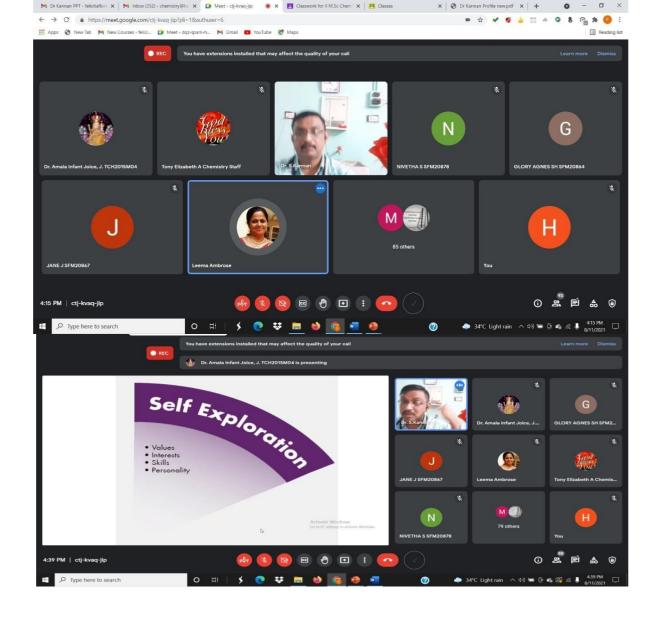
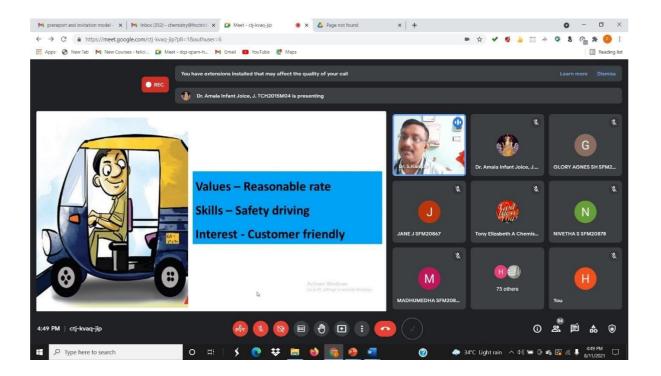
PG AND RESEARCH DEPARTMENT OFCHEMISTRY DETAILS OF ASSOCIATION ACTIVITIES (2021- 2022)

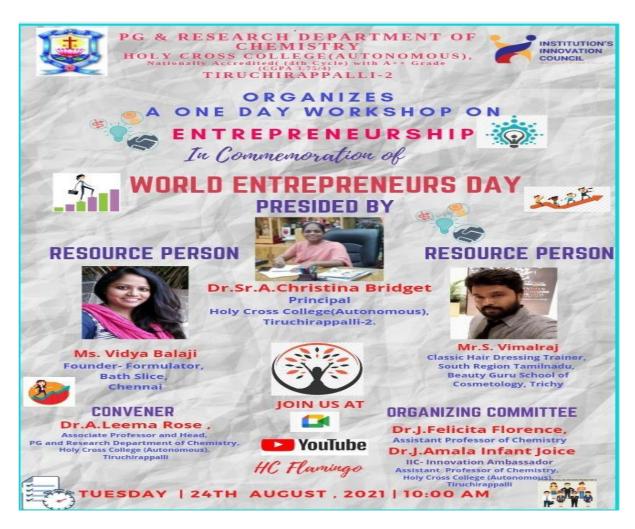
The PG and Research Department of Chemistry, conducted webinar on the topic "Building Impactful Career in Chemistry" on 11th August, 2021 between 4 p.m-5.30 p.m. The event was conducted through Google Meet platform as well as through Youtube HC Flamingo. Dr.S.Kannan, Head, Department of Chemistry, L.N.Governement Arts College (Autonomous), Ponneri, Chennai inaugurated the Chemistry Association Virtually. Dr.J.Felicita Florence, Assistant Professor of Chemistry delivered the welcome address and Dr. A. Leema Rose, Head and Associate Professor, Department of Chemistry offered felicitations. The speaker clearly explained about the definition of career, how to get the identity and how the students have to self-explore their selves. He also elaborated the steps to be taken to improve their values, skills and interest. Nearly 320 students got benefitted. The meeting came to an end with the vote of thanks delivered by Dr.J. Amala Infant Joice, Assistant Professor of Chemistry.

