

Department of Chemistry

Sir Syed College Taliparamba

Annual Report

Academic Year 2025-26

Department Programs

1. WORLD ENVIRONMENTAL DAY 2025

The Department of Chemistry, Sir Syed College, Taliparamba, organized an outreach program on June 10, 2025, in connection with *World Environment Day*. The program was conducted at Kurumathoor UP School with the theme "*Life Below Water – Ending Plastic Pollution.*" The event aimed to spread awareness among students about the harmful effects of plastic pollution and its impact on aquatic life. An awareness session was arranged to highlight the urgent need to reduce plastic use and promote eco-friendly alternatives. To engage young minds creatively, a drawing competition was also conducted, encouraging students to express their thoughts on environmental conservation. The program successfully combined education and creativity to inspire children towards sustainable practices. By connecting with school students, the Department of Chemistry emphasized the importance of collective responsibility in protecting our environment. Overall, the initiative proved to be an effective step in nurturing environmental consciousness among the younger generation.



2. CHEMIA-25

SIR SYED COLLEGE CHEMISTRY DEPARTMENT HOSTS CHEMIA-25: A CELEBRATION OF RESEARCH EXCELLENCE AND STUDENT ACHIEVEMENTS .The Department of Chemistry, Sir Syed College, Taliparamba, marked a significant academic milestone with the successful conduct of CHEMIA–25, an intercollegiate conference showcasing final-semester M.Sc Chemistry projects. Held on July 15, 2025, the event commemorated 25 years of the postgraduate Chemistry programme at the college and celebrated the exceptional research journey of its students during the academic year 2024–25. The conference was inaugurated by Adv. P. Mahamood, Manager of Sir Syed College, in the presence of faculty, students, alumni, and distinguished guests. The event featured Dr. Anitha P. K. (Principal, SNG College of Advanced Studies, Thottada & Former Research Guide in Chemistry, Kannur University) and Dr. Biju A. R. (Associate Professor & Head, Department of Chemistry, SAT Campus, Kannur University) as resource persons. A key highlight of the programme was the release of the book 'Proceedings and Abstracts of CHEMIA-24', edited by Dr. Ashwani Kumar N and published by the Publication Division of Sir Syed College with an ISBN number. The book comprises 16 abstracts by M.Sc students who undertook internships at top-tier institutions such as IIT Bombay, NCL Pune, CSIR-CLRI Chennai, Osmania University, and CUSAT, along with a chapter detailing the department's journey and academic achievements. The first copy of the book was presented by Dr. Biju A. R. to Ms. Farhana T. P., Senate Member, Abstract contributor and alumna of the department. Several dignitaries offered felicitations during the inaugural ceremony, including Dr. Shanavas S. M. (IQAC Coordinator), Mr. V. H. Nishad (Convenor, Publication Division), Mr. Muhammed Sayeed T, Dr. Fazal Edakot, and Ms. Farhana T. P. The session concluded with a vote of thanks delivered by Dr. Fasila P. M., Department of Chemistry. CHEMIA–25 was a platform to celebrate the outstanding accomplishments of the department's students, particularly their success in securing national-level fellowships and internships. This year, 75% of the M.Sc Chemistry students (15 out of 20) were awarded the ASPIRE Fellowship by the Government of Kerala, enabling them to undertake internships at

premier institutes such as IISc Bangalore, IIT Bombay, CSIR-IICT Hyderabad, NCL Pune, CSIR-CLRI Chennai, IIT Hyderabad, and NIT Calicut. Their internships encompassed a range of research areas including medicinal chemistry, materials science, environmental chemistry, and polymer technology. The department also celebrated an impressive number of national-level recognitions including GATE and CSIR-JRF qualifications by seven students, Summer Research Fellowships awarded by the Indian Science Academies (INSA, IAS, NASI), selections for DST-SERB Karyashala and Winter School programmes at IISER Thiruvananthapuram, and two INSPIRE–SHE Fellowship awardees. All the above achievements affirmed the academic rigor and mentorship offered by the department. The technical sessions included 11 oral and 12 digital poster presentations evaluated by the expert panel of Dr. Anitha P. K. and Dr. Biju A. R., with participants from various colleges under Kannur University. To support green initiatives, the poster presentation was conducted using digital displays. The best oral presentation was awarded to Ms. Shadiya Puthiyarichalil (Sir Syed College), while second and third prizes went to Ms. Fida Fathima (Govt. College, Kasaragod) and Ms. Aiswarya T. P. (Sir Syed College), respectively. In the poster category, the top three awards were bagged by Ms. Fathimathul Sharmila Shirin, Ms. Hiba K. P., and Ms. Dhana Soorya T. P. The valedictory function was presided over by Principal Prof. Ismayil Olayikkara. Dr. Rajeena Pathoor delivered the welcome address while Dr. Neethu Raveendran proposed the vote of thanks. The results were announced by the judging panel, who also offered valuable feedback to the participants. CHEMIA–25 stood as a resounding success, reaffirming the Department of Chemistry's leadership in promoting research-based education and national-level academic exposure.



3. RADIANT 2025

The Department of PG and Research Studies in Chemistry, Sir Syed College, Taliparamba, organized a special programme “*Radiant 2025*” on **7th August 2025 (Thursday) at 11.00 a.m.** in the Seminar Hall. The event was conducted to **recognize academic distinction and intellectual achievements** of notable students by felicitating **A+ and A grade holders**.

