

PG AND RESEARCH DEPARTMENT OF CHEMISTRY

Association Activities 2018-2019

The Chemistry Association was inaugurated on 4th July 2018 by Dr. A. John Peter, Dean and Associate professor of St. Joseph Institute of Management Trichy. He spoke on the topic “PURSUING YOUR PASSION”. He motivated the students to follow the principles of Self-actualization and the steps to discover the hidden talents.



Reaching the goal of CSIR-NET Qualifying Examination

On 20th July 2018, an association meeting was held on the topic “Reaching the goal of CSIR-NET Qualifying Examination”. The speaker of the day was Ms. Sabeena Ashifa, an alumna of the department of chemistry, Holy Cross College.



CSIR- NET COACHING CLASSES

After the strenuous efforts and meticulous planning by staff, the department has organized CSIR- NET coaching class for PG Students, Research Scholars and Staff of the department. It was inaugurated on 6th August 2018 by **Dr. S. R. Bheeter**, Associate Professor and Head, Department of Chemistry, Srimad Andavan Arts and Science College, Trichy. Eminent professors from various reputed institutions are conducting classes during week days and weekends. The objective is to create a comprehensive understanding of the subject and help in developing strategies to meet arduous competitions among the students.



WORKSHOP ON PHYSICAL CHEMISTRY EXPERIMENTS FOR TEACHING STAFF

On 21th August 2018, the PG and Research Department of Chemistry organized a workshop on “**PHYSICAL CHEMISTRY EXPERIMENTS FOR TEACHING STAFF**”. **Dr. Amala Fatima Rani**, Head and Associate Professor, Department of Chemistry initiated the idea of conducting this workshop. **Mrs. Kalaiselvi**, Associate Professor, Department of Chemistry acted as coordinator of this workshop. The aim of this workshop is to create an awareness about the proper handling of instruments and systematic way of carrying out the experiments. All staff members participated actively and clarified all their doubts. The workshop came to an end with the feedback session of the participants.



On 29th August 2018, Dr. I. Rama, Assistant Professor of chemistry, Seethalakshmi Ramaswamy College gave a lecture on the topic “**Brain Chemicals – A Module for happiness.**” She enlightened the session by saying that, the brain is the boss of our body. She gave us lots of do’s and don’ts that threatens our brain and those which protects our brain. She gave the message that everybody should be good to their own brain to lead a happy life.



MOU SIGNED:

Department of Chemistry signed an MOU with Dalmia Cement Bharat Ltd., Dalmiapuram-621 651, Tiruchirappalli on 18th September 2018, to establish a mutually beneficial relationship with the industry built on Academic and Scientific Co-operation.



On 4th October 2018, Rev. Fr. Dr. Sagayaraj M.A (Literature) & Ph. D (Christian studies), Parish Priest and Administrator of St. Mary's Cathedral, Trichy motivated the students on the topic **HUMAN VALUES**. He emphasised that "LIFE IS A GIFT". We all must love our self and make this society a better place to live. He concluded his session by saying that good values must be upheld and should last forever.



Alumnae Association

On 27th August 2018, Mrs. Malathi Shanmugam, Business Consultant, Intellect Design Arena Ltd, Chennai highlighted the importance of passion, persistence and perseverance to become successful in life. She insisted that the students should be empowered to face the social and cultural challenges and proactive. She felt proud to be an alumna of the department and recalled her pleasant memories as a student in the college. The students were spell bound by her inspiring talk.



Reunion of Alumnae

On 13th October 2018, **Reunion of Alumnae** programme was organized at Sophy's Hall to facilitate the participation of alumni from various batches. Rev. Sr. Elizabeth Rose an alumna and former Principal of Holy Cross College was the Chief Guest and Rev. Sr. Christina Bridget, Principal of Holy Cross College delivered the presidential speech. Nearly 40 alumnae from various batches participated.

On 21st December 2018, Ms. Prema distinguished Alumna, currently working at Singapore, ignited the students about the importance of goal setting. She quoted that chemistry is the base of all fields and there are only 6% of chemistry graduates left unemployed. She highlighted the various job opportunities available in Singapore. She also promised to help the students who are interested to work in prominent pharmaceutical and food industries at Singapore. The meeting came to the end with an interaction session.