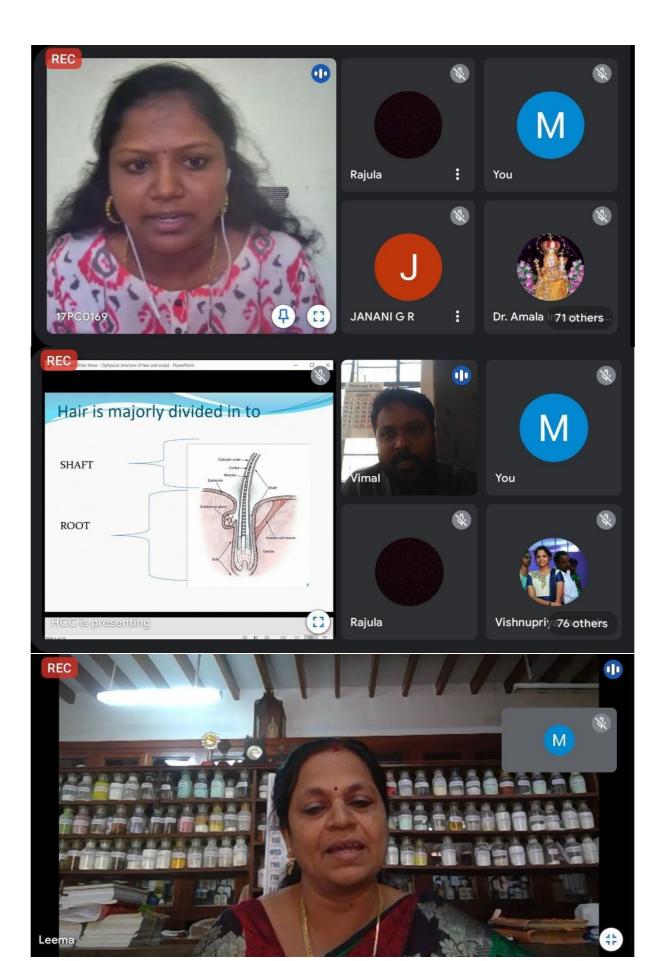


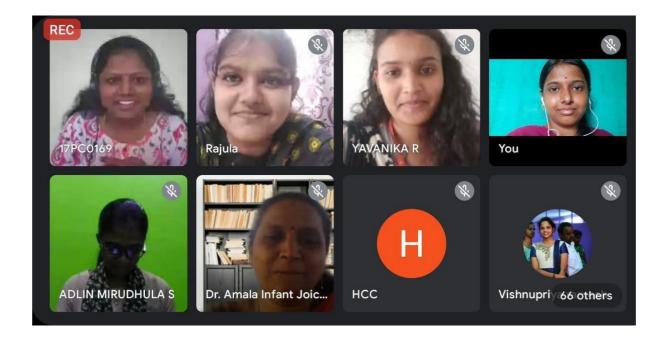




On 24th of August 2021, the PG and Research Department of Chemistry and Institution Innovation Council, Holy Cross College conducted an online "One day workshop on Entrepreneurship" to commemorate the World Entrepreneurs' Day. The event was held on Gmeet and live telecasted on YouTube also. The participants were from III UG and II PG of department of chemistry. The resource personinvited for the 1st session of the workshop was Mr.S. Vimal Raj, Classic Hair dressing Trainer, Beauty Guru School of Cosmetology. The event was presided by Rev. (Sr). A. Dr. Christina Bridget, Principal, Holy Cross College, Trichy. Felicitations was offered by the Dr.A.Leema Rose, Head of the department of Chemistry. The 1st session focused on equipping oneself with skills by method of "look and learn", "readand write" then progressing to create a unique style for one's brand. A detailed explanation on trichology was given for the questions posted in the chat box. The resource person for the 2nd session was Ms.Vidhya Balaji, Founder- Formulator, Bath Slice, Chennai. The 2nd session focused on Entrepreneurial skills. Ms.Vidhya Balaji shared his success story. She emphasised customer's well being and demand as the key for the success of a brand. Nearly 170 students got benefittedby this one day workshop on Entrepreneurship.







The PG and Research Department of Chemistry, Holy Cross College Organized an online webinar on the topic "Career Opportunities for Chemist in Government Sector" on 13th of September 2021. The eventwas held from 5:30PM – 7:30PM on Google meet. The Resource Person was Mr.R.Jegan, working as chemical and metallurgical Superintendent in Ponmalai, Southern Railways. Mr. Jegan focused on Career Opportunities for Chemistry students in various central Government Sectors after completing their Undergraduate and Postgraduate degrees. The Resource person shared his knowledge on interview skills and entrance exam questions perspective with his own life experiences. Students actively participated in the Question and answer session to know the advantages of central Government Jobs along with various schemes for Women Students in Government sectors. Nearly 110 students of Iyear Chemistry participated and benefitted by this useful session. Over all the session equipped the students to face the competitive world with various Central Government Careeropportunities.