The function was graced by **Dr. A. Madhavan, CEO of Mizone**, as the *Chief Guest*. In his address, he motivated the students to pursue excellence, highlighting the importance of dedication, creativity, and continuous learning in achieving success.

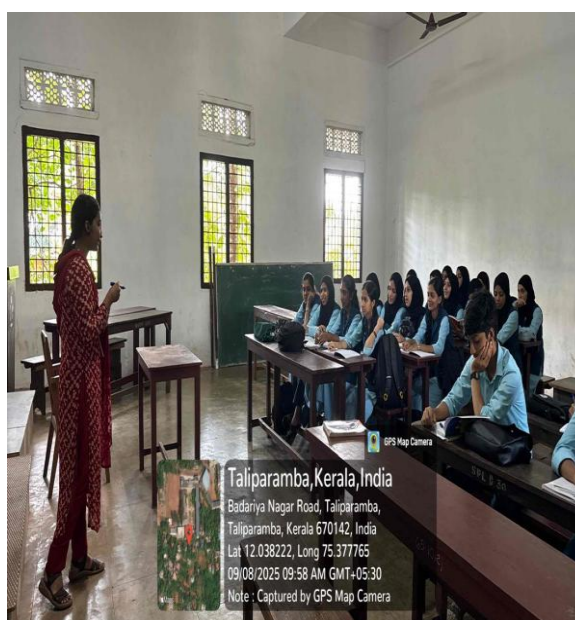
The function was started with a welcome address by Ms.Shahabanu.P,Head of the Department of Chemistry, Principal Dr Ismail Olaikkara presided the function, faculty members Dr.Fazal E,Dr.Fasila.P.M,Dr.Ashwani Kumar offered felicitation. Medals and

certificates were distributed to the meritorious students as a token of appreciation. The event concluded with a vote of thanks by Dr.Neethu Raveendran, Faculty Chemistry Department.



4. LITTLE MASTERS-Teachers' Day Celebration

As part of the Teachers' Day celebrations, the Department of Chemistry, Sir Syed College, Taliparamba, conducted the programme "Little Masters" on 08-09-2025. Final year PG students took the role of teachers and conducted classes for their juniors. This programme allowed students to experience the role of a teacher, fostering leadership and teaching skills among them while honouring the spirit of Teachers' Day.



5. SYMPOSIUM

The Department of Chemistry, Sir Syed College, Taliparamba, organised a one-day symposium titled *"From Atoms to Well-Being"* on 22nd September 2025 at the college seminar hall. The programme commenced with a welcome address by Ms. Shahabanu P, Head

of the Department of Chemistry followed by the presidential address by the Principal Dr. Ismail Olayikkara,. The symposium was formally inaugurated by Adv. P. Mahmood, Manager of Sir Syed College, and felicitations were offered by Dr. Ashwani Kumar N (Assistant Professor of Chemistry), and the inaugural session concluded with a vote of thanks by Ms. Jefna O.P (Secretary, Chemistry Association).

The technical sessions began with the first invited lecture by Dr. Sathees C. Raghavan, Professor of Biochemistry at IISc Bangalore, on the topic *“Exploiting DNA Repair Defects: Cancer Therapy via Chemical Inhibitors”*, chaired by Dr. Fazal Edakot. This was followed by the second lecture by Dr. Shivangi Sharma, Project Scientist (II), IISc Bangalore, who spoke on *“From Bench to Preclinical Validation: Development of BCL2 Inhibitors as Cancer Therapeutics”*, chaired by Mr. Muhammad Sayeed T. The final session featured Dr. Mujeeb Rahman P, Assistant Professor, GASC Kozhikode, who delivered a talk on *“Chemistry of Well-being: From Medicine to Mood”*, chaired by Dr. Sarayu Jayadevan.

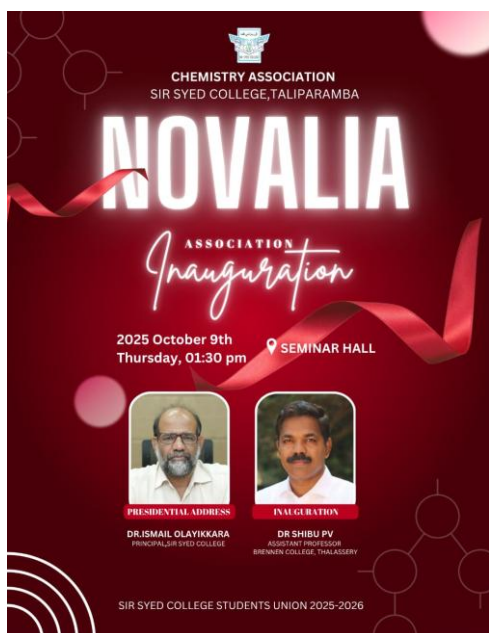
The symposium proved to be a highly enriching academic event, providing valuable insights into the interdisciplinary relevance of chemistry in medicine, therapy, and well-being. The distinguished speakers inspired the participants by linking cutting-edge research with practical applications, making the programme a memorable and meaningful experience for faculty, researchers, and students alike.