Workshop on “Small Scale production of household products”

On 24th October 2018, the PG and Research Department of Chemistry organized a workshop on “Small Scale production of household products” at Chemistry laboratory. Mrs. B. Pitchaiammal, working as a Teacher at the Government Higher Secondary School, Musiri was the chief guest. The meeting was attended by the faculty members and III UG students of chemistry department. She demonstrated the preparation of Detergent powder, Phenoyl and soap oil including the quantity of raw materials required for the preparation. She also gave useful tips on maintenance of good health and hygiene.



Workshop on “Small Scale production of household products” 24/10/2018

EXHIBITION (S-I & II)

On 30th November and 1st December 2018, an exhibition, “**CHEM EXPO (2018-19)**” with the theme “**Energy resources**” was organized. The event was inaugurated by **Dr. Sr. Christina Bridget Principal, Holy Cross College, Trichy**. The exhibition aims to promote a premier knowledge in the field of energy sources. It is a good platform for the presenters and viewers to get enriched in the various sources of renewable energy and its utility, in order to create a sustainable environment. Nearly 1500 students from various schools in and around Trichy along with the teachers visited the exhibition and 5000 students from various Departments of Holy Cross College, Trichy visited the exhibition and were immensely benefitted.



On 14th December 2018, Dr. A. Alexramani, Associate professor of chemistry, St. Joseph college, shared his views on the Career Guidance. He explored the various job opportunities available in different sectors. He also highlighted the importance of higher education and listed the various reputed institutions offering higher education after under graduation. He shared his views on the systematic approach in clearing the competitive examinations.



NATIONAL CONFERENCE-“Nano National Summit- Current Trends and Future perspectives” - (NNSCTFP-2019)

The PG and Research Department of Chemistry, Holy Cross College (Autonomous), Trichy conducted a *two day National Conference on the theme, “Nano National Summit- Current Trends and Future perspectives” (NNSCTFP-2019)*, 9th and 10th of January 2019. Nearly 220 participants from reputed national and international institutions participated and presented papers in different recent fields of research. **Dr. G. Gopinath**, Registrar, Bharathidasan University, Trichy delivered the inaugural address. He said that this conference will provide space for sharing the research findings and also kindle the fire for research in the field of nanotechnology. The keynote address was delivered by **Dr. S. Balakumar**, Professor and Director, National Centre for Nanoscience and Nanotechnology, University of Madras. **Rev. Sr. Jyothi Selvaraj**, Provincial, Holy Cross Convent, Trichy, released the conference proceedings with ISBN. **Dr. A. Leema Rose**, was the convener and **Mrs. S. Margrat Sheela** was the Organizing Secretary of the event.

Prof. Dulal Senapati, Associate Professor, Chemical Sciences Division, Saha Institute of Nuclear Physics, Kolkata spoke on the topic “*Sustainable Nanoscience and Nanotechnology: Current Status and Recent Developments in the Field of Plasmonic Nanomaterials*”. He gave a quick glimpse on the concerted effort for the development of nano

plasmonics field in the last 50 years. **Dr. S. Balakumar**, Professor and Director, National Centre for Nanoscience & Nanotechnology, University of Madras, Chennai delivered his talk on the topic “*Graphene Nanocomposites for Energy and Environmental Applications*”. He summarized the recent progress in the perspective of materials design and construction of hierarchical nano systems. **Dr. Kaliaperumal Selvaraj**, Senior Scientist, Nano and Computational Materials Lab Catalysis Division, CSIR-National Chemical Laboratory, Pune gave a lecture on “*Engineered Graphene Nano Structure: a versatile nanoplatform for futuristic Health and Energy Applications*”. He explored the novel property alterations of nanoscopic graphene and its applications in various fields. **Dr. Somenath Garai**, Assistant Professor, Department of Chemistry, National Institute of Technology, Trichy presented a lecture on the topic “*Inorganic Nano-Fullerenes: Discovering the Enormous Potential for Encapsulation Chemistry Towards Catalysis*”. The unique spherical nanocapsules and its applications in the field of drug delivery system was discussed by him. **Dr. B. Sreedhar**, Professor, CSIR - Indian Institute of Chemical Technology, Hyderabad delivered his talk on the topic “*Nano engineered Materials - Synthesis, Characterization and Catalytic Applications*” He explained the applications of nano engineered materials in different fields of research like advanced microelectronics for conductive lines, medicine as an antibacterial agent, catalytic and biocatalytic transformations.

