

PG & RESEARCH DEPARTMENT OF CHEMISTRY

ANNUAL REPORT (2024-2025)

1. WORLD ENVIRONMENT DAY CELEBRATION

The PG & Research Department of Chemistry conducted a programme on 05/06/2024 (AN) in connection with the World Environment Day. All the students and faculty members participated in this programme. On this occasion, the students and faculty members planted saplings on the college campus.



2. SCIENCE AWARENESS PROGRAMME

Creating science awareness among students can be exciting and impactful when linked to real-life applications, hands-on experiments, and fun activities. Hence a chemistry awareness programme for MTDMHS, Maloor school students was arranged on 11 July 2024. Funny experiments, Hands-on experiments, Soap making, Display of the Glass apparatus, working of instruments were demonstrated during the programme.



3. ONAM CELEBRATION

The PG & Research Department of Chemistry celebrated Onam on 12 September 2024 (FN). It was a special day for all of us. The students and the teachers of the Department participated in various programmes like, Vanchipattu, Nadanpattu, Thiruvaathira, Tug of war etc.



4. INAUGURATION OF CHEMISTRY ASSOCIATION

The Chemistry Association 2024-25 was formally inaugurated on 30 September 2024 at 10.00am in the Late Rev. Aprem Ramban Seminar Hall by Dr. Aravind K. (Assistant Professor of Chemistry, S.B College, Changanassery). The Head of the Department, Dr. Sujamol M.S. welcomed the gathering. The Principal, Dr. Biju A, presided over the meeting. Dr. Aravind has delivered a lecture on 'How to think like a Scientist?' He conveyed to the students that thinking like a scientist involves approaching everything with an inquisitive and unbiased mindset. It means being ready to experiment and take calculated risks and, more importantly, being willing to learn from mistakes and failures. The seminar highlighted that it is a way of observing the world around us, asking questions, and systematically investigating the answers. He concluded that a scientific mindset is about embracing a way of thinking and approaching problems that is curious, methodical, and evidence-based. Mr. Abhijith, III year B.Sc. Chemistry student proposed the vote of thanks. Dr. Anoop M.R. was the co-ordinator of the programme. The welcome programme for the first year UG & PG students was arranged in the afternoon. All the UG & PG students participated in the programme.

ST. STEPHEN'S COLLEGE, PATHANAPURAM
 Re-accredited by NAAC at B++ Grade with CGPA 2.91
 Post - Graduate & Research Department of Chemistry

INAUGURATION OF CHEMISTRY ASSOCIATION 2024

Invited Lecture on
"How to think like a Scientist" ?
 By
Dr. Aravind K.
 Assistant Professor of Chemistry
 S.B. College, Changanassery.

Date : 30.09.2024
 Time : 10.00 am
 Venue : Late Rev. Aprem Remban Seminar Hall

Dr. Biju A. Principal Dr. Sujamol M.S. HoD Dr. Anoop M.R. Co-ordinator

Dear Sir/Madam,

The Chemistry Association 2024-25 will formally be inaugurated on 30 September 2024 at 10.00 am in the Late Rev. Aprem Remban Seminar Hall. All are cordially invited to take part in the inauguration and the subsequent invited lecture.

Dr. Biju A. Principal Dr. Sujamol M.S. HoD Dr. Anoop M.R. Co-ordinator

PROGRAMME

Prayer Song : **Ms. Athulya M.S.**
 (III year B.Sc. Chemistry)

Welcome Speech : **Dr. Sujamol M.S.**
 (HoD, Chemistry)

Presidential Address : **Dr. Biju A.**
 (Principal, St. Stephen's College)

Inauguration & Invited Lecture : **Dr. Aravind K.**
 (Assistant Professor of Chemistry, S.B. College, Changanassery)

Vote of thanks : **Mr. Abhijith**
 (III Year B.Sc. Chemistry)