6. NOVALIA-CHEMISTRY ASSOCIATION INAUGURATION

The Chemistry Association of the college organized its inauguration programme titled *Novalia* on 9 October 2025 at 1:30 PM. The event began with a warm welcome address by Ms. Shahabanu P, Head of the Department of Chemistry. The Presidential Address was delivered by Dr. Ismail Olayikkara, Principal of Sir Syed College. Dr. Shibu P V, Assistant Professor from the Department of Chemistry, Govt. Brennen College, Thalassery, officially inaugurated the programme. He shared encouraging words about the importance of chemistry in modern science. Dr. Fazal E, Assistant Professor of Chemistry, offered felicitation and appreciated the initiatives of the association. Mr. Muhammed Sayeed T, Assistant Professor of Chemistry, also conveyed his best wishes during the felicitation. Mr. Muhammed Sinan P, Chairman of the Student Union, expressed his support for the association's activities. During the programme, students and teachers showed great enthusiasm and participation. The event concluded with a Vote of Thanks by Jefna O P, Secretary of the Chemistry Association.



7. MOLYMPICS – 2025

The Department of Chemistry, Sir Syed College, Taliparamba organized an intercollegiate Quiz Competition in connection with International Mole day on 24-October-2025. The event aimed to foster scientific curiosity, analytical thinking, and academic interaction among students.

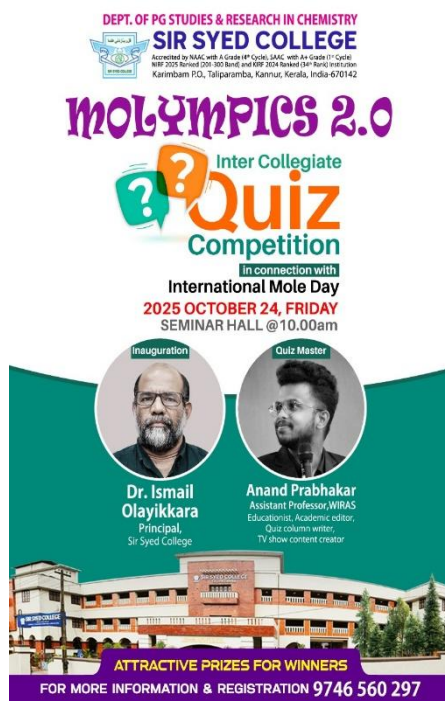
The program commenced with a welcome address by Dr. Fasila P.M., who greeted the dignitaries, participants, and audience. This was followed by the presidential address by Ms. Shahabanu P., Head of the Department of Chemistry, who highlighted the objectives of the program and encouraged students to actively engage in such intellectual competitions. The event was inaugurated by Mr. Hamsa CK, Principal in charge of Sir Syed College.

The quiz session was led by Mr. Anand Prabhakar, Assistant Professor, WIRAS, and an esteemed alumnus of the college (B.Sc. 2013–16 and M.Sc. 2016–18 batches). He served as the Quiz Master for the competition and conducted the event with great enthusiasm and professionalism. His engaging presentation made the quiz both intellectually stimulating and enjoyable for all participants.

A total of 12 teams from various colleges under Kannur University participated in the quiz competition. After several rounds of intense and competitive quizzing, the results were as follows: **First Prize: Nived K and Midhunraj M.E. (KUTEC, Dharmasala) Second Prize: Adhya and Nandana T Jayan (1st Semester BSc Zoology, Sir Syed College, Taliparamba). Third Prize: Nandana P.P. and Karthika K. (Payyannur College).**

The felicitation session was graced by Dr. Shanavas S.M. (Coordinator, IQAC), Dr. Shabeerali K.K. (Secretary, PTA), Mr. Muhammed Sayeed T, Dr. Fazal E, Dr. Ashwani Kumar N, Dr. Rajeena Pathoor and Dr. Neethu Raveendran. All the speakers motivated the students to take part in more academic and co-curricular activities.

The prizes were distributed by Dr. Shanavas S.M., who congratulated the winners and commended the performance of all participants. The event concluded with a vote of thanks delivered by Ms. Jefna P., Secretary of the Chemistry Association, who expressed gratitude to the dignitaries, faculty members, participants, and students for their support and cooperation in making the event a success. Overall, MOLYMPICS – 2025 was a grand success, showcasing the talent, knowledge, and enthusiasm of young students across Kannur University.



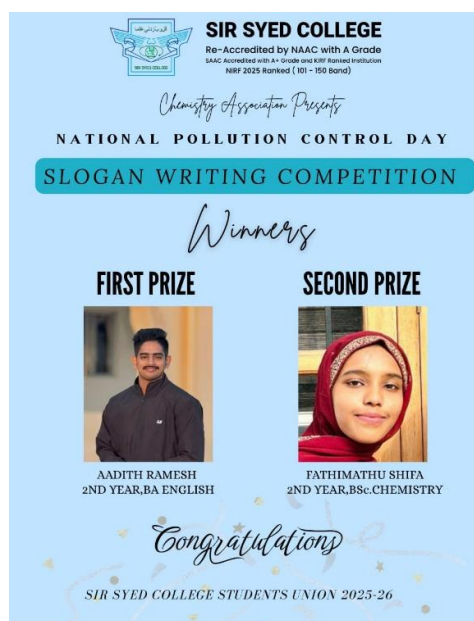
8. NATIONAL POLLUTION CONTROL DAY

Photography Contest

As part of National Pollution Control day , the Department of chemistry and the Chemistry Association of Sir Syed College, Thaliparamba conducted an Photography Contest on 03/12/2025. A total of 8 students participated in the competition on the topic "A click for Cleaner Tommorrow" .First prize were won by Mr.Aadhith Ramesh K, 2nd yr BA English and Second prize by Ms. Aysha Saleem, 1st yr BSc Physics.

