

PG & RESEARCH DEPARTMENT OF PHYSICS
MINUTES OF THE PHYSICS ASSOCIATION ACTIVITIES
2023 – 2024

“Setting goals is the first step in turning the invisible to visible” – Tony Robbins

With the blessings of the Lord Almighty we begin this new academic year 2023 – 2024. The business meeting was held on 4th July 2023 and the activities for the academic year were planned. Dr. A. Juliat Josephine and Ms. J. Roselin Jeyaseeli and the following students were selected as office bearers.

Ms. A. Bhavadharanee- III B.Sc., Physics- President

Ms. S. Blessy-III B.Sc., Physics - Vice President

Ms. V. Dharshini-II M.Sc., Physics –Secretary

Ms. S. Vaishnavi – I M.Sc Physics., - Assistant Secretary

Ms. R. Snowlin – II B.Sc Physics., - Assistant Secretary

Ms. S. Nivetha - – II B.Sc Physics., - Assistant Secretary

Ms. I. Theola Mektalin – I B.Sc Physics., - Assistant Secretary

Association Meeting - I

PG & research Department of Physics inaugurated The Physics Association on 17th July 2023 The meeting started with the prayer followed by the welcome address.

The resource person was Dr. B. Janet, Assistant Professor, Department of Computer Science, National Institute of Technology, Tiruchirappalli addressed the gathering on the topic “The Leader in you”.

The chief guest had given a clear definition of leadership. She explained the moral values of life with the influences of physics concepts. Her talk was informative and motivated the students to be a responsible person and to lead a successful life.

Prizes were distributed to the winners of the fresher’s day. Ms. Sneha of III B.Sc Physics was awardee with a medal and certificate for breaking the world record in boxing.

Nearly 240 students took part in the association meeting. The meeting came to an end with the vote of thanks.





