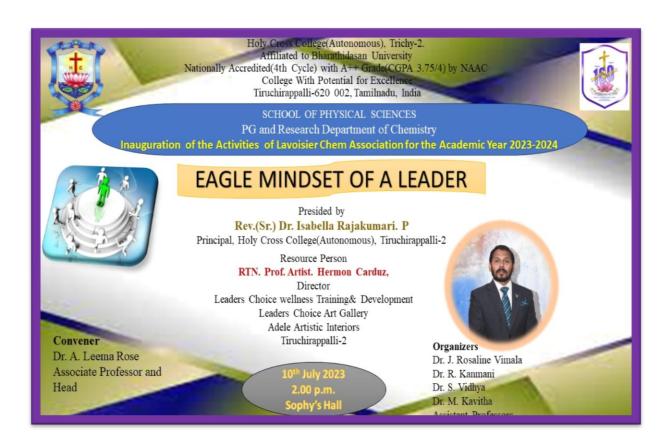
PG & RESEARCH DEPARTMENT OF CHEMISTRY

ASSOCIATION ACTIVITIES 2023-2024

The PG & Research Department of Chemistry, Holy Cross College, inaugurated the Lavoisier Chem Association activities for the year 2023-2024 on July 10, 2023. RTN. PROF. ARTIST. HERMON CARDUZ was the chief guest. The meeting commenced with a prayer followed by the welcome address by Ms. M.S. Sivaranjani (III BSc Chemistry 'B'), Association Secretary of the Lavoisier Chem Association, and Ms. M. K. Nithyasri (II BSc Chemistry 'B'), the Assistant Secretary of the Lavoisier Chem Association, read the minutes of the previous meeting. The resource person spoke on the topic "Eagle Mindset of a Leader." The resource person emphasized the good characteristics of an eagle that a leader should possess. He also stressed the importance of being calm and composed in all situations in order to be a good leader. Nearly 225 students of I UG, III UG, I PG, and II PG of the chemistry department actively participated and benefited from this session. The session ended with a formal vote of thanks delivered by Ms. V. Mareeshwari (II MSc Chemistry), Joint secretary of the Lavoisier Chem Association.







The PG and Research Department of Chemistry, Holy Cross College, Trichy organised a meeting on topic the 'Organics for Flextronics', on 21th July 2023. The resource person was Mr. Narayana Sastri Somanathan,

Senior Principal Scientist Deputy Director and Head (Retired) of Communication Polymer Science and Technology Laboratory, Central Leather Research Institute, Adyar, Chennai. The meeting commenced with a prayer followed by the welcome speech by Ms. P. Aparna of I PG Chemistry. The resource person spoke on the importance of organic chemistry in Flextronics(i.e.) flexible electronics. Sir gave insights on how the substitutional change in aromatic compounds will give more stable and useful polymers which are the future of electronics and solar cells. The students of III UG, I PG, II PG and research scholars benefitted from this session. Overall the session equipped the students with the scope of entrepreneurship in the field of Flextronics. The session ended with a formal vote of thanks delivered by Ms. G. Purenthery of I PG Chemistry.





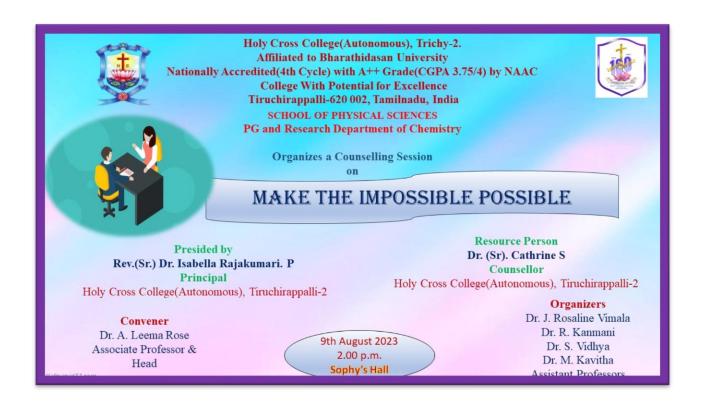


The Lavoisier Chem Association of the PG & Research Department of Chemistry, Organized a meeting on 1st August, 2023. *Dr. MADHAVAN JACCOB* was the chief guest. The meeting commenced with a prayer followed by the welcome address by Ms. R. Ezihloviya (III BSc Chemistry), and Ms. V. Mareeshwari (II MSc Chemistry), the joint Secretary of the Lavoisier Chem Association, read the minutes of the previous meeting. The resource person spoke on the topic "INSILICO APPROACH IN UNDERSTANDING CHEMICAL SCIENCE". The resource person discussed the in-silico approach (i.e., experimentation performed by computer) in understanding chemical science, emphasizing the importance of chemistry and the need to learn from the fundamentals. The session was attended by students from III UG, I PG, and II PG, as well as research scholars. They actively participated and benefitted from this session. The session concluded with a formal vote of thanks delivered by Ms. B. Harini (III BSc Chemistry).





On 9th August, the Lavoisier Chem Association of the PG & Research Department of Chemistry, organized a counselling session on the topic "MAKE THE IMPOSSIBLE POSSIBLE". *Dr. (Sr). CATHRINE. S* was the chief guest. The meeting commenced with a prayer followed by the welcome address by Ms. E. Visalakshi (I BSc Chemistry 'B'), and the minutes of the previous meeting was read by Ms. M.S. Sivaranjani (III BSc Chemistry), the Secretary of the Lavoisier Chem Association. The guest speaker enlightened us with her captivating speech. The sun consistently rises in the east and sets in the west. Some strategies and methodologies remain unchangeable. Similarly, there are certain impossible things that cannot be turned possible, yet there are extraordinary impossible feats that can become reality, enhancing our lives. The speaker emphasized, "Rather than changing others, focus on changing yourself," followed by a 6-7minute meditation to underscore its importance. The session was very effective and had a significant impact. Around 100 students from the I UG attended, actively benefiting from this session. The session concluded with a formal vote of thanks delivered by Ms. J. Anton Abiah Samrith (I B.Sc. Chemistry 'A').