Slogan Writing Competition

As part of National Pollution Control day , the Department of chemistry and the Chemistry Association of Sir Syed College, Thaliparamba conducted a Slogan Writing competition on 03/12/2025.A total of 12 students participated in the competition.First prize were won by Mr.Aadhit Ramesh, 2nd yr BA English and Second prize by Ms.Fathimathu Shifa, 2nd yr BSc Chemistry.



9. MAARGA DARSHI – '25

The Department of Chemistry, Sir Syed College, Taliparamba, in association with the Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Tamil Nadu, successfully organized an outreach programme titled “Maarga Darshi – '25” on 5 December 2025 at the Seminar Hall of the college. The programme was conducted under the OCES (Orientation Course for Engineering Graduates and Science Post-Graduates) initiative with the objective of creating awareness about career opportunities in the Department of Atomic Energy (DAE), Government of India. The programme was mainly targeted at final-year undergraduate and postgraduate students from the science stream.



The event commenced at 10.00 AM with a warm welcome address delivered by Ms. Shahabanu P, Head of the Department of Chemistry. In her address, she highlighted the importance of national-level research institutions like IGCAR and emphasized the need for students to explore career avenues in advanced scientific research and nuclear energy.

The programme was formally inaugurated by Dr. Ismail Olayikkara, Principal of Sir Syed College, who delivered the Presidential Address. He underscored the significance of outreach

programmes in bridging the gap between academic learning and real-world research opportunities. He also appreciated the collaborative efforts of IGCAR and the Department of Chemistry in guiding young aspirants towards prestigious career paths.

The key session of the programme was handled by the resource person, Dr. Rakesh P. T, Scientist F, IGCAR, Kalpakkam. In his detailed and informative talk, he introduced students to the role and functions of the Indira Gandhi Centre for Atomic Research and explained the structure, eligibility, selection process, and career prospects associated with the OCES programme. He elaborated on how OCES serves as a premier training and recruitment platform for the Department of Atomic Energy and its units such as IGCAR, BARC, and NPCIL. The session provided valuable insights into research opportunities, national service through science, and long-term career growth in the nuclear sector.

The programme also included a felicitation segment, during which Mr. Muhammed Sayeed T, Assistant Professor of Chemistry, honoured the resource person and appreciated his contribution. The session was effectively moderated by Dr. Ashwani Kumar N from the Department of Chemistry, ensuring smooth interaction and student engagement. The programme concluded with a Vote of Thanks proposed by Ms. Jefna O. P, Secretary of the Chemistry Association.



10. EXHIBITION CHEMIVERSE'26

The Department of PG Studies and Research in Chemistry, Sir Syed College, Taliparamba, successfully organized CHEMIVERSE'26 (The Chemical Universe) on 13th and 14th January 2026. The programme was conceived as a grand academic and outreach event aimed at

popularizing chemistry through competitive events, exhibitions, and interactive scientific demonstrations.

The programme was inaugurated by Adv. P. Mahamood, Manager of Sir Syed College, in the presence of Dr. Ismail Olayikkara, Principal of Sir Syed College.

Many neighbouring colleges and schools visited the exhibition. The visitors included **SSITS Taliparamba, Payyanur College, Sir Syed Higher Secondary School, Keyi Sahib B.Ed College, Kuttiyeri Schools, Pattuvam Model Residential School, Sir Syed High School, Chinmaya Vidyalaya, Royal School**, and many others. Students and teachers from different departments of our college also actively participated.

One of the major attractions of CHEMIVERSE'26 was the Chemistry Exhibition, which highlighted the practical relevance of chemistry in everyday life. The exhibition featured fun experiments, glass blowing demonstrations, forensic tests, electrochemistry and biochemistry experiments, green chemistry concepts, working and still models, food safety awareness, interactive games, stalls, and a photo booth. The exhibition created great interest among school and college students.

Students from different colleges participated in competitive events like **Mind Mania, Escape Room, and PowerPoint Presentation Contest**. Each event witnessed enthusiastic participation from students. Attractive cash prizes further motivated participants and enhanced the competitive spirit of the programme.

The programme was efficiently organized under the leadership of the staff coordinators Dr. Rajeena Pathoor and Dr. Neethu Raveendran along with faculty members of the Department of Chemistry. The wholehearted support of student coordinators played a crucial role in the smooth conduct of the events, reflecting excellent teamwork and organizational skills.