**HOLY CROSS COLLEGE (AUTONOMOUS)
TIRUCHIRAPPALLI**



PG & RESEARCH DEPARTMENT OF PHYSICS

CORDIALLY INVITES YOU FOR

***PHYSICS
ASSOCIATION
INAUGURATION***

**17th July 2023, Monday, 2 PM
Regina's Hall**

Dr. B. Janet

**Assistant Professor
Computer Applications
National Institute of
Technology
Trichy**

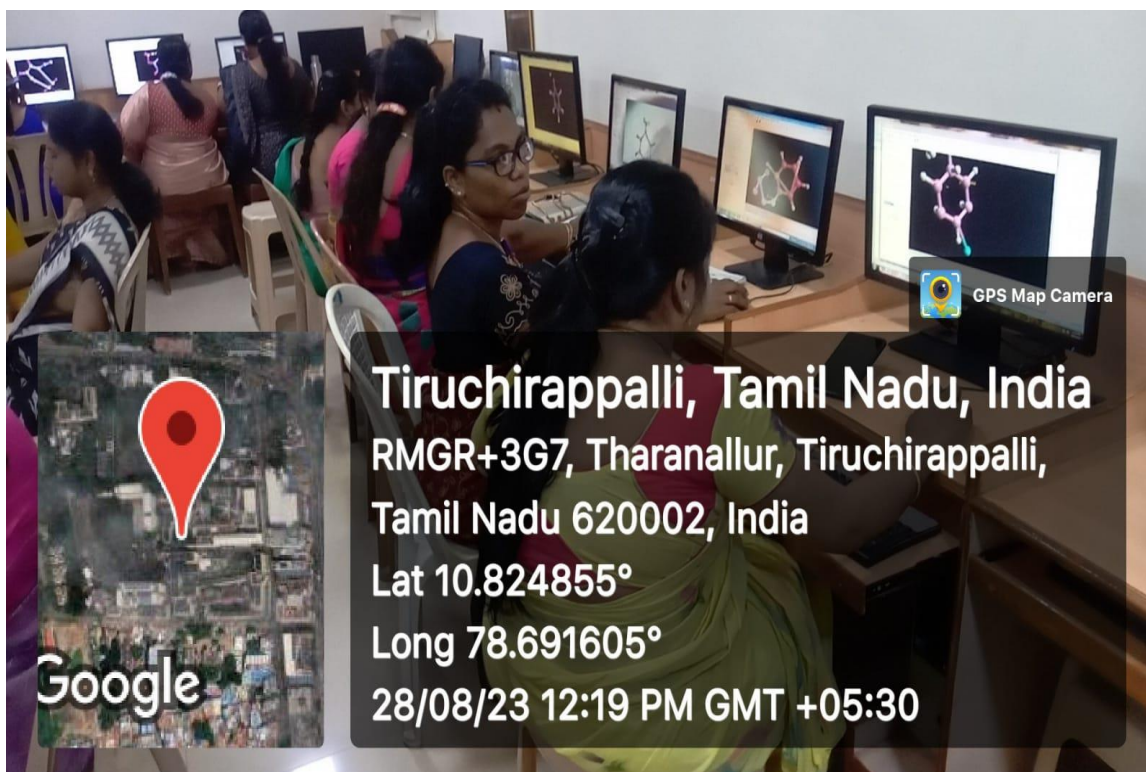


ASSOCIATION SECRETARIES

**DR. A. JULIAT JOSEPHINE
MS. J. ROSELIN JEYASEELI**

Association Meeting - II

The Faculty Development Program - Series I was conducted by the Department of Physics on 28th August 2023. Dr. V. VASUMATHI, Assistant Professor, PG & Research Department of Physics, Holy Cross College, Tiruchirappalli, trained the physics faculties on the topic of “Computational Modelling”. She guided to find the different molecular structures using ARGUS software.





**HOLY CROSS COLLEGE (AUTONOMOUS)
TIRUCHIRAPPALLI**



PG & RESEARCH DEPARTMENT OF PHYSICS

CORDIALLY INVITES YOU FOR

FACULTY DEVELOPMENT PROGRAMME - SERIES I

FDP ON COMPUTATIONAL MODELLING

28th August 2023, Monday, 11 .00 am

Browsing centre

Dr. V.Vasumathi

**Assistant Professor of Physics
Holy Cross College
Trichy**



ASSOCIATION SECRETARIES

**DR. A. JULIAT JOSEPHINE
MS. J. ROSELIN JEYASEELI**

Intercollegiate Competition - I

Department of Physics and Research Center of Lady Dock College, Madurai organized Intercollegiate Physics Meet PHYX PLOSION 23 on the theme PHYSICS - CONNECTING THE WORLD on 15th September 2023. 12 students from our college have participated in the event. They conducted 7 events for UG and 3 events for PG. Our students enthusiastically participated in all the events and won prizes in the following events:

Doodle Art - 2nd Prize

Fashion Parade - 2nd Prize

Photography - 3rd Prize

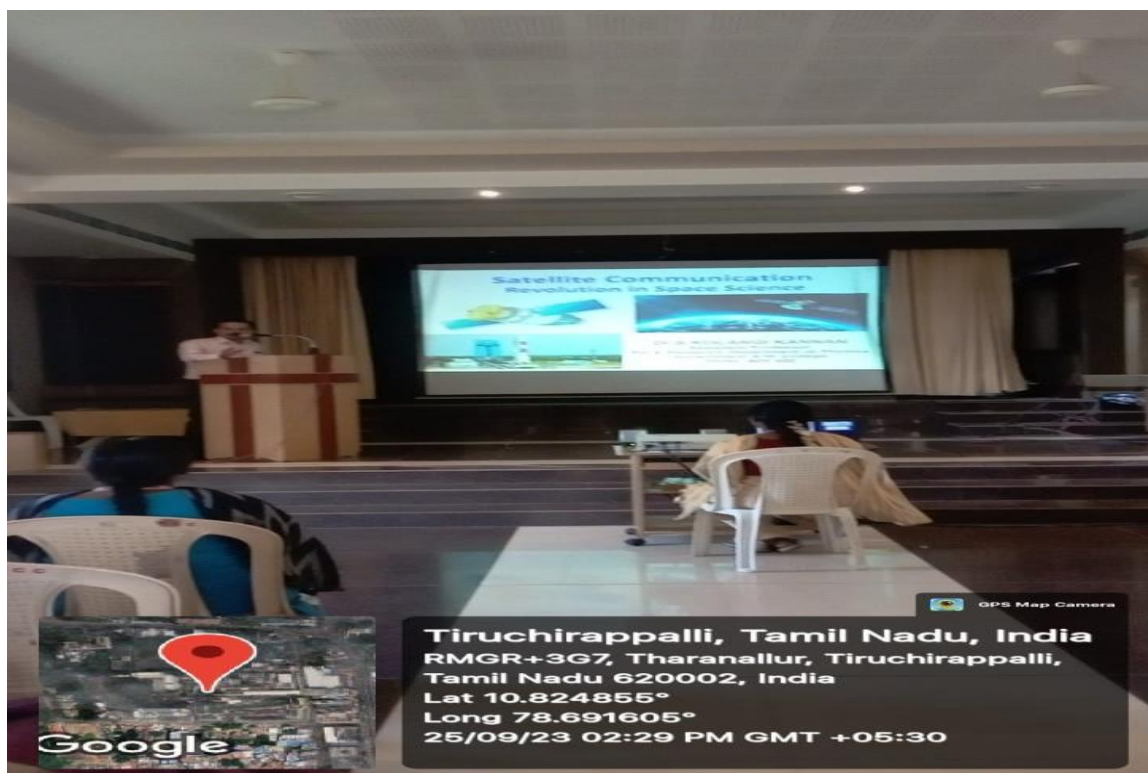
Meme Creation and Midgets - Consolidation Prize.

Our students also received certificates from all the events and they utilized the platform to explore their knowledge in physics.



Association Meeting – III

The PG & Research Department of Physics conducted an association meeting on September 25th 2023, on the topic "Satellite Communication: A Revolution in Space Science." The session commenced with a prayer and a welcome address. Dr. S. Kolanjikannan, Assistant Professor, PG & Research Department of Physics, Government Arts College, Trichy, was the resource person. He discussed the intricacies of satellite communication, its functioning, the structure of satellites and various components such as antennas, transponders, propulsion systems and Indian Space Research Organization (ISRO) milestones. Students interacted with the resource person and he clarified their doubts regarding satellite communications and rocket launching. 180 UG and PG students were benefited by this meet. The session concluded with the vote of thanks.