Organizing committee
 Ms. Sheeba Baby Alex, Ms. Suja Jacob, Ms. Anju Mathew
 Dr. Sunesh C. D, Dr. Sheeba Alexander, Dr. Sherine Alex



5. WORLD OZONE DAY CELEBRATION

The Post-Graduate and Research Department of Chemistry, St. Stephen's College, Pathanapuram, hosted the World Ozone Day celebration on October 4, 2024, at 1.30 pm in the college seminar hall. Dr. Manohar D. Mullasery, Head of the Department of Chemistry, Fatima Mata National College, Kollam, was the chief guest and delivered a lecture on "Science for a Sustainable Future." This seminar highlighted the crucial role of chemistry in addressing global environmental issues, particularly ozone depletion and climate change. The seminar underscored the importance of chemical research in finding solutions to environmental challenges, including biodegradable and bioplastics derived from renewable sources and hydrogen fuels as clean energy alternatives. The event stressed the significance of continued research and education in environmental chemistry in developing sustainable solutions. The seminar not only commemorated World Ozone Day but also inspired and educated students and faculty on the role

of chemistry in creating a sustainable future. Participants were encouraged to consider how their work in chemistry could address global environmental challenges.



6. INDUSTRIAL VISIT (FYUGP SEM 1 STUDENTS)

Implementing the National Education Policy (NEP) has brought about significant changes in higher education in India, including the mandatory requirement of industrial visits for degree students. This initiative aimed to bridge the gap between theoretical knowledge and practical applications, providing students with valuable real-world exposure. In line with this policy, first-year chemistry students at St. Stephen's College, accompanied by their teachers, embarked on an educational excursion to two notable institutions: the Cashew Export Promotion Council of India in Kollam and Doctor Johns Biotech Center in Kottarakara.

During the visits, students had the opportunity to observe and learn about sophisticated analytical instruments commonly used in research and industry. Equipment, such as Liquid Chromatography-Mass Spectrometry (LCMS), Gas Chromatography-Mass Spectrometry (GCMS), Atomic Absorption Spectroscopy (AAS), and UV spectrophotometry, provide invaluable insights into their practical applications. In addition, students were introduced to various food and water testing instruments, highlighting the importance of quality control and safety measures in these industries. This hands-on experience not only enhanced their understanding of theoretical concepts but also offered a glimpse into potential career paths and the practical challenges faced in industrial settings.



7. EXTENSION ACTIVITY- TRAINING PROGRAMME ON “SUCHITHOPADHI”

In association with IQAC, IEDC and IIC, Department of Chemistry organized a hands-on training programme “Suchithopadhi” on 05 November 2024 for the local people in Pattazhi Vadakkekara Gramapanchayath. The 19 participants were delighted by the session carried out by Dr. Sherine Alex (Assistant Professor of Chemistry, St. Stephen’s College, Pathanapuram). The raw materials for the initiative were provided by the Department of Chemistry. The training programme was conducted on detergent powder, liquid soap, hand wash and soap making. The participants were able to understand the importance of natural resources and were able to look at a new business opportunity for themselves.



സെന്റ് സ്റ്റീഫൻസ് കോളേജ്
പത്തനാപുരം
 സെന്ത്രൽ വിഭാഗവും ഐ.ക്യൂ.എ.സി.യും സംയുക്തമായി
 സംഘടിപ്പിക്കുന്ന സാമൂഹികോന്നമന പ്രവർത്തനം.