Competitive Events

13th January 26
(Time: 11 am)
Mind Mania
1st prize: ₹ 1000/-
2nd prize: ₹ 500/-
Event Coordinator: Anoushka K. R. (9957706991)

14th January 26
(Time: 10.30 am)
Escape Room
1st prize: ₹ 2000/-
Event Coordinator: Disha Mani (948599082)

13th January 26
(Time: 2 pm)
Treasure Hunt
1st prize: ₹ 2500/-
Event Coordinator: Shalabhana K. N. (9957706991)

13th January 26
(Time: 2 pm)
PowerPoint Presentation Contest
Topic: Microplastics: A Great Threat to Wildlife
1st prize: ₹ 800/-, 2nd prize: ₹ 500/-
Event Coordinator: Seemadri (943030448)

Closing Ceremony
Date: 14/01/2026
Time: 3:00 PM
Prize Distribution

CONTACT
Dr. Rajeena Pathoor (9631192390)
Dr. Neethu Raveendran M. (9746096862)
Shalabhana K. N. (9957706991)
Jefna O.P. (8606373611)

DEPARTMENT OF PG STUDIES AND RESEARCH IN CHEMISTRY
SIR SYED COLLEGE, TALIPARAMBA
Accredited by NAAC with A Grade (4th Cycle), SAAC with A+ Grade (1st Cycle), NIRF 2024 Ranked (201-300 Band) and NIRF 2024 Ranked (34th Rank) Institution

"We present a Chemical Universe to you"
CHEMIVERSE'26
(The Chemical Universe)
January 13 & 14, 2026

About the Department
The Department of Chemistry, established in 1967, offers UG, PG, and Research programmes. Academic and research focus areas include Theoretical, Organic, Physical, Nano, Computational, and Inorganic Chemistry. Supported by eight faculty members, including three research guides, the Department emphasizes practical training, research, mentoring, and co-curricular activities, preparing students for higher studies and research excellence.

Organizing Committee

Staff Coordinators
Ms. Shalabhana P. (HOD)
Mr. Muhammed Sayeed T.
Dr. Fazal Edalat
Dr. Sarayu Jayadevan
Dr. Fazla PM
Dr. Ashwini Kumar N
Dr. Rajeena Pathoor
Dr. Neethu Raveendran M

Student Coordinators
Shalabhana K.N.
Muhammed Swalih Bilal
Jefna O.P.
Amma Hamda K.C.
Marva P.P.
Fathimathul Sadika K.
Adithyan Vishnu
Fathimathul Hibba V.P.C.
Noorah K.P.
Anula K.P.
Sada Khadij
Fathimath Saja A.
Muhammed Nabawi
Fathimathu Shifa
Fathimath Sana

Inauguration Ceremony
Date: 13/01/2026
Time: 10 AM

Inauguration by
Adv. P. Mahamood
(Manager Sir Syed College)
In Presence of
Dr. Ismail Olayikkara
(Principal, Sir Syed College)
Mr. Mahamood Alhamkulam
(Secretary CDMAE)
Dr. Shanavas S.M. (JAC Coordinator)
Dr. Abdussalam A. K. (BISA Coordinator)

EXHIBITION HIGHLIGHTS
• Fun Experiments
• Food Safety on Wheel
• Glass blowing
• Forensic Tests
• Electro Chemistry Experiments
• Biochemical Experiments
• Green Chemistry
• Working Models
• Still Models
• Fun games
• Stalls
• Photo Booth

Prize Winners

Mind Mania

- First Prize: *M.K. Sankeerth Shaji and Anamika* (AMSTECK Arts and Science College, Kalliasseri)
- Second Prize: *Dhanush P and Abrarunissa* (SSITS Taliparamba)



PowerPoint Presentation Contest

- First Prize: *Muhammed Afras* (B.Com First Year, Sir Syed College)

Second Prize: *Safa Musthafa KK* (M.Sc Microbiology, Sir Syed Institute)



Videography Competition

- First Prize: *Muhammed Sadeed Abdullah*

- **Second Prize: Abdusamad K.**



Escape Room

- **First Prize: Rizla Rafi, Fathimathu Shahana, Ziya TKP and Sahwa** (Department of Statistics, Sir Syed College)

The programme was conducted successfully with active participation and good teamwork. The event helped to promote scientific knowledge and creativity among students. CHEMIVERSE'26 was a grand success and received positive feedback from participants and visitors.

<https://www.instagram.com/chemistrysirsyed?igsh=MWM0YjkyZmQxNGw0MA==>



11.Two-Day National Seminar on “Advances in Computational Chemistry”

The Department of Chemistry, Sir Syed College, successfully organized a Two-Day National Seminar on **“Advances in Computational Chemistry ACC 2026”** on 10-11 February 2026 at the Seminar Hall of the college. The seminar aimed to provide a comprehensive understanding of recent developments in computational chemistry and its applications in modern chemical research. The programme witnessed active participation from faculty members, research scholars, and postgraduate students from various institutions.

Day 1 – Inaugural Session

The seminar commenced with the Inaugural Ceremony held at 9:30am. The session began with a recitation and a warm welcome address by Ms. Shahabanu P, Assistant Professor and Head, Department of Chemistry, who highlighted the importance of computational tools in contemporary chemical research, including molecular modeling, quantum chemical calculations, and material design.

The Presidential Address was delivered by Dr. Ismail Olayikkara, Principal, Sir Syed College, who stressed the importance of interdisciplinary research and the need for institutions to promote research-oriented academic programmes. He appreciated the Department of Chemistry for organizing a seminar on a highly relevant and emerging field.

The seminar was formally inaugurated by Dr. Sujith K V, who delivered the inaugural address. In his address, he emphasized the transformative role of computational chemistry in contemporary research and explained how theoretical calculations complement experimental findings. He encouraged students and researchers to adopt computational tools to enhance the accuracy and efficiency of scientific investigations.