HOLY CROSS COLLEGE (AUTONOMOUS) TIRUCHIRAPPALLI - 620 002

PG & RESEARCH DEPARTMENT OF PHYSICS

CORDIALLY INVITES YOU FOR

ASSOCIATION MEETING

**SATELLITE COMMUNICATION
A REVOLUTION IN SPACE SCIENCE**

**25th September 2023, Monday @ 2 pm
Regina's Hall**

Dr. S. KOLANGI KANNAN

Assistant Professor

PG & Research Department of
Physics

Government Arts College
Tiruchirappalli - 620 022



Industrial Visit & Educational Tour

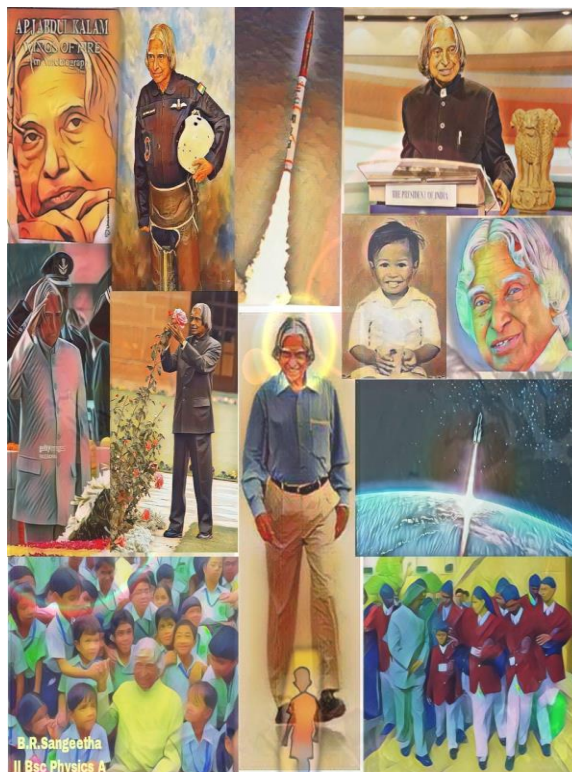
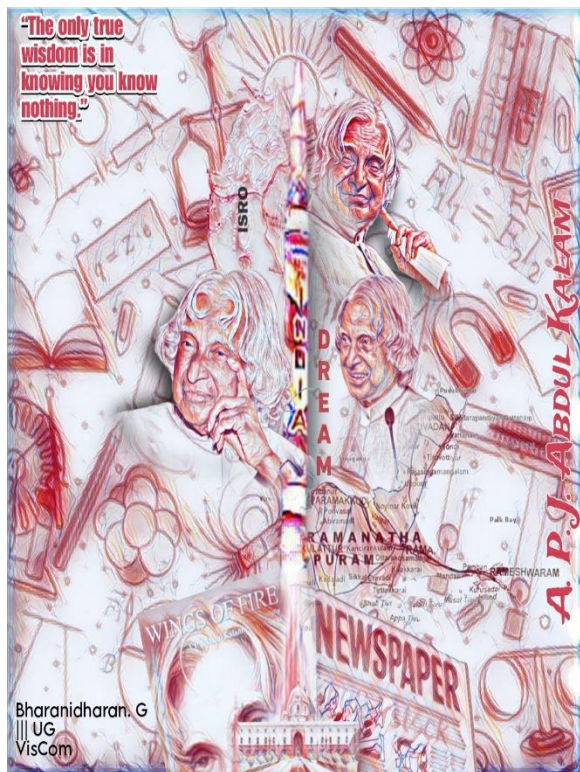
As a part of curriculum PG & Research Department of Physics arranged an industrial visit and educational tour to Kochi and Munnar on 6th and 7th October 2023. On 6th October 2023 the students visited Blue Shipyard Company, Willingdon Island, Kochi, Kerala. Through the visit the students gained insights on various processes involved in the maintenance, repair and ship rebuilding. The resource person Mr. E. Tojen, Manager, Ship Repairers and Builders, Sea Blue Shipyard Ltd. addressed a detailed overview of the different departments involved in ship repair and rebuilding. He also emphasized the safety measures to be followed in their work place. He also explained about the job opportunities available for physics students and the procedures for enrolling in Blue Shipyard Company. The students acquired knowledge about ship repair and maintenance procedures, which provided them a valuable learning experience. In addition to the industrial visit, a one-day sightseeing trip to Munnar was also arranged. A total of 79 students of UG and PG departments of Physics benefited through this visit.



Interdepartmental Activity - I

The World students' Day, the PG is celebrated on 15th October every year commemorate the birth anniversary of Dr. A. P.J. Abdul Kalam. In this regard PG & Research Department of Physics conducted the Collage competition on the theme "KALAM THE MISSILE MAN". The students from various department enrolled their names for the competition. The following students won the prize:

1. Bharanidharan. G – III B.Sc Vis.Com – I Prize
2. Sangeetha .B – II B.Sc Physics 'A' – II Prize



Intercollegiate Competition– II

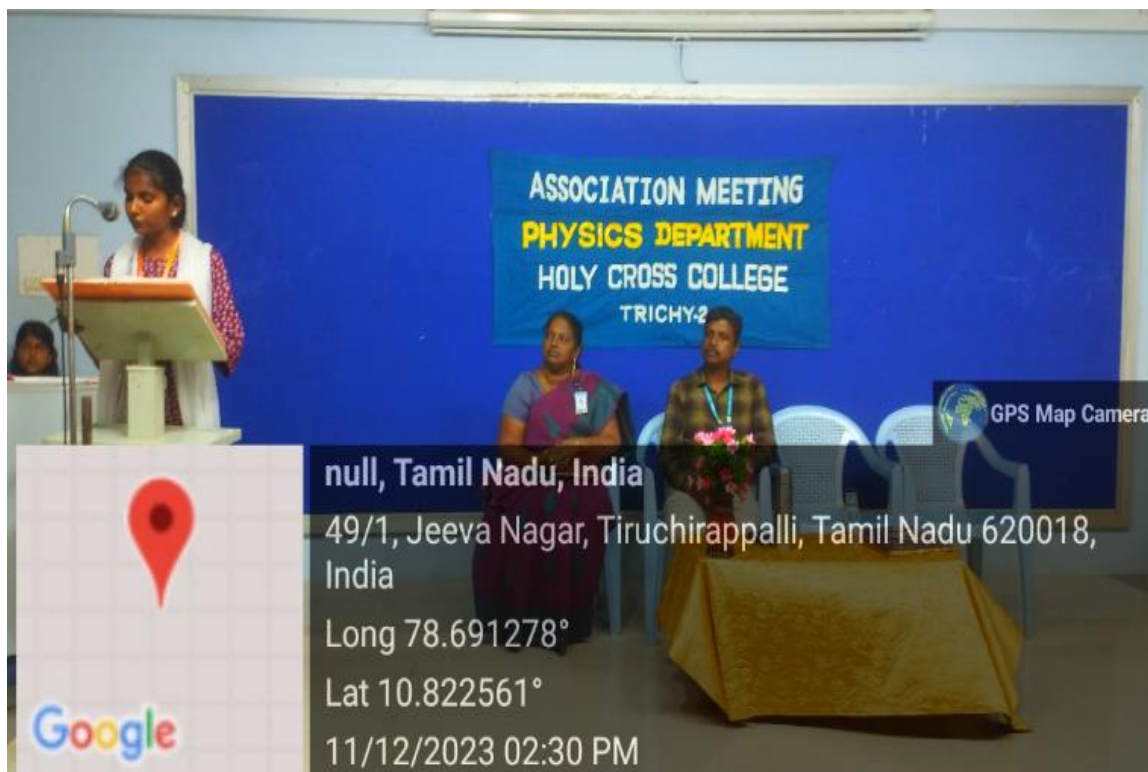
St. Joseph College (Autonomous), Tiruchirappalli, in collaboration with the Indira Gandhi Centre for Atomic Research, Kalpakkam, and The Academy of Sciences, Chennai, jointly organized the in the two-day ANU Awareness Program 2023 on 30th November and 1st December, 2023. The program focused on “Atomic energy and its applications for humanity”. Thirty-five students (35) were actively participated in the program to inquire into the role of atoms in national service. The program featured a technical talk by Prof. Dr. B. Venkatraman, Director of IGCAR, Kalpakkam, on the significance of atoms in national service. Dr. N. M. Meenachi provided insights into career prospects in the Department of Atomic Energy. Engaging activities such as a quiz competition and creative writing competition were conducted, centering around the theme "Integrated approach in science and technology for a sustainable future." In the quiz competition, one of our teams secured the second prize, earning participation certificates for their outstanding efforts. Notably, the following three students won silver medals for their remarkable performance in the quiz competition:

1. Ishwarya – III B.Sc Physics ‘A’
2. Sarukese – III B.Sc Physics ‘A’
3. Enitha – III B.Sc Physics ‘A’



Association Meeting – IV

The PG & Research Department of Physics organized an association meeting on December 11, 2023, focusing on the topic "Physics and Reality." The session commenced with a prayer followed by a welcoming address. Dr. D. Gopalakrishna, Associate Professor at the PG & Research Department of Physics, Bishop Heber College, Trichy, served as the resource person. He emphasized that physics equips us with powerful tools to understand the workings of nature and delved into the connection between physics and our perception of the world. The students actively engaged with the resource person, benefiting from the interaction. A total of 160 undergraduate and postgraduate students participated in the event. The session concluded with a vote of thanks.