The PG and Research Department of Chemistry organized a two days training programme on "Phytochemical analysis" for all III UG students on 10.08.2023 and 11.08.2023. The aim of the workshop was to kindle a research quest among the students. The phytochemical analysis involving extraction, screening and separation were demonstrated theoretically and practically, by the faculty of Chemistry Department, Holy Cross College. The workshop provided an overall view on how research is carried out in the field of Phytochemistry. The workshop was like a precursor for students which gave an idea on how to carry out projects in future.

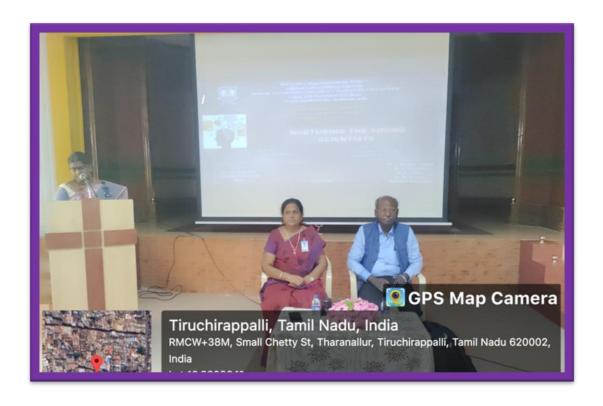


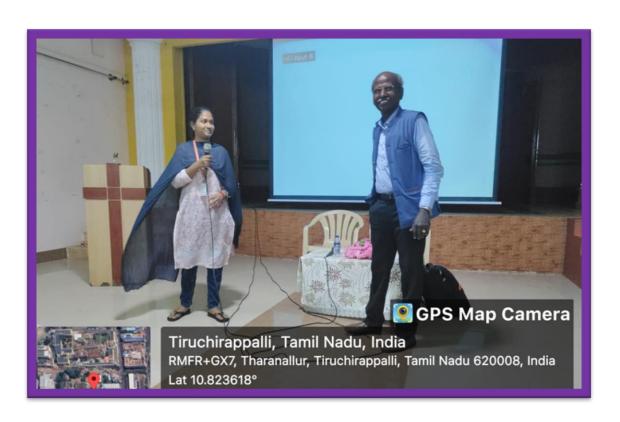




The PG and Research Department of Chemistry organized a meeting on 7th September 2023. Dr. J. Daniel Chellappa Eminent Nuclear Scientist was the chief guest. The meeting commenced with a prayer followed by the welcome address by Dr. M. Kavitha Assistant Professor of the PG and Research Department of Chemistry and the minutes of the previous meeting was read by Ms. Mareeshwari V of II M.Sc chemistry. The resource person spoke on the topic "NURTURING THE YOUNG SCIENTISTS" in his presentation. He emphasized the value of scientists and their research to the advancement of the Nation. He also underlined the need of scientific patriotism in keeping our attention on more recent breakthroughs. He inspired the youngsters to pursue careers in research, which will advance our nation's scientific advancement. Overall, the session was highly successful and had a big impact among the students. The lecture was beneficial to the research scholars, III UG, I PG, and II PG students. A formal vote of thanks was proposed by Haritha sakthi.S of II M.Sc. in Chemistry to end the meeting.







Five Days International Level Online Faculty Development Program on "Artificial Intelligence in Chemistry: Current Trends and Future Perspectives" (AICCTFP-2023)

The PG and Research Department of Chemistry, Holy Cross College (Autonomous), Trichy organized Five Days International Level Online Faculty Development Program on "Artificial Intelligence in Chemistry: Current Trends and Future Perspectives" (AICCTFP-2023), from 4th to 9th September 2023.

The objective of the FDP is to provide a platform for researchers, chemists, biologists, academicians to come to know the

- Applications of AI in Chemistry
- Challenges and Limitations of AI in Chemistry
- The future of chemistry with the integration of AI
- Advancement and the crucial role of AI in the future of scientific discovery.

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The programme commenced with the welcome address by Dr. A. Leema Rose, Associate Professor and Head, PG and Research Department of Chemistry, Holy Cross College (Autonomous), Trichy and the convener of this FDP. Dr. Docent N. Arul Murugan, Associate Professor, The NeuroCa(u)re Laboratory, Department of Computational Biology, Indraprastha Institute of Information Technology, New Delhi India, inaugurated the programme and spoke about "Doing Science with computers" in his Inaugural address followed by his talk on Applications of AI based approaches for Drug Discovery and Materials design" It was holistic as it gave a coverage on Computational drug discovery-its challenges, various approaches available for binding affinity prediction, success and failures of force filed based approaches and development of Quantum Mechanics-fragmentation based and data-driven approaches for binding affinity prediction.

On 5th September Dr. Madhavan Jacob, Assistant Professor of Chemistry, Loyola College, Chennai spoke on the topic "Pros and Cons of AI in learning Chemical Sciences". He detailed on the ability of machines to act in seemingly intelligent ways, making decisions in response to new inputs, with AI implementations design and experimental effort have proven to be dramatically improve efficieny, reduces errors, 24x7 availability, leads to fast decisions, new inventions, cost reduction, but the other side of it is that it leads to Job displacement and cost and complexity.

Dr. Sri Ranjini Arumugam, Head-Projects Management XeedQ GmbH, Leipzig, Germany on 7th September 2023, spoke on AI in the era of quantum computing for chemists. Significance of Artificial Intelligence, quantum computing and quantum computers, the realm of Quantum AI in the futuristic direction and the applications of quantum AI in chemistry which enables chemists to be faster and creative in their research are the glimpses of her talk.