Adv. P. Mahmood, Manager of Sir Syed College, served as the chief guest during the inaugural session. In his address, he appreciated the Department for organizing a seminar on such a relevant and emerging area of study.

Felicitations were offered by:

- Mr. Mahamood Allamkulam, Secretary, CDMEA
- Dr. Shanavas S M, Coordinator, IQAC
- Dr. Shabeerali K K, Secretary, PTA
- Mr. Muhammed Sinan, Chairman, Students’ Union

The inaugural session concluded with a Vote of Thanks proposed by Dr. Fasila PM, Assistant Professor and the convener of the organizing committee.

Technical Sessions – Day 1– 10 February 2026

Session I

Time: 10.45 am – 12.30 pm

Topic: *Revisiting Forbidden Chemistry for Practical Chemical Applications*

The first technical session of the two-day seminar on **Advances in Computational Chemistry** was held from 10.45 am to 12.30 pm. The session focused on the intriguing theme “*Revisiting Forbidden Chemistry for Practical Chemical Applications.*”

The session was chaired by Mr. Muhammed Sayeed T., Assistant Professor, **Sir Syed College**, Taliparamba. He briefly introduced the topic and highlighted the relevance of exploring unconventional and theoretically “forbidden” chemical reactions through modern computational approaches.

The resource person for the session was Dr. Padmesh A., Associate Professor, Department of Chemistry, **IIT Palakkad**. In his insightful lecture, Dr. Padmesh elaborated on the concept of forbidden reactions in chemistry, particularly in the context of orbital symmetry rules and pericyclic reactions. He explained how advancements in computational chemistry, including quantum chemical calculations and molecular modeling, have enabled chemists to better understand reaction pathways that were once considered inaccessible or highly improbable.

The session concluded with an engaging interaction between the speaker and participants. Students and faculty members actively raised questions, making the session highly informative and intellectually stimulating. The chair appreciated the resource person for delivering a thought-provoking lecture and thanked the participants for their active involvement.

Session II

Topic: *Electron Interference: The Heart of Quantum Mechanics*

Resource Person: Dr. Biju A. R., Associate Professor & HOD, School of Chemical Science, Swami Anandatheertha Campus, Kannur University

Chair: Dr. Ashwani Kumar N., Assistant Professor, Department of Chemistry, Sir Syed College, Taliparamba

Date & Time: 11 February 2026, 1.15 pm – 2.45 pm

Technical Session 2 was delivered by Dr. Biju A. R., who presented an insightful lecture on the fundamental concept of electron interference and its central role in quantum mechanics. He explained wave–particle duality, the double-slit experiment, quantum superposition, and the mathematical description of electron behavior through wave functions. The session provided a clear understanding of how interference patterns arise from electron waves and how these principles form the foundation of modern quantum theory.

Dr. Biju further connected these quantum mechanical concepts to computational chemistry, explaining their relevance in molecular orbital formation, bonding interactions, and electronic structure calculations. The lecture strengthened participants’ theoretical understanding essential for computational modeling methods such as Hartree–Fock and Density Functional Theory. The session concluded with an interactive discussion, during which participants actively engaged with the resource person to clarify conceptual aspects of quantum mechanics.

Technical Session III

Session: Oral Presentations
Date & Time: 11 February 2026, 2.45 pm – 4.00 pm
Chair: Dr. Muhammed Niyas K. V., Associate Professor, Govt. Brennen College, Dharmadam

Technical Session III was dedicated to oral presentations by research scholars and Teachers providing them with a valuable platform to present their research findings and innovative ideas. The session was chaired by Dr. Muhammed Niyas K. V., who guided the proceedings and offered constructive academic insights. The presentations covered diverse areas of chemistry, including computational studies, synthetic methodologies, analytical techniques, and emerging research trends, reflecting the interdisciplinary nature of modern chemical research.

Day 2 – 11 February 2026

Technical Session IV

Time: 10.00 am – 11.15 am
Topic: *Digital Colorimetric Analysis for Food Quality Monitoring*
Resource Person: Dr. Vinod T. P., Associate Professor, Department of Chemistry, Christ University, Bengaluru
Chair: Dr. Fazal Edakkott., Assistant Professor, Sir Syed College, Taliparamba

Technical Session IV commenced with Dr. Fazal Edakkott. welcoming the resource person and highlighting the relevance of analytical techniques in ensuring food safety and quality. Dr.

Vinod T. P. delivered an informative lecture on digital colorimetric methods used for food quality monitoring. He explained how image-based analysis, digital sensing, and computational processing techniques are employed to evaluate food parameters such as freshness, adulteration, contamination, and nutrient content.

The session emphasized the integration of computational tools with analytical chemistry, demonstrating how digital image processing and quantitative color analysis provide rapid, cost-effective, and reliable assessment methods. Real-world examples and case studies were discussed to illustrate practical applications. The lecture encouraged participants to explore interdisciplinary research combining chemistry, computation, and data analysis

Technical Session V

Time: 11.30 am – 12.45 pm

Topic: *Computational Design of Electrodes and Electrolytes for Advanced Energy Storage Applications*

Resource Person: Dr. Sooraj K., Assistant Professor, Department of Chemistry, IIT Madras

Chair: Dr. Rajeena Pathoor, Assistant Professor, Sir Syed College, Taliparamba

Technical Session V was chaired by Dr. Rajeena Pathoor, who introduced the resource person and underscored the importance of sustainable energy research. Dr. Sooraj K. delivered a highly insightful lecture on the role of computational chemistry in designing advanced electrode materials and electrolytes for energy storage systems such as batteries and supercapacitors.