ശുചിത്വോപാധി നിർമ്മാണ പരിശീലന പരിപാടി

പത്തനാപുരം സെന്റ് സ്റ്റീഫൻസ് കോളേജ് സെന്ത്രൽ വിഭാഗത്തിന്റെ ആഭിമുഖ്യത്തിൽ ശുചിത്വോപാധി നിർമ്മാണ പരിശീലന പരിപാടി 2024 നവംബർ 05-ാം തീയതി രാവിലെ 10 മണിക്ക് കോളേജിലെ സെന്ത്രൽ വിഭാഗത്തിൽ വെച്ച് നടത്തപ്പെടുന്നു. ശുചിത്വ ശീലത്തിന്റെ അടിസ്ഥാന പാഠങ്ങൾ പറഞ്ഞ് വിവിധതരം ശുദ്ധീകരണ ലായനികൾ നിർമ്മിക്കുന്നതിന് ഡോ. ഷെറിൻ അലക്സ് (അസി. പ്രൊഫ. കെർസ്ട്രി, സെന്റ് സ്റ്റീഫൻസ് കോളേജ്, പത്തനാപുരം) പരിശീലനം നൽകുന്നു.

ഈ മേഖലയിൽ പ്രവർത്തിക്കുവാനും സ്വയം തൊഴിൽ യൂണിറ്റുകൾ ആരംഭിക്കുവാനും താല്പര്യമുള്ളവരെ ഈ പരിപാടിയിലേക്ക്, ഹാർദ്ദമായി സ്വാഗതം ചെയ്യുന്നു.

എന്ന്,

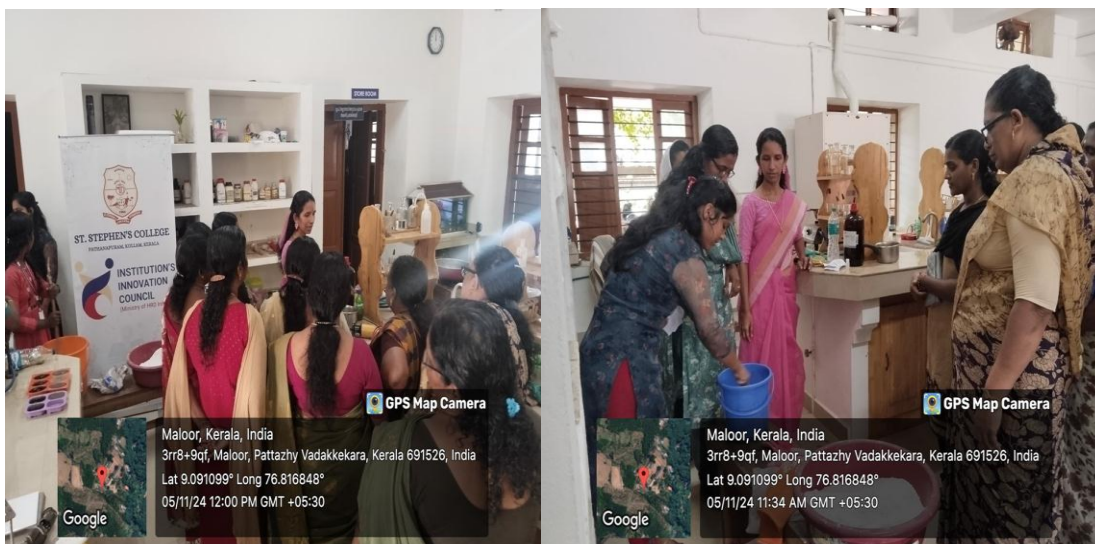
ഡോ. ഷെറിൻ അലക്സ്
കൺവീനർ

ഡോ. സുജമോൾ എം.എസ്
സെന്ത്രൽ വിഭാഗം മേധാവി

ഡോ. ബിജു എ
പ്രധാന അധ്യാപകൻ

സംഘാടക സമിതി

ഷീബാ ബേബി അലക്സ്, സുജാ ലേഖിനി, ഡോ.അനൂപ് എം.ആർ, അഞ്ജു മാത്യു, ഡോ. സുനിഷ് സി.ഡി, ഡോ. ഷീബാ അലക്സാണ്ടർ



