Jackfruit Seed powder for Synthesis of Bioplastic and Enhancement of Shelf life using Silver Nanoparticles

Prathibha S. Prabhu<sup>1</sup>, Santhi Jestin<sup>2</sup>, Devika K.<sup>3</sup>, Saritha Chandran A<sup>4</sup>, Ushamani M<sup>5</sup>
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#### SYNTHESIS AND CHARACTERIZATION OF PURE AND COPPER DOPED ZINC SULPHIDE NANOPARTICLES PREPARED BY CHEMICAL METHOD

Sicily Rilu Joseph, <sup>2</sup>Saritha Chandran A. <sup>3</sup>Ushamani M.\*
 <sup>1</sup>Research Scholar, <sup>2</sup>Assistant Professor, <sup>3</sup>Associate Professor, Department of Chemistry and Centre for Research
 St. Teresa's College (Autonomous), Ernakularn, Kerala, India
 \* Corresponding author

### Kaolinite as a Low Temperature Binder for Porous Ceramic SiC Foam



Dr. Resmi V.G. Assistant Professor Department of Chemistry Mahatma Gandhi College



Dr. Annu Raju

Assistant Professor, Department of Chemistry and
Centre for Research

St. Teresa's College (Autonomous)
Science Block, Ernakulam





Dr. SARITHA CHANDRAN A.

College Coordinator of Spoken Tutorial Programme of IIT Bombay. College gained the National Level Spoken Tutorial Awards, 2022



Educational Scholarship by Department of Chemistry Sponsored by Erudite Scholar Prof. Gary B Schuster given to Anjana P.S. of II PG

MRS. SUMANGALA T. PAI PRIZE

TERESIAN KARSHAKASREE CHALLENGE

( Second prize, IIIDC Chemistry )

#### ALINA AUGUSTIN

**BSc Chemistry** 

M.S. Narayanan memorial prize and Sr. Emeline prize-Highest marks for degree examination 2022



**NAMRATHA** SANTHAKUMAR

(IIDC)

TEJA M.J. (IIDC)

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SANDRA K. (III DC)

ANJU LUZY GEORGE MEMORIAL ENDOWMENT & FRANCIS ARTHASERY MEMORIAL PRIZE



ATHIRA K. Dr. (Sr) BERTILLE MEMORIAL PRIZE (IIPG)



LIMA SEBASTIAN (IIPG) Short term Research Grant, ICREP, CUSAT



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LC ANNIE ROSE (III DC)

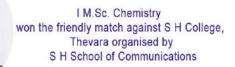
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ANJANA ROSE

**IIIDC** Chemistry Second position in MG University Intercollegiate Basketball Championship

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