**HOLY CROSS COLLEGE (AUTONOMOUS)
TIRUCHIRAPPALLI - 620 002**

PG & RESEARCH DEPARTMENT OF PHYSICS

CORDIALLY INVITES YOU FOR

ASSOCIATION MEETING

PHYSICS AND REALITY

December 11, 2023, Monday, 2 pm

Shanthi's Hall

Dr. D. Gopalakrishna
Associate Professor of Physics
Bishop Heber College
Trichy



ASSOCIATION SECRETARIES

**DR. A. JULIAT JOSEPHINE
MS. J. ROSELIN JEYASEELI**

Association Meeting – V

The Department of Physics organized the Faculty Development Program - Series II on 11th December 2023. Dr. D. Gopalakrishna, Associate Professor at the PG & Research Department of Physics, Bishop Heber College, Tiruchirappalli, conducted the training session. The topic of focus was "Thin Film Deposition Technique - Spray Pyrolysis." During the program, Dr. Gopalakrishna demonstrated the experiment and provided valuable insights into developing high-quality thin films using the spray pyrolysis technique.



International Conference

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

19th & 20th January 2024

Day 1: 19th January 2024 - 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.

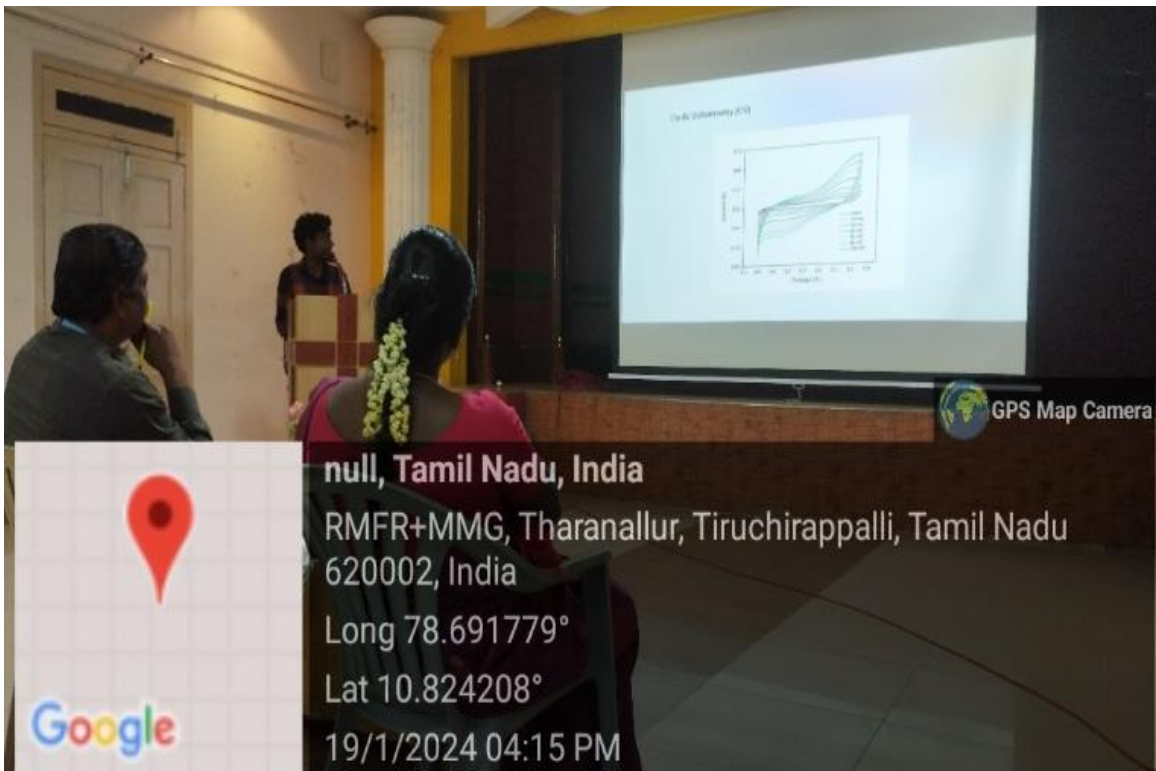
Rev. Sr. Dr. Anne Xavier, Secretary and **Rev. Sr. Dr. Rajakumari. P**, Principal, Holy Cross College, (Autonomous), Trichy offered felicitations. **Dr. A. Inigomary Rita**, Assistant Professor of Physics and Dean of Physical sciences, proposed the vote of thanks.