8. NATIONAL SEMINAR ON INTELLECTUAL PROPERTY RIGHTS

The College organized an Intellectual Property Rights (IPR) awareness program to educate students and faculty members about the significance of IPR, its types, and ways to safeguard their intellectual property. The Post-Graduate and Research Department of Chemistry in association with the Innovation and Entrepreneurship Development Cell (IEDC), Institution's Innovation Council (IIC) and Internal Quality Assurance Cell (IQAC), hosted a National seminar on 'Intellectual Property Rights' on 11 November 2024. The Head of the Department of Chemistry, Dr. Sujamol M.S., extended a warm welcome to the gathering, followed by the Presidential address by the Principal, Dr. Biju A. The programme commenced with an inaugural address and the IPR awareness lecture was delivered by Mr. Anumod S., Examiner of Patents and Designs and NIPAM Officer, Ministry of Commerce and Industry, Chennai. The seminar was felicitated by the IQAC Co-ordinator, Dr. Ambily C.R and IIC Co-ordinator, Dr. Deepa T.S., while Ms. Anju Mathew, Assistant Professor of Chemistry and the Convenor of the Seminar, proposed the Vote of thanks. The seminar attracted over 90 participants, comprising students from various departments and faculty members of the college.








ST. STEPHEN'S COLLEGE
PATHANAPURAM
 Affiliated to the University of Kerala
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NATIONAL SEMINAR
 ON
INTELLECTUAL PROPERTY RIGHTS

ORGANIZED BY
DEPARTMENT OF CHEMISTRY,
IEDC, IIC AND IQAC
 IN ASSOCIATION WITH
INTELLECTUAL PROPERTY OFFICE, CHENNAI.

RESOURCE PERSON

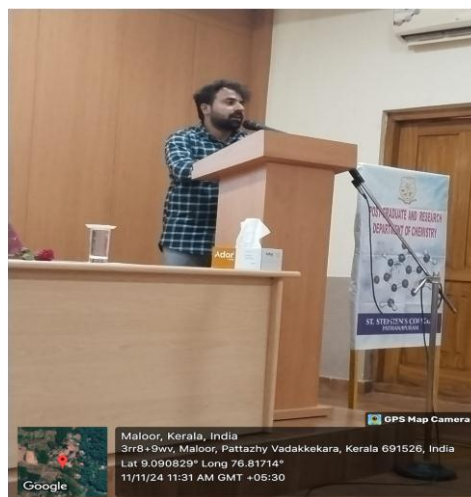
Mr. ANUMOD S.
 EXAMINER OF PATENTS AND DESIGNS
 AND SUPPLY OFFICER,
 (GROUP A GAZETTE) OPST,
 MINISTRY OF COMMERCE AND INDUSTRY
 INTELLECTUAL PROPERTY OFFICE, CHENNAI.

You are cordially invited to join us for the programme.


Dr. BUJ A. **Dr. SUJAMOL M.S.** **Ms. ANJU MATHEW**
 PRINCIPAL CO-ORDINATOR CONVENER

• VENUE
 Late Rev. Aprem Rembon Seminar Hall
 • DATE
 11 November 2024
 • TIME
 11 : 00 am



9. CERTIFICATE COURSE ON WATER QUALITY ANALYSIS

The Post-Graduate and Research Department of Chemistry conducted a certificate course on “Water Quality Analysis” in collaboration with the **National Centre for Earth Science Studies (NCESS)**. One theory and one practical paper were included in the syllabus. The theory paper is based on the Instrumentation and Basic Concepts of Water Quality Analysis and the practicals consisted of the collection and analysis of 50 groundwater samples. The visit to NCESS was also included in the course. 17 students completed the course successfully.