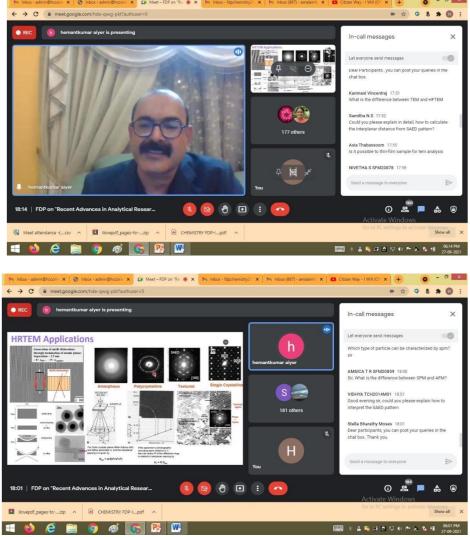




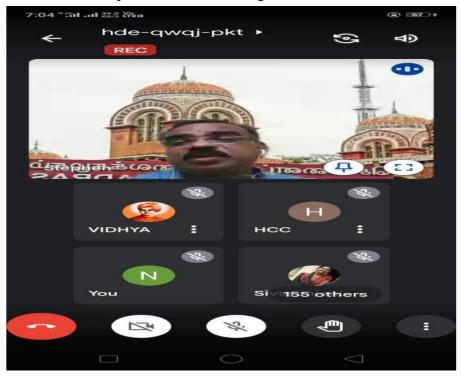


The five days National Level Online Faculty Development Cum Certificate Programme on "Recent Advances in Analytical Research Techniques" held from 27th September to 1st October, 2021 organized by the PG and Research Department of Chemistry, Holy Cross College (Autonomous), Trichy. Five eminent experts from various parts of India were invited to share their wisdom and vast experience on the topic. The main objective of the faculty development cum certificate programme was to provide a platform for researchers, chemists, academicians and postgraduate students from all over the country on the current trends of analytical chemistryin research. The programme commenced with the welcome address by Dr. J. Felicita Florence, organizing secretary, Assistant Professor of Chemistry, Holy Cross College (Autonomous), Trichy. Dr. A. Leema Rose, FDP Convener, Associate Professor and Head, Department of Chemistry, Holy Cross College (Autonomous), Trichy, offered felicitations.On 27th September, Dr. Hemant Kumar Aiyer, Lead Scientist, Aditya Birla Science and Technology Company Pvt. Ltd., Mumbai spoke on the topic 'Review of Current Analytical Techniques for Advanced Materials'. He discussed the use of various microscopic techniques like SEM, TEM, HRTEM, AFM etc. in advanced research. The integral role of Analytical Chemistry in academics and industries was also explained by him.



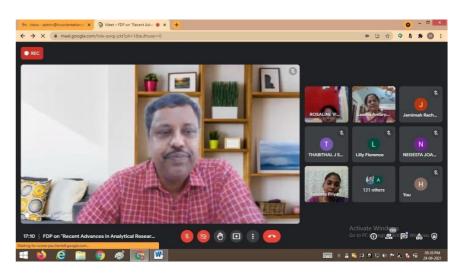


On 28th September, Dr. A. Stephen, Professor, Department of Nuclear Physics, University of Madras, Chennai, gave a lecture on the topic 'X ray Diffraction Techniques'. He elaborated that, the primary use of XRD analysis is the identification of materials based on their diffraction pattern. He also summarized the benefits and applications of XRD in detail. The latest software available for the interpretation of XRD image was also dealt in this session.