Dr. A. Vadivel Murugan, Associate Professor & Centre Head, Centre for Nanoscience and Technology, Pondicherry University, Puducherry presented a talk on the topic “*Challenges and Opportunities in Nanostructured Materials for Clean Energy and Bio nanotechnology*”. He gave an overview on how nanomaterials and nanotechnology can impact the development of high performance and affordable materials for clean energy technologies. **Dr. K. Muralidharan**, Professor, School of Chemistry, University of Hyderabad, spoke on the topic “*Synthesis of surfactant free metal chalcogenide nano/microparticles by hexamethyldisilazane (HMDS) - assisted method and their applications*”. He discussed the importance of designing new methods to yield applied nanomaterials without organic molecules surrounding to achieve targeted applications. The valedictory address was delivered by **Dr. B. Gopalan**, Industrial Research Consultant, Indian Institute of Chemical Technology, Hyderabad.



CHEM FEST '19

On 22nd January 2019, the department organized an Inter-Collegiate Competition **CHEM-FEST '19** on the topic “**NATURAL PRODUCTS CHEMISTRY**”. Nearly ten colleges from in and around Trichy participated in the inter-collegiate fest. The various events are quiz, chem.-rangoli, extempore, paper presentation, poster presentation, role play, cartooning, chem.-tunes, Chem-snap and dumb-charades. The students actively participated in all the events and the

overall trophy was bagged by Bishop Heber College, Trichy and Jamal Mohamed College, Trichy, bagged the runner up trophy.



On 19th February 2019, **Mr. R. Jegan, Chemical and Metallurgical** Superintendent in Ponmalai Workshop, Southern Railways, Trichy shared his views on the Central Government job opportunities available for chemistry graduates. He explored the various job opportunities available in different sectors. He shared his experiences in approaching and clearing various competitive exams. He also prescribed few important books which helps in the preparation of competitive exams to a great extent.



On 22nd February 2019, **Mr. V. Sundararajan – Head, Quality Control,** Dalmia Cements, spoke on the topic **Industrial Institution Interaction** as follow up programme of MOU. He explored the various job opportunities available for a chemist in cement industries.



On 25th and 26th February 2019, an Intradepartmental “**Periodic Table Writing Competition**” was conducted in commemoration of the International Year of the Periodic Table of Chemical Elements 2019. Students actively participated in the competition and meritorious students were honored with certificates.

The PG and Research Department of Chemistry organized **The International Scientist Meet** on 7th March, 2019. The purpose of the International Scientists Meet – 2019 is to equip the students with the scientific resources, so that they are able to shape up their academic career in the best possible way. The Department has a strong vision to impart knowledge and to maintain high academic standard through creative teaching, learning, research and extension for holistic development. The UG and PG students from the department of Chemistry participated in the meet. **Dr. Ramesh Pandian**, Research Professor, Protein structure – function research unit, School of Molecular and Cell Biology, University of Witwatersrand, Johannesburg, South Africa. He spoke on the topic “Hinge Region Insertions in HIV-1 Protease Affect Drug Binding: Insights from Structural and Functional studies”. He explained the growth of HIV virus and the various steps involved in the HIV- life cycle such as HIV –binding, replication, assembly, budding and molecular simulations. **Dr. R. Parithiban**, Research Professor, Department of Chemistry and Chemical Engineering, Inha University, Republic of Korea Spoke on the topic, “Types of Journals & Publication process”. He stressed that, the purpose of research is upliftment of human kind and publication of research work is nothing but dissemination of research knowledge.





Big Idea – Highlights of entrepreneurship”

On 9th March 2019, **Mr. R. Venkatesh**, Co-Coordinator, Entrepreneurship, Care Business School, gave the Valedictory address. He enlightened the students about” **Big Idea – Highlights of entrepreneurship**”. He distributed the certificates and prizes for UG and PG students who excelled in intra and intercollegiate competitions.

DEPARTMENT OF CHEMISTRY (SHIFT-II)

The Inaugural meeting of Chemistry association was held on 12th July 2018. The chief guest was **Mr. A. EBINISAR RAJA**, Assistant Professor, Bishop Heber college, Trichy, who gave an inspirational talk on “**YOU ARE UNIQUE**”. He motivated the students and gave interactive speech about who am I?. He also spoke about the importance of a student life.