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.

Day 2: 20th January 2024 - 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 on 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

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 67 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. 34 papers were oral presented and 33 papers were presented in poster section.

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 promoted the participants to reexamine the concepts that we mindlessly hold onto in our daily lives.





NGPE – 2024

On 21st January 2024 Indian Association of Physics Teachers (IAPT) conducted National Graduate Physics Examination (NGPE - 2018) for the undergraduate physics students in our college. 46 students enrolled their names. 44 students were present and the exam was supervised by the coordinators Dr. A. Juliat Josephine and Ms.J. Roselin Jeyaseeli Assistant Professors of Physics.



Intercollegiate Competition – III

PG & Research Department of Physics, Bishop Heber college (Autonomous), Tiruchirappalli organized a grand intercollegiate fest SURPHY'24 on 16th February 2024. Nearly, 8 colleges were participated in this Intercollegiate competition. 13 students were participated enthusiastically and took part in all the events and won the Overall winner's trophy of SURPHY'24. The following students were the prize winners:

- Filthy Pettigrew (Turn Coat) – I Prize – S.Sobana - II Prize – M.Roshini Begum
- Hunt for Horcrux (Treasure Hunt) - II Prize - S.Ishwarya, F. Kennisha Reymon
S.Sarukese, G.Marsha
- Magical Painting (Painting) - I Prize :R.Sandhiya and F. Kennisha Reymon
- Weasley wizard memes (Memes) - I Prize - J.N.Sharon and F. Kennisha Reymon
- Sorcerer's Story (Story telling) - III Prize - A.Rebia Hency
- Goblet of fire (Dumb Charas) - III Prize- J.N.Sharon and D.Livitha
- Expeliarmus (Photography) - II Prize –R .Sandhiya and M.Nivetha



Intercollegiate Competition – IV

Department of Physics, Bharathidasan University, Tiruchirappalli has organized an intercollegiate competition APEIRON'24 on 22nd & 23rd February 2024. The online events were held on February 22nd and the offline events were held on February 23rd in the Bharathidasan University campus. More than 100 colleges all over Tamilnadu has participated in the event. Our students enthusiastically took part in both online and offline events and won prizes in the following events:

- Poster presentation -Sharon -III BSc. Physics “A”
- Origami- Vinotha and Vishnupriya -II BSc. Physics “B”
- Dumb charades -Nivetha and Bhavadharanee - III BSc. Physics “A” & “B”

Intercollegiate Competition – V

Department of Electronics, St. Joseph's college, Tiruchirappalli organized a Technical Symposium JOSELEX 2K24 on 1st March 2024. Nearly, 15 colleges were participated in the symposium. 8 students participated and won prizes in the following events.

- Electro Chart (Poster Presentation)– I prize – Sangeetha and Sriloshini II B.Sc Physics A
- Brain Burst (Quiz) – II Prize – Sharly and Ragavi II B.Sc Physics A



Intercollegiate Competition – VI

PG & Research Department of Physics, National college, Tiruchirappalli organized an Intercollegiate Physics Extravaganza CEL – PHY 2K24 on 1st March 2024. Nearly, 8 colleges were participated in this Intercollegiate competition. 26 students participated and won prizes in the following events.

- Quiz – I prize - Iswarya. S and Sarukese . S
- Memes- II prize - Sharon J.N. and Livitha.D
- Photography – II prize - Roselin Mary.K and Sobana . S
- Culturals – III prize - Kalaimathi. B, Keerthi. S and Shehar Banu. Z