He explained theoretical modeling techniques, material optimization strategies, electronic structure calculations, and simulation approaches used to predict electrochemical performance. The session highlighted how computational studies reduce experimental cost and accelerate material discovery in renewable energy research. The lecture provided participants with exposure to cutting-edge research in energy materials and emphasized the growing importance of computational approaches in addressing global energy challenges.

Technical Session VI

Time: 1.45 pm – 2.45 pm

Session: Poster Presentations

Session Lead: Dr. Rahana Ameen, Associate Professor, Payyanur College, Payyanur

The afternoon session was devoted to poster presentations by students and research scholars. Participants presented their research work in various domains of chemistry, including

computational studies, synthetic chemistry, analytical techniques, and material science. The session provided an interactive platform for academic discussion and scholarly exchange.

Dr. Rahana Ameen evaluated the presentations and offered constructive feedback to the presenters. The session encouraged innovation, critical thinking, and research enthusiasm among young scholars. The best poster and oral presentations were identified for awards, adding motivation and recognition for academic excellence.

Valedictory Session

The Valedictory Session was held from 3.00 pm to 4.00 pm in the Seminar Hall.

The session began with a welcome address by Dr. Fasila P M, Assistant Professor, Department of Chemistry, who expressed gratitude to all dignitaries, speakers, and participants for making the seminar a grand success.

The Presidential Address was delivered by Dr. Ismail Olayikkara, Principal, Sir Syed College, who appreciated the efforts of the Department of Chemistry in organizing such a relevant and timely seminar.

The valedictory function was graced by Adv. P. Mahmood, Manager, Sir Syed College, and Mr. Mahamood Allamkulam, Secretary, CDMEA.

The presence of the following dignitaries added prestige to the function:

- Dr. Shanavas S M, Coordinator, IQAC
- Dr. Shabeerali K K, Secretary, PTA
- Mr. Muhammed Sinan, Chairman, Students' Union

Seminar Concluding Remarks were delivered by Ms. Shahabanu P, Head of the Department of Chemistry, who summarized the key takeaways of the two-day seminar and encouraged participants to pursue research in computational chemistry. Certificates were distributed to all participants by Mr. Mahamood Allamkulam, Secretary, CDMEA. The programme concluded with a Vote of Thanks by Dr. Sarayu Jayadevan, Assistant Professor, Department of Chemistry, who expressed sincere gratitude to the management, principal, organizing committee, resource persons, participants, and support staff.

Outcome of the Seminar

The seminar successfully:

- Enhanced awareness about modern computational chemistry tools.

- Encouraged interdisciplinary research approaches.
- Motivated students to pursue research in theoretical and computational chemistry.
- Strengthened academic collaboration and research culture within the institution.

The two-day seminar was highly informative, interactive, and academically enriching. The active participation and enthusiastic involvement of students and faculty contributed to its grand success.

SIR SYED COLLEGE
Accredited by NAAC with A Grade (4th Cycle), SIAC with A+ Grade (1st Cycle)
NAAC 2020 Re-accreditation (2019-2023) and SIAC 2022 Re-accreditation (2021-2024) Institution
Karimnagar P.O., Taliparamba, Kannur, Kerala, India-670142

In association with
Kerala State Council for Science, Technology and Environment

Department of P. G. Studies and Research in Chemistry

Two-day National Seminar on
ADVANCES IN COMPUTATIONAL CHEMISTRY (ACC-2026)

Feb 2026
10 At Seminar Hall
11 Sir Syed College
Taliparamba

Inauguration

Dr. Sujith K.V.
D.S.S. Kannur University

Chief Guest

Adv. P. Mahamood
Manager, Sir Syed College

Dr. Padmesh A.
Associate professor
Department of Chemistry
III Palakkad

Dr. Biju A. R.
Associate professor & HOD
School of Chemical Science
SAT Campus, Kannur University

Dr. Vinod T. P.
Associate professor
Department of Chemistry
Christ University, Bengaluru

Dr. Sooraj K.
Assistant professor
Department of Chemistry
III Madras



12.ONE-DAY WORKSHOP ON GAUSSIAN 09

A one-day workshop on Gaussian 09 was organized by the Department of P.G. Studies and Research in Chemistry, Sir Syed College, Taliparamba on 17-02-2026 at the IT Centre of the college. The session was handled by Dr. V. C. Saheer, Assistant Professor of Chemistry, Brennan College, who served as the resource person for the programme. A total of 23 participants, including faculty members and students, actively took part in the workshop.

The workshop focused on introducing computational chemistry techniques using Gaussian 09. The resource person explained important topics such as Density Functional Theory (DFT) calculations, geometry optimization, HOMO–LUMO plots, electrostatic potential (ESP) plots, and IR vibrational spectrum analysis. The session included both theoretical explanations and practical demonstrations, which helped participants understand the concepts clearly.

Participants were given hands-on training in running basic calculations and interpreting the results. The interactive nature of the session allowed students to clarify their doubts and gain confidence in using computational tools. The workshop also highlighted the importance of computational methods in modern chemical research.

Overall, the workshop was highly informative and beneficial, providing valuable exposure to computational chemistry and enhancing the technical skills of the participants.