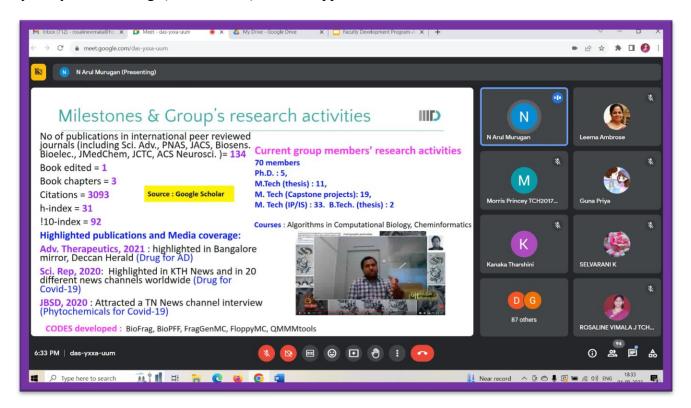
On 8th September a talk on "AI: The Next Chapter in Chemistry" was delivered by eminent speaker Dr. Parthiban Srinivasan, Visiting Faculty (Data Science & Engineering) at IISER, Bhopal, Madhya Pradesh, India, CEO, Vingyani, Chennai, India. He highlighted the paradigm shift in science, Current Trends in the use of AI in chemistry, the vitality of Data science- which has become the art of creating new knowledge (ie) the 4th paradigm science and the future of chemistry is language, large language models could be the catalyst for a new era of chemistry

On 9th September Ms. Mathangi Thiagarajan M.S, Project Director, Biospecimen Research Group, Frederick National Laboratory for Cancer Research, USA delivered a session on the topic "Artificial Intelligence for

proteogenomics and biomarker discovery". She elaborated on What is Clinical Proteomic Tumor Analysis Consortium, Its workflow and components, Proteogenomic data analysis Data: Analysis, data mining and sharing, Artificial Intelligence for protegenomics and biomarker discovery, Deep learning benefits and importance of AI and machine learning in understanding cancer

The valedictory address was delivered by, Er. Abhijith Neerkaje, Senior Director Data Science and Analytics, Falabella, Bengaluru, India. He briefed on how coining of the word AI came into existence, the evolution and revolution of AI, the contributions made in this domain and also emphasized that students should be enriched in interpreting the machine data-the output of the algorithm which is an important skill to be developed and the other thing is that in the world of research inserted in deep learning models in conclusion, how do we yield, essentially to people needs to be trained to evaluate the quality of the data irrespective of how machine learning is important, and also conference needs to be made.

The FDP was appreciated as a timely and valuable event by the resource persons. The FDP received a lot of positive feedback from faculty members and research scholars from many colleges and universities of India. There are nearly 175 enthusiastic participants in total, from Karnataka, Andhra Pradesh, Uttar Pradesh, Kerala, Uttaranchal, Manipur, Puducherry, Gujarat, Maharashtra, Rajasthan including Tamil Nadu who took part in the 5-day online FDP. Each session was of 60 minutes and included open question and answer session. Google Meet and YouTube was the platform used and the feedback form links were shared every day at the end of the presentation. This 5-day online FDP cum certificate programme was an extraordinary event with huge success and this event will be a landmark in the field of Artificial Intelligence. The participants gave their feedback and the program came to an end with the vote of thanks delivered by Dr. R. Kanmani, Assistant Professor of chemistry, PG and Research Department of Chemistry, Holy Cross College(Autonomous), Tiruchirappalli-2.





DAY 1 - 04-09-2023 "Applications of Al based approaches for (6.00 p.m. - 7.00 p.m.) Drug Discovery and Materials design" Dr. Docent N. Arul Murugan

Associate Professor
The NeuroCa(u)re eLaboratory
Department of Computational Biology
Indraprastha Institute of Information Technology
New Delhi. India

DAY 2 - 05-09-2023 "Pros and Cons of Al in (6.00 p.m. - 7.00 p.m.) learning Chemical Sciences"

Dr. Madhavan Jaccob Assistant Professor Department of Chemistry Loyola College, Chennal

Day 3 - 07-09-2023 "Al in the era of quantum (6.00 p.m. - 7.00 p.m.) computing for chemists"

Dr. Sri Ranjini Arumugam Head-Projects Management XeedQ GmbH, Leipzig, Germany

Day 4 - 08-09-2023 "Al: The Next Chapter in Chemistry"

(6.00 p.m. - 7.00 p.m.) Dr. Parthiban Sriniyasan

(6.00 p.m. - 7.00 p.m.) Dr. Parthiban Srinivasan Visiting Faculty (Data Science & Engineering) at IISER Bhopal, Madhya Pradesh, India & CEO, Vingyani, Chennai, India

VALEDICTION

Day 5 - 09-09-2023 "Artificial Intelligence for Proteogenomics

(6.00 p.m. - 7.00 p.m.) and Biomarker Discovery**

VALEDICTION

Ms. Mathangi Thiagarajan, M.S Project Director

Biospecimen Research Group Frederick National Laboratory for Cancer Research, USA

Er. Abhijith Neerkaje Senior Director Data Science & Analytics Falabella, Bengaluru, India