ST. STEPHEN'S COLLEGE, PATHANAPURAM
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Post Graduate & Research Dept. of Chemistry
invites application for
Certificate Course
2024-2025
on
"Water Quality Analysis"
Duration: 6 months

MORE DETAILS CONTACT
Dr. Sheeba Alexander
 Course Co-ordinator
 9947993485

Sl. NO.	NAME	GENDER
1.	ABIKRISHNA S	MALE
2.	AMRUTHA RAJ	FEMALE
3.	ASWIN KRISHNA H	MALE
4.	MAITHREYI M	FEMALE
5.	SINI SAMKUTTY	FEMALE
6.	SUBHANA S	FEMALE
7.	SUBIN SAM	MALE
8.	SREELEKSMI P G	FEMALE
9.	ANN MARY THOMAS	FEMALE
10.	KARTHIKA B	FEMALE
11.	AKHILA P	FEMALE
12.	GOURY KRISHNA S	FEMALE
13.	SUCHITRA G	FEMALE
14.	ANCY ROY	FEMALE
15.	SILPA S	FEMALE
16.	ATHIRA A.S.	FEMALE
17.	ALMA K ASHA BABY	FEMALE

10. MEGA SCIENCE EXHIBITION

The Post-Graduate and Research Department of Chemistry, St. Stephen's College, Pathanapuram, was a part of the Arts and Science Mega Exhibition, SINERGIA 2024 conducted by St. Stephen's College, Pathanapuram, on December 5th & 6th, 2024. The Rock Museum newly set in connection with the Diamond Jubilee Celebrations of the college by the Alumni members of the Chemistry Department was inaugurated by H.G. Dr. Joseph Mar Dionysius (Metropolitan, Kollam Diocese). The highlights of the exhibition from the Chemistry department includes,

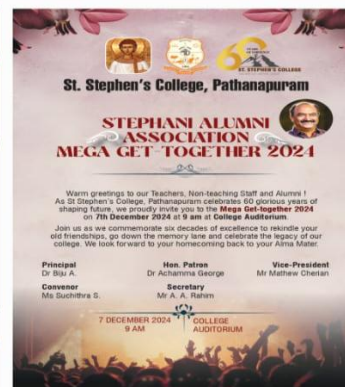
- Mobile Exhibition Unit - Space on wheels by VSSC
- Energy Technologies from ANERT
- Rock Museum
- Water Quality Analysis
- The Chemist Tree

- Crazy Chemical experiments
- Display of glass apparatus and instruments.



11. MEGA ALUMNI MEETING

In connection with the Diamond Jubilee Celebrations, the college hosted a Mega Alumni Meet on 07 December, 2024. Around 2000 alumni members of various departments participated in the function. Around 150 chemistry alumni members also participated in the function.



12. NATIONAL SEMINAR ON 'RECENT ADVANCES IN APPLIED CHEMISTRY'

Two-day National Seminar on 'Recent Advances in Applied Chemistry' was organized by Post-Graduate and Research Department of Chemistry on 9 & 10 December 2024 as part of Diamond Jubilee Celebrations of the College. It was conducted with an aim to provide an

interdisciplinary platform for students, researchers, and teachers to explore the recent advances in applied chemistry and its impact on our lives and surroundings. The inaugural session of the seminar was held at 10:00 am on 9 December 2024 with the welcome address by the Head of the Department, Dr. Sujamol M. S. and it was followed by the Presidential address by the Principal, Dr. Biju A. The seminar was inaugurated by the respected Manager of Mount Tabor Diara Institutions, Very. Rev. Younan Samuel Remban.

There were two technical sessions, Oral presentations, and Poster presentations in the seminar. Dr. Renjith S., Scientist, BMT Wing, SCTIMST, served as the resource person of the first day. He delivered a talk on the topic 'Emerging materials with biomedical applications'. Dr. Anup Thomas, Assistant Professor, Department of Applied Science, SCTCE, Pappanamcode, served as the resource person of the second day. He delivered a talk on the topic 'The impact of applied chemistry on our lives and surroundings'. For the seminar, we received 23 abstracts from researchers and students. Book of Abstracts (Proceedings) of the National Seminar was also published with ISBN number on the same day.