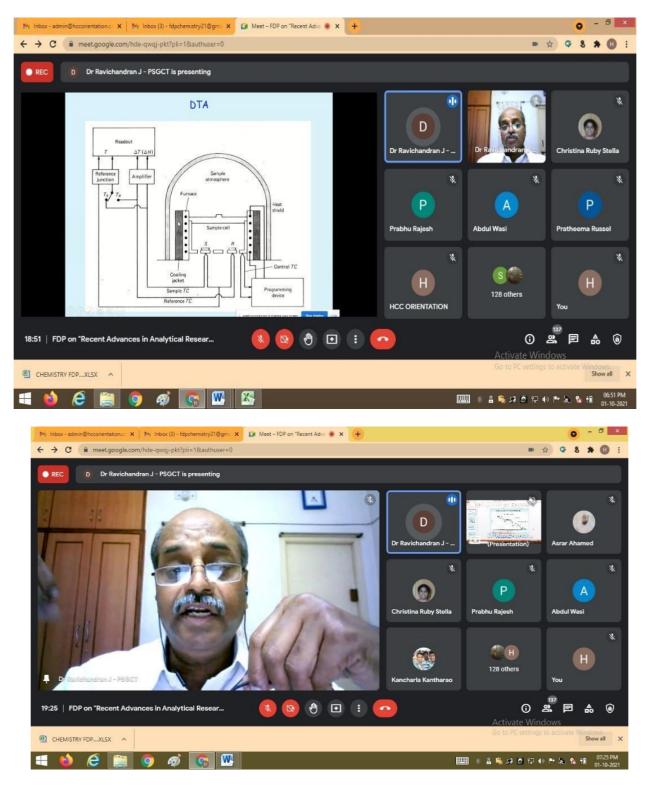


On 29th September, Dr. T.M. Sridhar, Assistant professor, Department of Analytical Chemistry, University of Madras, Chennai, delivered his talk on the topic 'Analytical Techniques for Surface Characterization'. He focused on the fundamentals of Surface Analysis and related characterization techniques. The metal surface characterization techniques including XPS, AES and PES was explained in detail by him.

On 30th September, Dr. T. Sivakumar, Professor, Department of Applied Science and Technology, Anna University, Chennai, presented a lecture on the topic 'Gas Chromatography'. He gave a detailed outline on the working principle of gas chromatography. The ongoing challenges and applications of gas chromatographic technique was also elaborated by him.



On 1st October, Dr. J. Ravichandran, Professor of Chemistry, PSG College of Technology, Coimbatore, delivered a session on the topic 'Thermal Methods of Analysis'. He elaborated the different thermal techniques including thermogravimetry, differential thermal analysis and differential scanning calorimetry. The widespread use of thermalmethods both in quality control and research applications on industrial products such as polymers, pharmaceuticals, metals and alloys was also explained by him.



The FDP was appreciated as a timely and valuable event by the resource people. The FDP received a lot of positive feedback from faculty members and research scholars from many colleges and universities of India. There were nearly 205 enthusiastic participants in total, who took part in the 5-day online FDP. Each session was of 120 minutes and included open

question and answer session. Google Meet was the platform used and the feedback cum assessment form links were shared every day at the end of the presentation. This 5-dayonline FDP cum certificate programme was an extraordinary event with huge success and this event will be a landmark in the field of Recent Advances in Analytical Research Techniques.

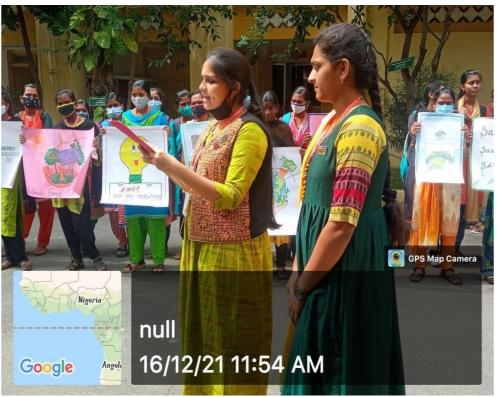
The PG and Research Department of Chemistry, Holy Cross College organized an Association Meeting on the topic "Leadership Skills" on 4th December, 2021. The Event was held from 1:30 to 3:30pm at Sophy's hall. The Resource Person of the day was Dr.M.Sumathi, Assistant professor and Head ,Department of Social Work, Thanthai Hans Roever College (Autonomous), Perambalur. The event Strated with Prayer and welcome address . The resource person gave an inspirational speech on developing the leadership skills of our students who are the future leaders. Emphasis was given to the different styles of leadership and how to inculcate the Leadership styles in our own work places. Thoughts on resilience and the practice of creating opportunities was shared by the resource person. This was followed by a very interactive Q and A session. Over all, the session equipped the students to face the competitive world with good leadership skills. 323 students of Chemistry Department were greatly benefitted and motivated by this session. The event ended with a formal vote of thanks.