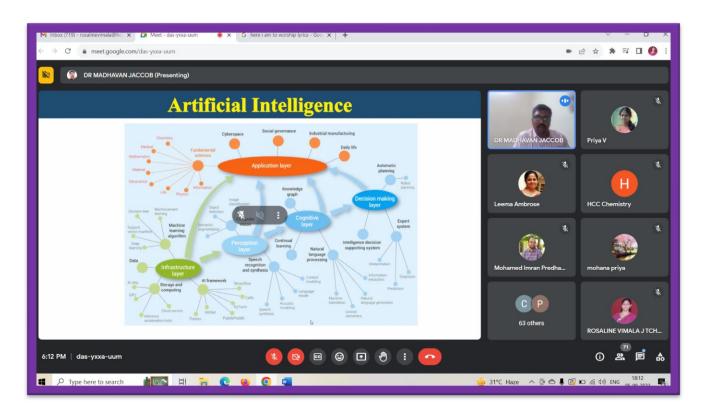


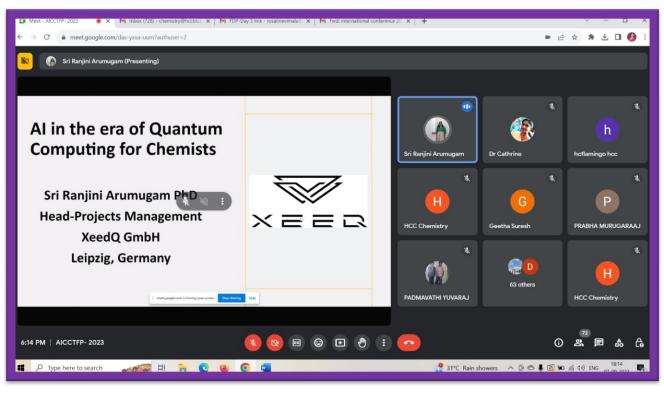


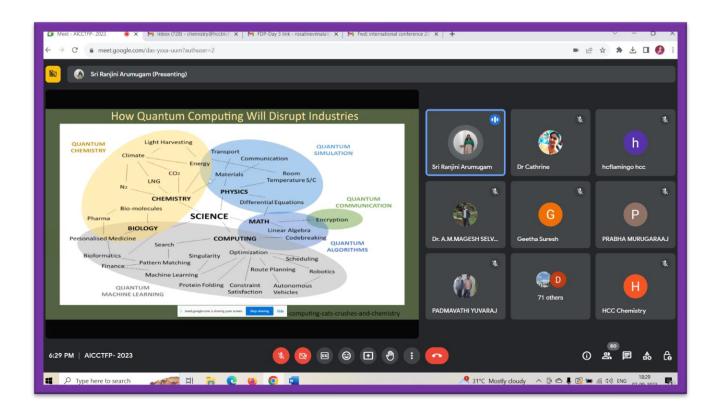


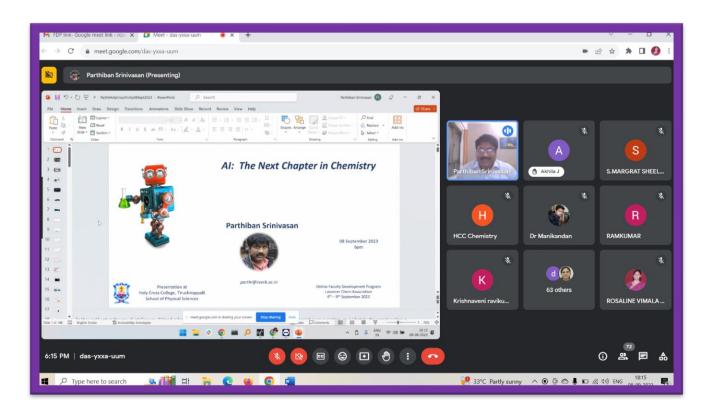


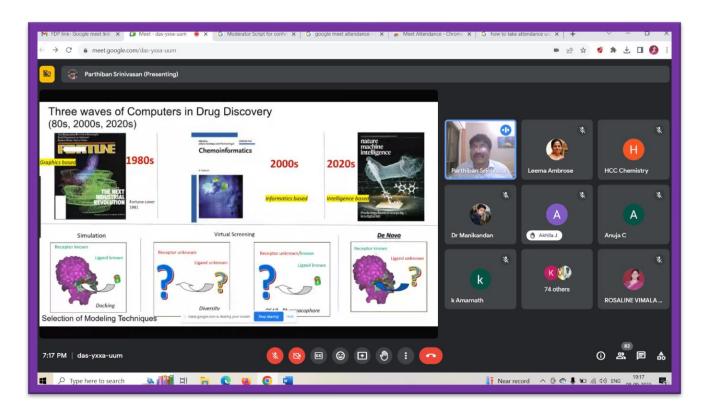


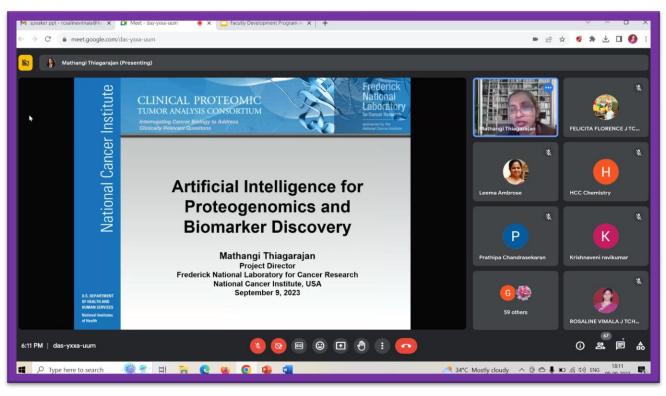


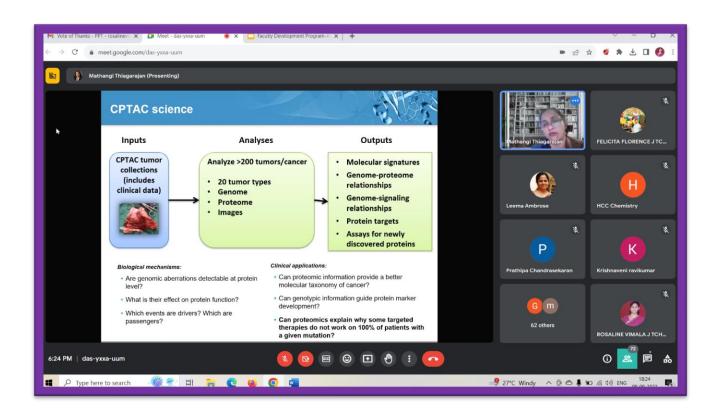


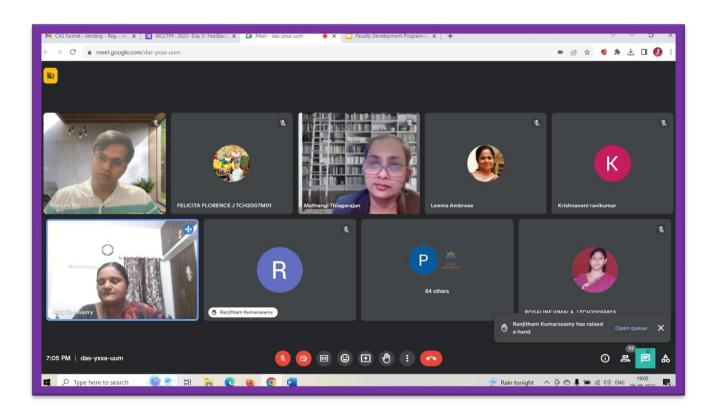




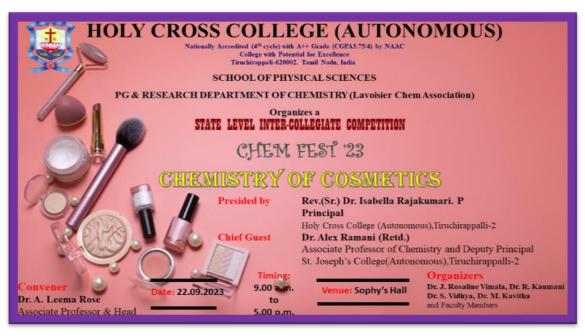








The PG and Research Department of Chemistry, Holy Cross College organised a State Level Inter-Collegiate Competition – Chem Fest'23 on 22nd September 2023 based on the theme "CHEMISTRY OF COSMETICS". Cosmetics are substances or products used to enhance the appearance or fragrance of the body. Chemistry is involved in every aspect of the cosmetology field, including hair, hair dyeing, and chemical reactions formed when blending chemicals. All beauty products are made from combinations of chemicals and fall into the realm of chemistry. Chemicals in personal care and makeup products have many uses. For preserving the product and adding fragrance to provide sun protection and making the product feel smooth and silky. The event commenced with a prayer followed by welcome address delivered by Dr. A. Leema Rose, Associate Professor of Chemistry, Holy Cross College(Autonomous) Trichy. The inaugural address was delivered by Dr. Alex Ramani (Retd.), Associate Professor of Chemistry and Deputy Principal, St. Joseph's College (Autonomous), Trichy. Sir acted as the quiz master for the Chem quiz competition. The various events conducted are Chem Quiz, Chem Photography, Dumb Charades, Chem Rangoli, Extempore, Poster Presentation, Chem-Connexion, and Chem Cartooning. 17 colleges from in and around Trichy registered and participated in the Inter-College Chem Fest'23. About 190 students actively participated in different events. All the events were based on the theme of the chemistry of cosmetics. The overall winner trophy was won by Lady Doak College, Madurai, and St. Joseph's College (Shift-I) won the runner-up trophy. The response received from various colleges and the feedback of the participants was positive and a great boost for the institution. The program ended with the vote of thanks proposed by Dr. S. Vidhya, Assistant Professor of Chemistry at Holy Cross College, Trichy. Overall, the event was a grand success and good exposure for all the teams who participated.