Day 2, 10/12/2024 (Tuesday)

10:00 am -12:30 pm : Oral Presentation
 12:30 pm - 1:30 pm : Lunch Break
 1:30 pm -2:30 pm : Poster Presentation
 2:30 pm - 3:30 pm : Valedictory Session

REGISTRATION FEE
 UG/PG students : Rs. 150-
 Research Scholars : Rs. 200-
 Faculty Members : Rs. 300-

REGISTRATION LINK
<https://forms.gle/9GyYrNksZTzLj6eU6>

ORGANISING COMMITTEE


Chief Patron : Very Rev. Younan Samuel Remban
 (Manager, Mount Tabor Diara Institutions)

Patrons : Rev. Fr. Philip Mathew
 (Secretary, Mount Tabor Diara Institutions)
 Very Rev. Dr. N.J. Alosky Remban
 (Bursar, Mount Tabor Diara Institutions)
 Rev. Fr. Dr. Roy John
 (Governing Body Member)

Dr. Biju A. (Principal)
 Dr. Sujamol M. S. (HOD)
 Ms. Suja Jacob (Assistant Professor)

Committee Members : Ms. Sheeba Baby Alex
 (Assistant Professor)
 Dr. Anoop M.R. (Assistant Professor)
 Ms. Anju Mathew (Assistant Professor)
 Dr. Suresh C. O. (Assistant Professor)
 Dr. Sheeba Alexander
 (Assistant Professor)
 Dr. Shirine Alex (Assistant Professor)

Contact Details
 Dr. Sujamol M.S. (HOD) Mob: 9497279111
 Ms. Suja Jacob (Co-ordinator) Mob: 9497339194
 Department of Chemistry, St. Stephen's College, Pathanapuram.



**ST. STEPHEN'S COLLEGE
 PATHANAPURAM**

Affiliated to the University of Kerala
 (Re-accredited by NAAC at B++ Grade with CGPA 2.91)

National Seminar
 on
**Recent Advances in
 Applied Chemistry**

09-10 DECEMBER 2024
 Venue: Late Rev. Aprem Remban
 Seminar Hall

Organized by
 POST-GRADUATE & RESEARCH
 DEPARTMENT OF CHEMISTRY
 (IN ASSOCIATION WITH IQAC)
 ST. STEPHEN'S COLLEGE, PATHANAPURAM

Dear Sir/Madam,
 We are glad to inform you that the Post-Graduate and Research Department of Chemistry, St. Stephen's College, Pathanapuram is organizing two day National seminar on Recent Advances in Applied Chemistry from 09 to 10 December 2024. All are cordially invited.

With warm regards,
 Dr. Biju A. Principal
 Dr. Sujamol M.S. Convener, HOD
 Ms. Suja Jacob Co-ordinator

About the college

St. Stephen's College, Pathanapuram, was founded in 1964, after the name of St. Stephen, the first martyr of Christianity. The college is affiliated to the University of Kerala and offers eight Undergraduate Programmes in Botany, Chemistry, Mathematics, Physics, Zoology, Economics, English and Commerce as well as five Post-Graduate Programmes in Botany, Chemistry, Mathematics, Physics and Zoology. The Departments of Zoology and Chemistry are recognized as Research Centres of the University of Kerala. The college was re-accredited by the NAAC at B++ Grade with CGPA 2.91 in 2022.

About the seminar

The two day national seminar aims to provide an interdisciplinary platform for students, researchers and industrialists to explore the recent advances in applied chemistry and impact and applications of applied chemistry on our lives and surroundings. The seminar will include oral presentations, poster presentations, invited talks and discussion.

Abstract submission guidelines

The participants have to submit the abstracts of their work to chemistry@ststephenspathanapuram.ac.in. Title of the paper should be in upper case, font size 14, and bold with center alignment. Title of the paper followed by names of authors; font size 12, bold followed by their affiliation and email (font size 12) with center alignment. The name of the presenting author should be indicated by asterisk symbol. The abstract should be in Times New Roman, font size 12, spacing 1.5 lines and should not exceed 350 words.