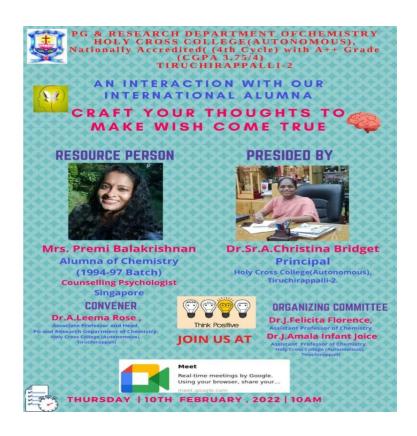
The PG and Research Department of Chemistry, Youth Red Cross (YRC) and Rotaract club of Holy Cross College organized An awarenessprogram on 16th DECEMBER ,2021 on account of National Energy Conservation day. The Student volunteers of Chemistry department assembled on either side of the College entrance holding charts related to 'Energy conservation' from 8am to 10am in the morning

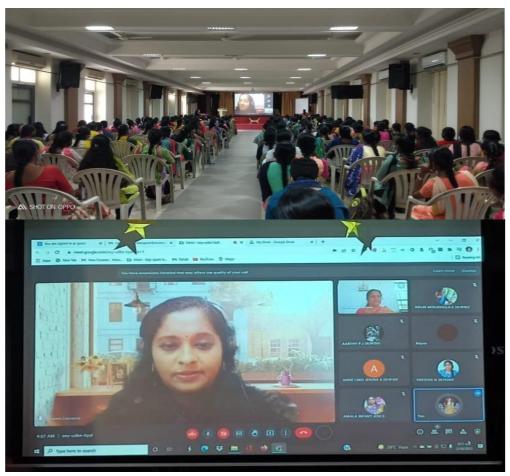
.Later in that day, at 11.30am a mime was depicted on The Significance of trees .Pioneering ideas on Conserving energy was postulated to the student community. The Importance of Reduce, Reuse and Recycling of plastics were clearly Explained to the studentsthrough mime activity. As an initiative to Terminate plastic, paper bags were made and distributed to the Staff. More than 40 students participated in the program and created awareness among all the students.





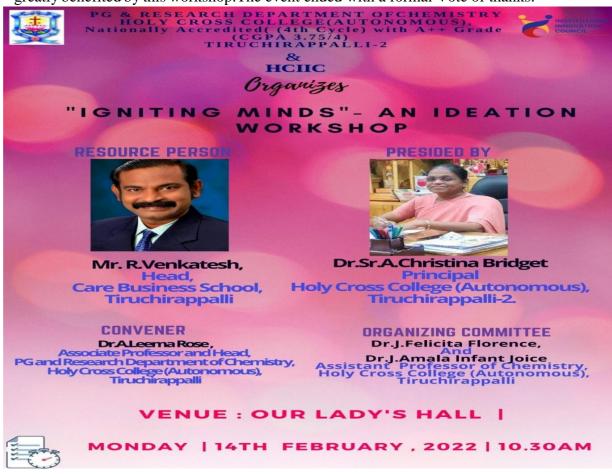
The PG and Research Department of Chemistry, Holy Cross College organized an Association meeting – Interaction with our International Alumna on the topic "Craft your thoughts to make wish come true" on 10th February,2022. The event was held from 10am to 11am at our lady's hall. The resource person was our Chemistry Alumna of batch (1994-1997) Ms.Premi Balakrishnan, counseling psychologist, Singapore. The meeting commenced with the prayer and welcome address. The resource person gave an inspirational speech through virtual meet. The session focussed on positive thinking. Madam spread the positive vibes to the students. Mam insisted the principles of positive thinking and the power of mind. Madam motivated us to have a wish and sow it in our mind. The positive thoughts will bring success one day. The meet was followed by Question and Answer session. Around 180 students from III UG and IIPG of our chemistry department greatly benefited by this session. The event ended with a formal vote of thanks.





The PG and Research Department of Chemistry and Holycross College Incubation and Innovation Council (HCIIC) jointly organized a one day workshop on the topic, 'IGNITING MINDS— AN IDEATION WORKSHOP' on 14th February, 2022 in Our Lady's Hall. Mr.R.Venkatesh, a trainer in entrepreneurship development certified by EDII of Tamilnadu and Head of Care Business School, Trichy was the Resource person. The workshop

commenced with prayer and Welcome address. Theresource person motivated the students to generate ideas through various activities, videos and group discussions. Students came up with creative and innovative solutions to existing social problems in their daily life. It was followed by afeedback session. Around 110 students from II UG of ourChemistry department greatly benefited by this workshop. The event ended with a formal Vote of thanks.