On 1st December, Lavoisier Chem Association of the PG and Research Department of Chemistry, organised a meeting on the topic "scope and career prospects in Pharmaceutical Industry". Mr.Rajeesh Loganathan, General Manager-Quality Control, Tagros Chemicals India Pvt. Ltd. Cuddalore, was the resource person. The meeting commenced with a prayer followed by the welcome address by Ms. K. Kavithanjali of II M.Sc Chemistry. The minutes of the previous meeting was read by Ms.M.S.Sivaranjani, Secretary of Lavoisier Chem Association. The resource person spoke about the scope for chemistry graduates in the field of Pharmaceutical industry. Sir gave insights on the various Departments where chemistry students would play a core role in pharma industries. He motivated the students to pursue their careers in industries by developing the practical and analytical skills. The session was an eye opener to the students. The students of II UG, II UG, II PG, II PG and research scholars were benefited from this session. The session ended with a formal vote of thanks delivered by Ms.G.Vidhya Shree of II M.Sc Chemistry.







The Lavoisier Chem Association of the PG & Research Department of Chemistry organized a workshop on 5th December on the topic "Big Idea- An Ideation". **Dr. D. SUGUMAR,** Principal, Care College of Arts and Science, Tiruchirappalli, and **Dr. B. ABDUL SUBAN,** Associate Professor, Care Business School, Tiruchirappalli, were the resource persons. The workshop commenced with a prayer and the welcome address delivered by Ms. M. Pirathiksha (I BSc Chemistry 'B'), and the minutes of the previous meeting were read by Ms. M.S. Sivaranjani (III BSc Chemistry 'B'), the Secretary of the Lavoisier Chem Association.

The first session was conducted by Dr. B. Abdul Suban. Sir spoke about "Creating the Power House of Innovation." Sir insisted on the students analyzing and concentrating their skills, and also that a basic idea is necessary and enough to become an entrepreneur. This session was very effective and more valuable to the students.

The next session was followed by Dr. D. Sugumar. Sir spoke about "what you need to start a business?" Sir motivated the students to become entrepreneurs, and he gave some real-life examples of a few entrepreneurs. Sir conducted an activity based on the topic "How to change daily life problems into ideas and convert that into a business." Students enthusiastically participated and enhanced their ideas. This session was more beneficial to the students. The workshop was very worthwhile and had a significant impact. Around 90 students from I UG attended, actively benefitted from this session. The session concluded with a formal vote of thanks delivered by Ms. M. Aline Ruth of I B.Sc. Chemistry 'A'.

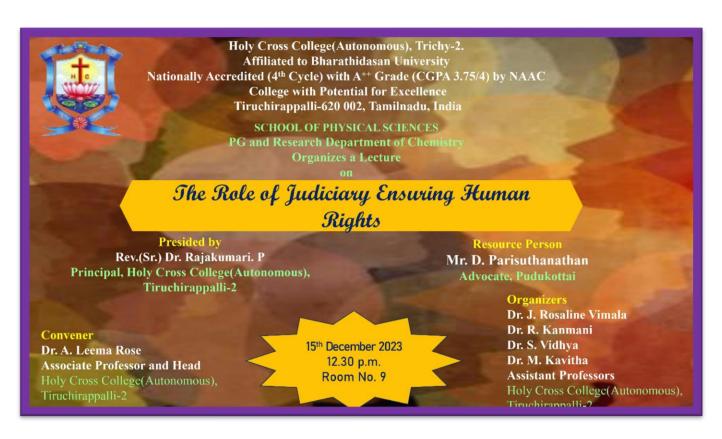






The PG and Research Department of Chemistry organized a lecture on the topic "The Role of Judiciary Ensuring Human Rights" on 15th December 2023. Ms. P. APARNA of I MSc Chemistry gave the welcome address and Ms. V. Mareeshwari of II MSc Chemistry, Joint secretary of Lavoisier Chem Association, read the association minutes of the previous meeting.