Last Date of Abstract Submission: 28 November 2024

Guidelines for Oral/Poster presentation

- Oral presentation will be of 10 minutes duration. Seven minutes is allowed for presentation and three minutes for discussion.
- Poster should be 90 cm (width) x 120 cm (vertical height) size in portrait.

PROGRAMME SCHEDULE

Day 1, 09/12/2024 (Monday)

9:00am-10:00 am : Registration
 10:00 am - 11:00 am : Inaugural Session
 Welcome Speech : Dr. Sujamol. M.S.
 (Head, Dept. of Chemistry)
 Presidential Address : Dr. Biju A. (Principal)
 Inauguration : Very Rev. Younan Samuel Remban
 (Manager, Mount Tabor Diara Institutions)


Felicitations : Rev. Fr. Dr. Roy John
 (Governing Body Member)
 Dr. Anbul C.R.
 (IQAC Co-ordinator)
 Ms. Suja Jacob
 (Asst. Professor, Dept. of Chemistry)


Vote of Thanks : Tea Break

11:00 am-11:15 am : Session I
 Technical Session : Dr. Renjith S
 11:15am-12:45 am : Session II
 "Emerging Materials with Biomedical Applications"
 12:45pm-1:30 pm : Lunch Break
 1:30pm-3:00pm : Session III
 Dr. Anup Thomas

"The Impact of Applied Chemistry on Our Lives and Surroundings"

Invited Speakers

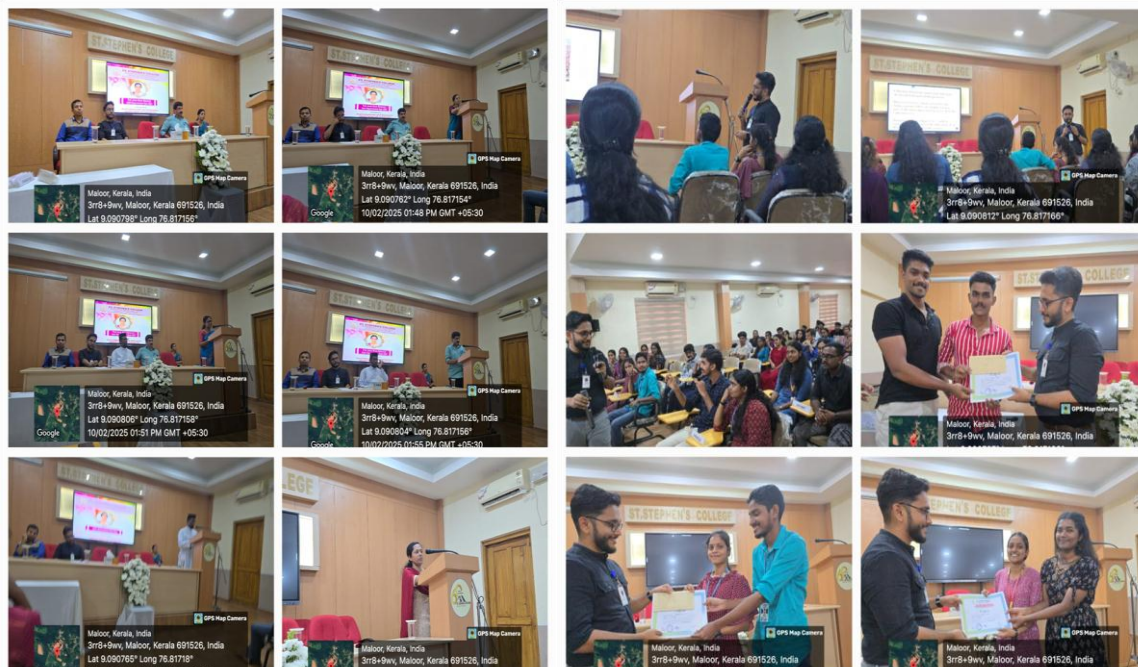
 **Dr. Renjith S**
 Scientist C
 Central Analytical Facility
 BMT Wing, SCTIMST