The PG and Research Department of Chemistry ,Holy Cross College along with the HCIIC (Holy Cross College Incubation and Innovation Council) jointly organized a live radio Program called "Chemfo Talks" on 28th February ,2022 in commemoration of the National Science Day. The show was live telecasted on Holy Cross FM 90.4 HZ at 11.30 am. The Ist year IIC students of Chemistry department shared their knowledge on various science inventions and their applications in our daily life. The history and stages of progressin the science inventions were clearly explained to the public. The show was live telecasted for about 15 minutes and ended with the gain of many scientific insights.







The PG and Research Department of Chemistry Holy Cross College , organized an Inter – departmental quiz competition on 28th February, 2022 in commemoration of the National Science day on the topic "Chemistry in Everyday Life" at Our Lady's Hall. The event started with prayer and Welcome address . Overall 15 departments of our college participated in the preliminary round of quiz ,of which 10 department got selected for round 1. Each team of a department has 3 members. There are totally 4 rounds with Multiple choice questions, connection, Dumb charades and rapid fire questions. The questions were based on Food & nutrition, Environmental & medicinal Chemistry, Industries and Industrial products that we come across in our daily life. The students actively participated in the Inter – departmental quiz competition by answering Spontaneously. The quizscores were based on the no. of correct answers and the timing they took to answer. The first three prize winners were from the department of Psychology ,Botany and Physics. The event ended witha formal vote of thanks.



PG & RESEARCH DEPARTMENT OF CHEMISTRY

HOLY CROSS COLLEGE (AUTONOMOUS)

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

Organizes

INTER - DEPARTMENTAL QUIZ COMPETITION

IN COMMEMORATION OF

NATIONAL SCIENCE DAY

ON THE TOPIC

CHIENTSWRY IN LEVERYDAY LIFE



Date :28th February 2022 (Monday) Venue : Our Lady's Hall Time : 2.00 pm - 3.30 pm

Principal,
Holy Cross College (Autonomous)

Tiruchirappalli

CONVENER

Dr. A. Leema Rose

Associate Professor and Head
PG & Research Department of Chemistry
Holy Cross College (Autonomous)
Tiruchirappalli

ORGANIZING COMMITTEE

Dr. J. Felicita Florence & Dr. J. Amala Infant Joice Assistant Professors of Chemistry Holy Cross College (Autonomous) Tiruchirappalli

All are Cordially invited







The PG and Research Department of Chemistry, Holy Cross College (Autonomous), Trichy organized the two-day international virtual conference on the theme, "Futuristic Aspects of Sensors and Biosensors" (IVCFASB-2022). The objective of the conference is to provide a platform for researchers, chemists, biologists, academicians as well as industrial professionals from all over the world to present their research findings and development activities in their field of research which would facilitate the exchange of new ideas, applications and experiences leading to collaboration among global partners.

The event commenced with the prayer service followed by the welcome address delivered by **Dr. J. Felicita Florence**, organizing secretary and Assistant Professor of Chemistry, Holy Cross College (Autonomous), Trichy. **Dr. Arun Gnana Raj**, Project Manager, Qanawat LLC, Dubai, delivered the inaugural address on the topic, "Biosensors and Nano Biosensors in IoT Space". He elaborated that, Biomolecular recognition, Transducer, and Signal processor were the three different stages of working of a sensor. He highlighted that remote monitoring, remote diagnosis, time to analyze, analyze with verity, and a vast amount of data are very important characteristics of the IoT-enabled sensors.

Rev. Sr. (Dr.) A. Christina Bridget, Principal, Holy Cross College (Autonomous), Trichy, released the first copy of the souvenir, and **Rev. Sr. (Dr.) Anne Xavier,** Secretary, Holy Cross College (Autonomous), Trichy, received the first copy of the souvenir.

The highlights of the conference were briefed by **Dr. A. Leema Rose**, convener and Head of the Department of Chemistry, Holy Cross College (Autonomous), Trichy.

Rev. Sr. (Dr.) Anne Xavier, Secretary and Rev. Sr. (Dr.) A. Christina Bridget, Principal, Holy Cross College, (Autonomous), Trichy offered felicitations. Dr. L. Cathrine, Dean of Science & Assistant Professor of Chemistry, Holy Cross College, Trichy proposed the vote of thanks.