Mr. D. PARISUTHANATHAN, Advocate, Pudukkottai was the resource person. Sir highlighted the significance about human rights which imparts a good standard of living in the world. He insisted that human rights are the fundamental rights for all the humans to get treated equally irrespective of nationality, place of residence, sex, ethnicity, colour, religious, language etc. He shared few case histories from his own experience with the student's community and elucidated the police arresting procedure for a person under suspicion. He also discussed about the judicial custody, interrogation, bailable offense and non-bailable offense. Finally, he emphasized the five important human rights i.e., the right to life and liberty, freedom from slavery and future freedom of opinion and expression, the right to work and education. Ms. B. GOWTHAMI of I MSc Chemistry gave the vote of thanks. The beneficiaries of this session were PG students and Research Scholars.







On 12th January, the Lavoisier Chem Association of the PG & Research Department of Chemistry, organized a meeting on the topic "RESEARCH OPPORTUNITIES FOR CHEMISTRY STUDENTS IN HIGHER EDUCATION INSTITUTIONS". Dr. Berlina Maria Mahimai our department alumna was the chief guest. The meeting commenced with a prayer followed by the welcome address by Ms. S. Haritha Sakthi (II MSc Chemistry), and the minutes of the previous meeting was read by Ms. V. Mareeshwari, the joint Secretary of the Lavoisier Chem Association. Dr. Berlina discussed the significance of research and the opportunities which are available all over the world. She explained a clear overview about the scope of research, how to select a research topic and stipends available to carry over the research. She then addressed several opportunities in India and abroad, as well as how to acquire admission to private colleges and apply for fellowships for Master's, Ph.D., and post-doctoral programs. She also highlighted the importance of publishing the research article in Scopus indexed journals and to explore the searching tools which are useful to write a research article. The session was very effective and had a significant impact. The I PG, II PG and Research scholars attended, actively benefiting from this session. The session concluded with a formal vote of thanks delivered by Ms. Kavithanjali (II M.Sc. Chemistry).







International Conference on Recent Advances in Physical Sciences (ICRAPS-2023)

The School of Physical Sciences, Holy Cross College (Autonomous), organized the Two Days International Conference on Recent Advances in Physical Sciences (ICRAPS-2023), on 19th and 20th January 2024.

The objective of the International Conference on Recent Advances in Physical Sciences (ICRAPS) is to provide a platform for researchers, early-career researchers, scientists, and industry professionals to exchange knowledge, present cutting-edge research findings, and discuss advancements in the field of physical sciences and materials. The conference aims to foster interdisciplinary collaborations and facilitate the dissemination of innovative ideas and approaches in various areas of physical sciences, such as condensed matter physics, quantum physics, materials science, nanoscience, and photonics. The aforementioned domains offer a remarkable chance for the academic, scientific, and industrial groups to tackle novel difficulties, exchange answers, and deliberate on next research paths.

The programme commenced with the welcome address by Dr. A. Leema Rose, Associate Professor and Head, PG and Research Department of Chemistry, Holy Cross College (Autonomous), Trichy and the Convener of ICRAPS 2024. Rev. Dr. Pavulraj Michael SJ Rector, St. Joseph's College (Autonomous), Tiruchirappalli inaugurated the programme and spoke about Synergy and Energy.

Dr. Agila Yuvapragasam, Director Mullai Academia, International Pvt. Ltd, Chennai briefed about the highlights of the conference. **Rev. Dr. Pavulraj Michael** SJ Rector, St. Joseph's College (Autonomous), Tiruchirappalli released the conference proceedings.

Dr. Selvaraj Arokiyaraj, Assistant Professor, Department of Food Science and Biotechnology Sejong University, Republic of Korea delivered the keynote address and emphasized on the importance of education.

Rev. Sr. Dr. Anne Xavier, Secretary and Rev. Sr. Dr. Rajakumari. P, Principal, Holy Cross College, (Autonomous), Trichy offered felicitations. Dr. A. Inigomary Rita, Assistant Professor of Physics and Dean of Physical sciences, proposed the vote of thanks.

The inauguration was followed by three technical sessions. **Dr. Selvaraj Arokiyaraj,** Assistant Professor, Department of Food Science and Biotechnology Sejong University, Republic of Korea delivered the talk on the topic Touting Traditional Knowledge and Herbal Medicine to Combat and Prevent COVID-19. **Dr. Saravanan Govindaraju,** Research Professor at Bionano Research Institute Gachon University, Seongnam-si,, South Korea presented a talk on the topic Single Atomic Scale Catalysts for Biomedical Applications. **Dr. A. Dennyson Savariraj,** Assistant Professor, Advanced Functional Nanohybrid Material Laboratory, Department of Chemistry, Dongguk University, South Korea elaborated on the topic Smart Contact Lenses for Ocular Theranostics.

The second day of the conference started with a prayer song and followed by four technical sessions. **Prof. Dr. Gurumurthy Hegde,** Director, Centre for Advanced Research and Development Professor, Department of Chemistry, CHRIST (Deemed to be University), Bengaluru delivered a talk on the topic Marriage between Shape Anisotropic Materials and the Porous Nano Carbons: Good or Bad? **Dr. P. Parthiban,** Professor of Chemistry, Saveetha School of Engineering, SIMATS (Saveetha University), Chennai discussed the topic Catalytic Enhancement by Economic Materials. **Dr. Kuppusamy Arumugam,** Associate Professor Department of Chemistry, Wright State University, OHIO, USA explained about Gold Based Next Generation Cancer Therapeutics. **Dr. Sivaprakash Paramasivam,** Post-Doctoral Fellow, Department of Mechanical Engineering, Keimyung University, Daegu, Republic of Korea spoke on the topic Shock Waves on Materials

Dr. A.V. Paulin Edwidge Mary, Assistant Professor and Head, PG and Research Department of Physics, Holy Cross College (Autonomous), Trichy and the Convener of ICRAPS-2024 gave the welcome address in the valediction. **Dr. Sivaprakash Paramasivam,** Post-Doctoral Fellow, Department of Mechanical Engineering, Keimyung University, Daegu, Republic of Korea, gave the valedictory address and **Dr. A. Juliat Josephine,** Organizing Secretary of ICRAPS-2024 and Assistant Professor, PG and Research Department of Physics read the report of the conference. The participants gave their feedback and the program came to an end with the vote of thanks delivered by **Dr. J. Rosaline Vimala**, Organizing Secretary of ICRAPS-2024 and Assistant Professor, PG and Research Department of Chemistry, Holy Cross College(Autonomous), Tiruchirappalli-2.