 **Dr. Anup Thomas**
 Assistant Professor
 Dept of Applied Science
 SCTCE
 Pappanamcode, Thiruvananthapuram



13. PROF. ANNIE NINAN MEMORIAL INTER-DEPARTMENTAL QUIZ -2025

The Post-Graduate and Research Department of Chemistry organized Prof. Annie Ninan Interdepartmental Quiz Competition to honour the former faculty Late Prof. Annie Ninan on February 10, 2025, at 1:30 pm in the Aprem Remban Seminar Hall. The Head of the Department, Dr. Sujamol M. S. welcomed the gathering. The Principal, Dr. Biju A., gave the presidential address followed by the felicitations by the Management Representative, Dr. Fr. Roy John. Mr. Stephen Marydas, Assistant Professor of English, served as the quiz master. Teams from various departments, including Chemistry, Botany, Zoology, Physics, Commerce, and English, Economics and Mathematics participated in the competition. Aswin Ashok and Athul Krishnan of II Semester B.Com. won the first prize (Rs. 1500/-). Sruthy M.S. and Vaishnav J. of II Semester B.Sc. Zoology won the second prize (Rs. 1000/-). Cash awards and participation certificates were distributed to the participants. Ms. Anju Mathew, the co-ordinator proposed the vote of thanks. All the students of the chemistry department and other departments participated in the function.



14. EDUCATIONAL TOUR

As part of the U.G. Curriculum, a combined educational study tour was organised by the Department of Chemistry & Department of Commerce, St. Stephen's College, Pathanapuram to Coorg, Chickmangalore & Belur from 17 to 21 February 2025 for final year degree students. A group of 45 students was accompanied by Dr. Anoop M. R. (Assistant Professor of Chemistry), Dr. Maja K. Koshy (Assistant Professor of Commerce) and Mr. Jayson Varghese (Lab Assistant of Chemistry Department). During the study tour they visited the industry, Ashok Rubber Factory, Changanachery. The trip was very effective and the students enjoyed well.



15. NATIONAL SCIENCE DAY CELEBRATIONS (INDUSTRIAL VISIT)

The National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram commemorates National Science Day with an OPEN day event. Students from educational institutions were invited to visit the laboratory during this occasion and were guided by various advanced scientific facilities and instruments. Demonstrations are provided to offer them insight into Indian R&D, thereby fostering a sense of scientific inquiry and motivation to pursue careers in science. The Department of Chemistry, St. Stephens college, Pathanapuram arranged a visit to NIIST for Semester II FYUGP (Major & Minor students of Chemistry) students on 28-02-2025. During the visit, 29 students were accompanied by two faculty members from the Department of Chemistry.

During the visit, the participants had the opportunity to interact with NIIST scientists and researchers, gaining firsthand knowledge about ongoing projects and cutting-edge research in various fields. This experience left a lasting impression on the students, inspiring many to consider their future careers in scientific research and innovation.



16. VALEDICTORY FUNCTION OF CHEMISTRY ASSOCIATION AND FAREWELL

The PG and Research Department of Chemistry organised the Valedictory function of the Chemistry Association on 28 March 2025 at 9.30 am in Late Rev. Fr. Denaha Mathew Seminar Hall. The Head of the Department, Dr Sujamol M. S., welcomed the gathering and the Principal Dr. Biju A. presided over the meeting. Mr. Abhijith, Association secretary, presented the annual report and Dr. Anoop M.R. felicitated the programme. The final year students shared their

memories and various cultural programmes were arranged. Ms. Athira S. proposed the vote of thanks. 55 students and 8 teachers participated in the programme.