The inauguration was followed by two technical sessions. **Dr.Nithiya Jeromiyas**, Post-Doctoral Faculty, from National Kaohsiung University of Science and Technology, spoke on the topic, "Engineering nanostructured electrodes for real-time monitoring of endogenous oxide reductants signaling molecules from live cells". **Dr.C.I.Sathish**, the Research Associate from the University of Newcastle, Australia, delivered his talk on the topic, "Carbon Nitride and its application as Volatile Organic Compound sensors".

The second day was comprised of two technical sessions. **Dr.T.M.Sridhar,** Associate Professor, University of Madras, Chennai, presented a talk on the topic, "Graphene Oxide-based Nanocomposite Sensors for Selective detection of toxic gases". Professor **Dr. D. Ravi Shankaran** from the University of Madras, Chennai, gave a lecture on the topic, "Nano-Enabled Sensors, and devices for food and agricultural applications".

The valedictory address was delivered by **Dr.Sriram Balasubramanian**, Post-Doctoral Faculty, from National Kaohsiung University of Science and Technology. He elaborated on the progress of 2D materials—based electrochemical sensors during the previous decade, with an emphasis on applications in food safety, environmental monitoring, illness detection, and tiny biomolecule analysis.

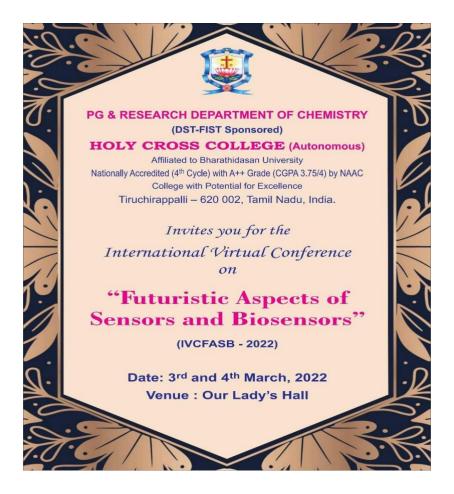
Dr. V. Priya, Assistant Professor of Chemistry, Holy Cross College, Trichy welcomed the gathering. The report of the conferencewspresented by Dr. J. Felicita Florence, Organizing

Secretary, IVCFASB -2022. Feedback time was allotted for students and the vote of thanks was be proposed by **Dr. J. Amala Infant Joice**, organizing secretary, IVCFASB -2022.

The conference was appreciated as a timely and valuable event by the resource persons, research scholars, delegates and students was participated from various colleges and universities of India and abroadin this event. There were 145 enthusiastic participants in total, who took part in the two-day international virtual conference. A total of 67 abstracts were incorporated in the conference souvenir with ISBN number. The editorial team appreciates and congratulates the participation of scholars and faculty members from various from reputed institutions like Central Leather Research Institute, Chennai, Alagappa University, Karaikudi, National Institute of Technology, Calicut, Central University of Gujarat, and National Taipei University of Technology, Taiwan. Out of 67 paper presentations , 5 best paper presentations were awarded.

In every session of the conference, excellent research findings and advancements in the fields of sensors and biosensors were discussed, enriching the participants with new ideas for research and helping them gain insights on the importance of sensors, biosensors, and nanosensors in different domains. On the whole, the two-day conference rendered a good outlook into the current global research on sensors and biosensors in various recent current fields of research like human monitoring, soil quality monitoring, food quality monitoring, disease detection, water monitoring, environment monitoring, drug discovery and IoT enabled biosensors.

This two-day international virtual conference was an extraordinary event with huge success and this event will be a landmark in the fieldof Sensors and Biosensors.