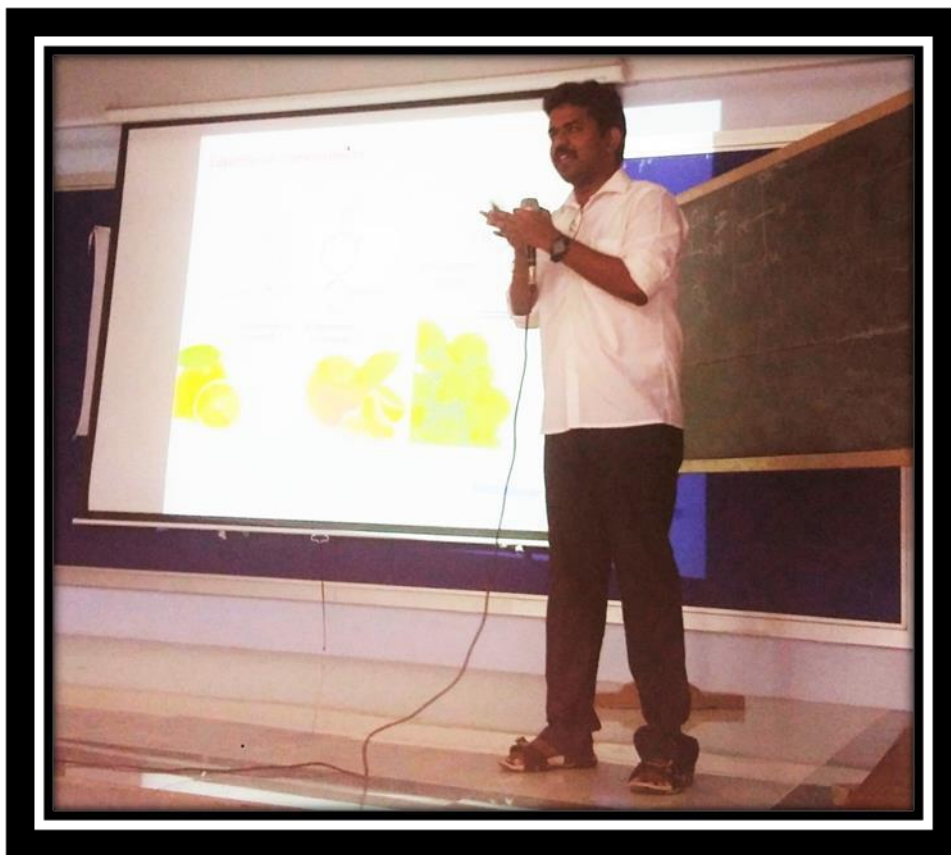
On 25th August 2018, **Dr. M. PURUSHOTHAMAN** Assistant Professor, Jamal Mohamed College, Trichy, gave an interesting talk on “**CHEMISTRY OF DRUG DESIGN AND DISCOVERY**”. He highlighted the role of a chemist in the field of drug designed discovery.



On 11th september 2018, **DR. A. N. PAUL ANGELO**, Associate Professor of chemistry, St. Joseph's college, Trichy, gave an inspirational talk on “**ELECTRIFYING ELECTROCHEMISTRY**”. He spoke about the basic principles and fundamental laws in electrochemistry.



On 16th September 2018 Mr. **MUTHUKUMAR, A.L** Research Scholar from IIT, Chennai gave an informative talk on the topic “**BASIC CONCEPTS OF STEREOCHEMISTRY**”. He highlighted the fundamental importance of stereochemistry.



On 7th January 2019, **Dr. A. SAVARIMUTHU** Associate Professor in JIM, Trichy addressed the students on the topic **HUMAN VALUES**. He motivated and encouraged the student with fruitful words about intrinsic values and humanity.



On 23rd January 2019, **Dr. N. MUJAFARKANI**, Assistant Professor of Chemistry, Jamal Mohammad college, Trichy addressed the students on the topic “**CAREER GUIDANCE**”. He spoke about the different job opportunities for UG and PG students.



On 21st February 2019, **MR. S. TAMIL SELVAN**, Master Memory Trainer, Kite Braining Institute, Trichy gave the training for development of memory power, competitive exam skills and ways to remove Exam Phobia and experience joyful learning.