Department of P. G. Studies and Research in Chemistry

SIR SYED COLLEGE

Incorporated by M.A.O. Amritsar District U.F. Circular, dated 10th May 1906
and State Revenue Dept. dated 10th May 1906, Amritsar District, Punjab.
Karnaham P.G., Tuliparamba, Kottur, Kerala, India - 610142

One Day Workshop on **Gaussian 09**

DFT Calculations
Geometry Optimization
HOMO-LUMO Plots
ESP Plots
IR Vibrational Spectrum

17 - 02 - 2026

**IT Centre,
Sir Syed College**

Resource Person

Dr. V. C. SAHEER

Associate Professor
Government Brennen College

Contact Us:

9786 560 297
9037 393 049

REGISTRATION FEE: ₹ 300



ALUMNI INTERACTION SERIES

ALUMNI INTERACTION SERIES-I

The Department of Chemistry had the honor of hosting Dr. Maharoof Koyakatt, a distinguished alumnus of the 2015–18 Chemistry batch, who recently completed his PhD in Molecular Spectroscopy from Chiba University, Japan. The interactive session was held on 5th June 2025, and it served as a motivational talk for the undergraduate students of the department.



ALUMNI INTERACTION SERIES-II

The Department of Chemistry at Sir Syed College conducted Alumni Interaction Series– 2 on 9-12-2025. The resource person for the session was Ms. Rahna Banu, an ISO Lead Auditor at QAC Qatar. She is a proud alumna who completed her B.Sc (2016–2019) and M.Sc (2020–2022) from this college. The session aimed to inspire students by sharing real-life experiences and career guidance. Rahna Banu spoke about her academic journey and professional growth in a simple and motivating way. She explained the importance of skill development, confidence, and continuous learning. She also shared insights about quality assurance and auditing as a career option. Students actively participated and asked questions during the interaction. The session helped students understand industry expectations and future opportunities. The program was informative, inspiring, and beneficial for all the participants.



ALUMNI INTERACTION SERIES-III

The Department of Chemistry, Sir Syed College organized an interactive session with Dr. P.P. Haridasan on March 5, 2026. The session, held at the college Seminar Hall, brought together physics and chemistry students for an engaging discussion on radiological safety, nuclear applications, and industry insights. Dr. Haridasan, alumnus of Chemistry department, Sir Syed College and renowned expert with experience at BARC and IAEA, shared his expertise, inspiring students with real-world perspectives. The event was a valuable opportunity for students to learn from his vast experience in nuclear safety and research.



13.ADD-ON COURSE

DEPARTMENT OF CHEMISTRY
SIR SYED COLLEGE
(Accredited by NAAC with A Grade (4th Cycle) Accredited by SIAC with A+ Grade (1st Cycle)
 NAAC 2024 Re-acc (21 - 300 Band) and 686 2024 Re-acc (24th Rank) Institution)
 Karimbam, Taliparamba, Kannur - 670142

ADD-ON COURSE
INTRODUCTION TO
GAUSSIAN 09

DFT Calculations
Geometry Optimization
HOMO-LUMO Plots
ESP Plots
IR Vibrational Spectrum

Contact Us:
9746560297
9037393049

COURSE FEE : ₹.250

GAUSSVIEW

The Department of Chemistry of Sir Syed College conducted an add-on course on "Introduction to Gaussian 09." The course aimed to give basic knowledge about computational chemistry tools. Students learned about DFT calculations and geometry optimization. They were also introduced to HOMO-LUMO plots and ESP plots. The session included a discussion on IR vibrational spectrum analysis. The course helped students

understand molecular modeling and visualization using GaussView. Many students participated actively and showed great interest in the practical sessions. Overall, the program was useful in improving the computational skills of the students.

14.MoU with Synthesis

A Memorandum of Understanding (MoU) was established between **Sir Syed College, Taliparamba, Kannur**, affiliated to Kannur University, and **SynTheCis – Analytical Solutions & Institute of Chemical Industrial Training, Vadakara, Kozhikode, Kerala**. This collaboration aims to enhance academic and industrial interaction for the benefit of students and faculty members. The MoU was formally released by the Principal, **Dr. Ismail Olaikkara**, in the presence of faculty members and the IQAC Coordinator, **Dr. Shanavas.S.M**. The event marked an important milestone in strengthening institutional collaboration with industry partners.



15.PTA MEETING REPORT

The PTA meeting of B.Sc Chemistry Sixth Semester students was conducted on **15-01-2026 (Thursday) at 2:30 PM** in **Room No. 313**. The meeting was attended by **Ms.Shabanu P., Head of the Department of Chemistry, Dr. Rajeena Pathoor (Tutor), and Dr. Fasil P. M.** Most of the parents were present for the meeting. The main agenda of the meeting included the **analysis of the Fifth Semester examination results**. The teachers

explained the overall performance of the students and discussed areas where improvement is needed. Suggestions were given to help students perform better in the upcoming examinations. The meeting also discussed plans for an **institutional visit and study tour**. Parents were informed about the importance of such academic visits in improving practical knowledge and exposure.

Another important discussion was about **higher education opportunities after UG**. The faculty members explained various options available after B.Sc Chemistry, including postgraduate studies and career opportunities. Guidance was also given on preparing for competitive examinations such as **JAM, GATE, CUET**, and other entrance tests.