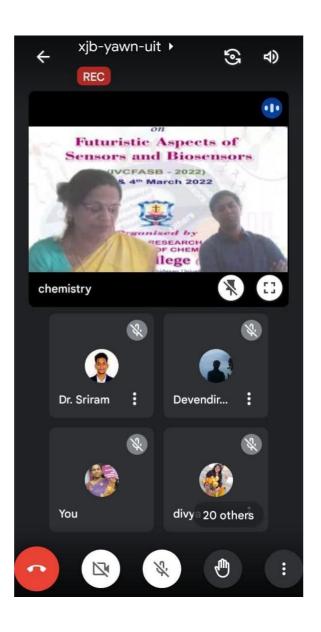






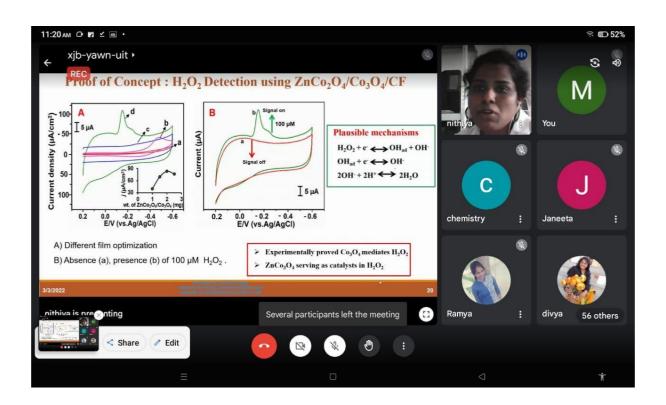












The PG and Research Department of Chemistry , Holy cross College organised an Association meeting on the topic "Intellectual Property Rights" on 21st March,2022. The event was held from 2.00 to 3.30pm at Our Lady's Hall. The resource person invited was Dr.T.K.Sethuramalingam, Associate Professor Department of ECE, Karpagam College of Engineering, Coimbatore. The resource person gave informational knowledge about the Indian patent act, patent law, patent licence, types of patent ,patentable inventions and its features. It was followed by interactive Q & A session. Overall, the session equipped the students to gain knowledge about research oriented patentable rights and purpose of patent. Around 60 PG students and research scholars of Chemistry department greatly benefited by this session. The event ended with a formal vote of thanks.



PG & RESEARCH DEPARTMENT OF CHEMISTRY HOLY CROSS COLLEGE (AUTONOMOUS)

Nationally accredited (4th cycle) with A++ Grade CGPA(3.75/4)

Tiruchirappalli - 620002

Organizes an

Association meeting on

INVELLECYUAL PROPERTY RIGHYS

RESOURCE PERSON



Dr. T.R. Sethuramalingam
Associate Professor
Department of ECE
Karpagam College of Engineering,
Coimbatore.

CONVENER

Dr.A.Leema Rose

Associate Professor and Head PG&Research Department of Chemistry Holy Cross College(Autonomous) Tiruchirappalli

PRESIDED BY



Dr. (Sr.) A. Christina Bridget
Principal
HolyCross College(Autonomous)
Tiruchirappalli-2

ORGANIZING COMMITTEE

Dr.J.Felicita Florence

and

Dr.J.Amala Infant Joice

Assistant Professors of Chemistry Holy Cross College(Autonomous) Tiruchirappalli

21st March 2022 (Monday) All are cordially invited



The PG and Research Department of Chemistry , Holy Cross College organised an Association meeting on the topic" Find the Right way of life Using Nutraceuticals" on 6th April , 2022. The Event was held from 2.00 to 3.30pm at our Lady's hall. The resource person of the day was Dr.S.Amutha, Assistant professor Department of Educational Technology, Bharathidasan University, Tiruchirapalli. The resource person spoke about the essential nutrients and their availability of food items. Mam enlightened us with her knowledge on supplement, anti-microbial and anti-diabetic values present in our various Indigenous food It was followed by interactive Question & Answer session. Overall, the session, Mam reminded us the concept of Food is the only Medicine, by her effective speech. The Session wasfollowed by Prize distribution to the students of chemistry department and the students who won Prizes in an Inter- Departmental Quiz competition In Commemoration of the National Science Day. Around 200 students from II UG, III UG and II PG of our Chemistry Department greatly benefited by this Session . The event ended with a formal vote of Thanks .







PG & RESEARCH DEPARTMENT OF CHEMISTRY

HOLY CROSS COLLEGE (AUTONOMOUS)

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Tiruchirappalli - 620002

CHEMISTRY ASSOCIATION VALEDICTORY MEEVING

RESOURCE PERSON



Dr. S.Amutha

M.Sc.,M.Sc (Psy).,M.A., M.Ed.M.Phil.,Ph.D Assistant Professor (Selection Grade) Department of Educational Technology Bharathidasan University Tiruchirappalli.

PRESIDED BY



Rev.(Sr.)Dr. A. Christina Bridget

Principal Holy Cross College(Autonomous) Tiruchirappalli-2

Topic : Find the Right way of Life Using Neutraceuticals

Venue :Our Lady's Hall

CONVENER

Dr.A.Leema Rose

Associate Professor and Head PG&Research Department of Chemistry Holy Cross College(Autonomous) Tiruchirappalli

ORGANIZING COMMITTEE

Dr.J.Felicita Florence

and

Dr.J.Amala Infant Joice

Assistant Professors of Chemistry Holy Cross College (Autonomous Tiruchirappalli

6th April 2022 at 2.00pm All are cordially Invited