Nearly 160 participants registered for the conference from various colleges and universities such as Karunya Institute Coimbatore, St. Antony's College Dindigul, St. Joseph's College Trichy, H.H. Raja's College Pudukottai, CUT Thiruvarur, Cauvery College Trichy, Dr. N.G.P. Arts and Science College Coimbatore, Sacred Heart College Thirupattur, Dhanalakshmi Srinivasan Perambalur, Sri Meenakshi Government Arts and Science College Madurai, Jamal Mohammed College Trichy, New College Chennai, Alagappa University Karaikudi, Bishop Heber College Trichy, JJ College Pudukottai and Urumu Dhanalakshmi College Trichy. The editorial committee chose approximately 71 abstracts and included them in the conference proceedings with ISBN. The editorial team acknowledges and congratulates the participation of scholars and faculty members from diverse institutions. 37 papers were oral presented and 34 papers were presented in poster section. From which 2 best papers are selected from the oral presentation and 2 best papers from the poster presentation.

Excellent research findings and advancements in the current fields of research were discussed throughout the conference, enriching the participants with new research ideas and assisting them in gaining insights on both inward research in core areas of chemical, physical and biological sciences and outward research in multi-disciplinary and inter-disciplinary fields. Overall the two-day conference provided a positive outlook on current global research in variety of recent disciplines of research. The perspectives presented and analyzed by the resource persons and paper presenters helped the participants to reexamine the concepts that we mindlessly hold onto in our daily lives.



1.30 p.m. - 2.30 p.m. Technical Session - VII

Shock Waves on Materials

Dr. Sivaprakash Paramasivam Post Doctoral Fellow Department of Mechanical Engineering Keimyung University, Daegu, Republic of Korea

Oral Presentation 2.30 p.m.

VALEDICTION

VALEDICTION

3.00 p.m. - 4.00 p.m.

Prayer

Welcome Address

Dr. A. V. Paulin Edwidge Mary Convener, ICRAPS-2024 Assistant Professor and Head PG and Research Department of Physics Holy Cross College (Autonomous), Tiruchirappalli

Dr. Sivaprakash Paramasivam Valedictory Address

Post Doctoral Fellow Department of Mechanical Engineering Keimyung University, Daegu, Republic of Korea

Presentation of Report

Dr. A. Juliat Josephine
Organizing Secretary, ICRAPS-2024
Assistant Professor of Physics
Holy Cross College (Autonomous), Tiruchirappalli

Feedback

Distribution of Certificates

Dr. J. Rosaline Vimala Vote of Thanks

Organizing Secretary, ICRAPS-2024 Assistant Professor of Chemistry Holy Cross College (Autonomous), Tiruchirappalli

National Anthem



Holy Cross College (Autonomous)

Affiliated to Bharathidasan University
Nationally Accredited (4° Cycle) with A++ Grade (CGPA 3.75/4) by NAAC
College with Potential for Excellence Tiruchirappalli - 620 002, Tamilnadu, India



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Chennai - 600 053, Tamilnadu, India.



Organizes an

International Conference on

Recent Advances in Physical Sciences

(ICRAPS - 2024)

Date: 19th & 20th January, 2024

19th January 2024

8.30 a.m. - 9.00 a.m. Registration

9.00 a.m. - 11.00 a.m.

Inauguration Prayer

Lighting the lamp

Dr. A. Leema Rose
Convener, ICRAPS-2024
Associate Professor and Head
PG and Research Department of Chemistry
Holy Cross College (Autonomous), Tiruchirappalli

Rev. Dr. Pavulraj Michael SJ Rector, St. Joseph's College (Autonomous), Tiruchirappalli Inaugural Address

Dr. Vijayshankar Asokan Co-Convener, ICRAPS - 2024 Managing Director Multai Academia, International Pvt. Ltd, Chennai Conference Highlights

Releasing the Souvenir Keynote Address

Dr. Selvaraj Arokiyaraj

Assistant Professor Department of Food Science and Biotechnology Sejong University, Republic of Korea

Rev. Sr. Dr. Anne Xavier Secretary, Holy Cross College (Autonomous), Tiruchirappalli

Rev. Sr. Dr. Rajakumari P. Principal, Holy Cross College (Autonomous), Tiruchirappalli

Dr. A. Inigomary Rita
Assistant Professor of Physics and Dean of Physical Sciences
Holy Cross College (Autonomous), Tiruchirappalli Vote of Thanks

11.00 a.m. - 11.30 a.m. Tea Break 11.30 a.m. - 12.30 p.m. Technical Session - I

Touting Traditional Knowledge and Herbal Medicine to Combat and Prevent COVID-19

Dr. Selvaraj Arokiyaraj Assistant Professor Department of Food Science and Biotechnology Sejong University, Republic of Korea

12.30 p.m. - 1.30 p.m. Lunch



Single Atomic Scale Catalysts for Biomedical Application

Dr. Saravanan Govindaraju Research Professor at Bionano Research Institute Gachon University Seongnam-si, Gyeonggi-do, South Korea

2 30 p.m. - 3 30 p.m. Technical Session - III

Smart Contact Lenses for Ocular Theranostics

Dr. A. Dennyson Savariraj Assistant Professor, Advanced Functional Nanohybrid Material Laboratory, Department of Chemistry, Dongguk University, South Korea.

3.30 p.m. - 4.30 p.m. **Oral & Poster Presentation**

20th January 2024

9.00 a.m. - 10.00 a.m. Technical Session - IV

Marriage between Shape Anisotropic Materials and the Porous Nano Carbons: Good or Bad?

Prof. Dr. Gurumurthy Hegde

Director Centre for Advanced Research and Development Professor, Department of Chemistry CHRIST (Deemed to be University), Bengaluru

10.00 a.m. - 11.00 a.m. Technical Session - V

Catalytic Enhancement by Economic Materials

Dr. P. Parthiban

Professor of Chemistry
Saveetha School of Engineering
SIMATS (Saveetha University), Chennai

11.00 a.m. - 11.30 a.m. Tea Break

11.30 a.m. - 12.30 p.m. Technical Session - VI

Gold Based Next Generation Cancer Therapeutics

Dr. Kuppusamy Arumugam Associate Professor Department of Chemistry Wright State University, OHIO, USA

12.30 p.m. - 1.30 p.m. Lunch

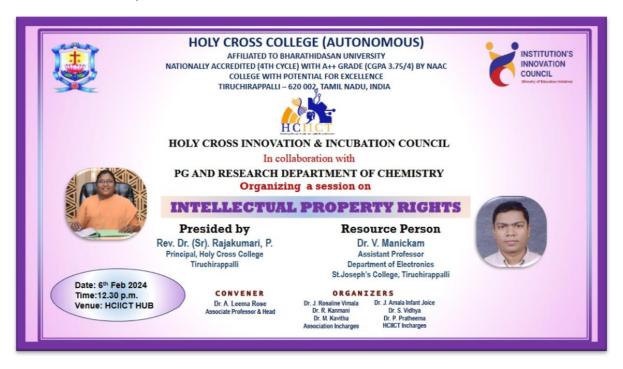






On 06th February, the Lavoisier Chem Association of the PG & Research Department of Chemistry, In collaboration with Holy Cross Innovation & Incubation Council organized a meeting on the topic "INTELLECTUAL PROPERTY RIGHTS". Dr. V. Manickam Assistant Professor Department of Electronics St. Joseph's, College, Tiruchirappalli was the chief guest. The meeting commenced with a prayer followed by the welcome address by Ms. Angel Prabha (Research scholar), and the minutes of the previous meeting was read by Ms. V. Mareeshwari, the joint Secretary of the Lavoisier Chem Association.

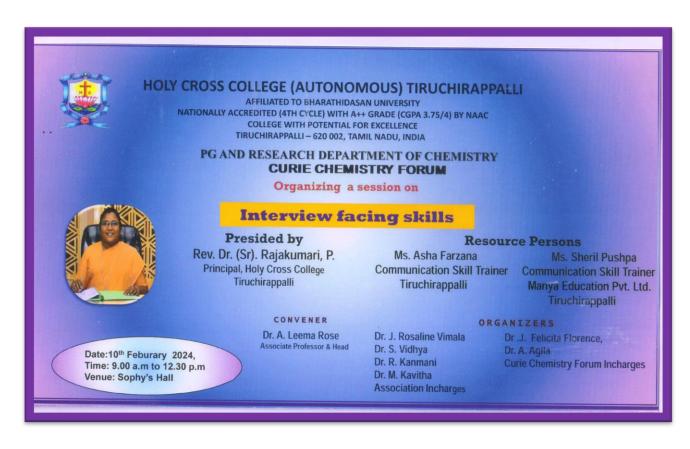
The resource person had enlightened us with an engaging discourse. He gave a brief introduction on IPR and explained the various related terms such as copyrights, patents etc., He gave us an idea about how to use the property rights which allows the holder to exercise a monopoly on the use of the item for a specified period. Students learnt how IPR provides total control over a new innovation and its creator. He also discussed how small innovation influence societies at large and how one should indulge in innovating and patenting ideas that will be useful for an individual. The session was very effective and had a significant impact. The I PG, II PG and Research scholars attended, actively benefiting from this session. The session concluded with a formal vote of thanks delivered by Ms. S. Nivetha (Research scholar).







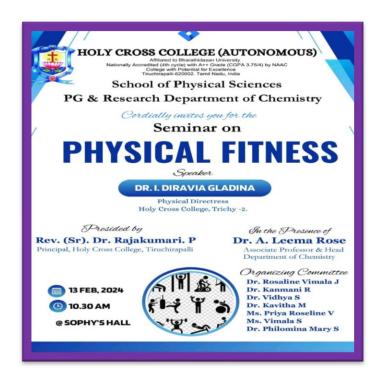
The **PG** and Research Department of Chemistry organized one day session on Interview Facing Skills on 10th February 2024. The workshop was started with a prayer followed by the welcome address. The resource persons were Ms. Sherly Pushpa and Ms. Asha Farzana. The first session was based on interview skills and tips and techniques for building a good resume. The resource person highlighted the importance of communication skills and fluency in English. The second session was based on trends in employment market and the importance of group discussion and the myths of group discussion. The resource person emphasized the importance of emotional intelligence and presence of mind during interviews. Totally 119 students were benefitted from this workshop.







The PG and Research Department of Chemistry, Holy Cross College organized a topic Seminar on "Physical Fitness" on 13th February, 2024. The event started with a prayer followed by welcome address in Sophy's hall. The resource person of the day was Dr. I. Diravia Gladina, Physical Directress, Holy Cross College, Tiruchirappalli-2. The resource person enlightened the students on role of exercise for good health and proper functioning of human body. She made the students do joint exercise. Nearly 200 students of I UG NME from various departments were benefited by this session. The event ended with the formal vote of thanks.









The PG & Research Department of Chemistry, Holy Cross College, Trichy, organized a meeting on the topic "Nutrition for Sustenance", on 19th February 2024. The meeting commenced with a prayer followed by the welcome address. Ms. V. Mareeshwari, Joint Secretary of Lavoisier Chem Association, welcome the gathering. Dr. S. Amutha, Assistant Professor(SG), Department of Education & Technology, Bharathidasan University, Trichy was the resource person. Mam spoke about the importance of nutrition for healthy life. She told us to incorporate a diet chart in our daily life. The resource person stressed on mindful eating, balanced diet, the role of water and detoxification of our body. The importance of millets in our daily chart to lead a disease free lifestyle and the role of micro and macro nutrients were distributed for the winners of drawing and paper presentation competition which was conducted by the "Curie Chemistry Forum" on 27.07.2024. Nearly 200 students of IIUG, IIIUG, IIPG got benefitted from this session. The meeting ended with the formal vote of thanks by M.S. Sivaranjani, Secretary of Lavoisier Chem Association.

