



ACADEMIC ACTIVITIES 2020-2021

DEPARTMENT OF PHYSICS



Academic activities

2020-2021

International Symposium on 'Medical and Radiation Physics

A six-day International Symposium on 'Medical and Radiation Physics' was organized by Department of Physics, Women's Christian College, Chennai from 20 to 25 July 2020. The virtual meet of the symposium was held using Zoom and it was live screened in YouTube.



Dr. Devan Krishnamurthy, Medical Physicist at University of California, USA ,Dr. Hitesh Sharma, Assistant Professor (Medical Physics) at Government. Cancer Hospital, Netaji Subhas Chandra Bose Medical College, Jabalpur were the resourse persons on day 1.

The second day's sessions were handled by Dr. Balu Krishna Sasidharan. Professor, Department of Radiation Oncology, Christian Medical College, Vellore and Dr. Kenji Ishikawa, Professor at Center for Low Temperature Plasma Science, Nagoya University, Japan,

One day 3, the session's speaker were Dr Hannah Mary Thomas, India Alliance Early Career Fellow at the Department of Radiation Oncology in Christian Medical College at Vellore, and Dr. Stephen J. Franklin, Systems Engineer at Saab Australia, discussed 'Understanding MRI from a Physicist's Perspective'.

The fourth day's first session were handled by Dr.Stephen Sudhakar, Ophthalmologist, Chettinad Hospitals, Chennai. His talk was based on the Role of Biomedical Instrumentation and Lasers in Ophthalmology. Dr. V. V. Raghavendra Sai, Professor, IITM, Chennai, handled the second session and spoke on Optics in Clinical Diagnostics.

On fifth day the sessions were taken by Dr. T.S.N. Sankara Narayanan, Professor, Ulsan National Institute of Science and Technology (UNIST), Republic of Korea and Dr. Thiyam Deepa Beeta, Assistant Professor, Vel Tech R&D Institute of Science and Technology, Chennai, India. She gave insights about Brain Waves: Origin and its Application in Brain Computer Interface (BCI). The first session on the final day was handled by Dr. Gokul Thimmarayan, Anesthesiology Specialist, Marshfield Medical Center, WI, USA. He discussed the role of Physics in Anesthesia and Critical Care Medicine. Dr. Rajesh Kinhikar Professor & Head, Department of Medical Physics, Tata Memorial Hospital, Mumbai, India delivered a lecture in the concluding session on Accelerators in Radiotherapy. The symposium was accomplished, with over 500 participants including professors, technical staff, research scholars and students from Physics and other science related disciplines.

Entrepreneurship - A motivational Talk titled 'Own Your Future'

Department of Physics and Young Indians Club of Women's Christian College organized a motivational talk titled 'Own Your Future' for the science students, by Mr. Manoj Kumar J, CEO Inventz Life Sciences on 13th January 2021.



Entrepreneurship - A motivational Talk titled 'Indian Women Entrepreneurs Reimagined

Department of Physics and Entrepreneurship Cell (Blaze) of Women's Christian College organized a webinar on 'Indian Women Entrepreneurs Re-imagined' by Ms. ManviVaidyanath, Program Lead-Women's Entrepreneurship, Pratham Institute on 11th March 2021.





HI-PHY Association Activities

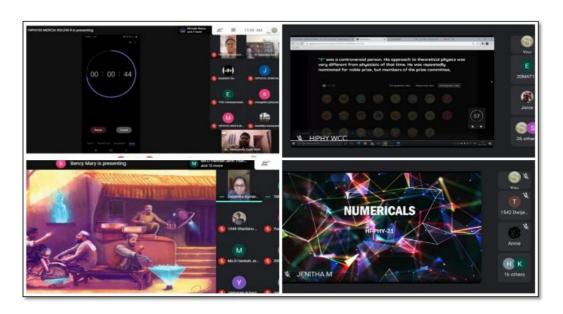
"Education is not the filling of a pail, but the lighting of a fire"

True to the words of W.B.Yeats, the HI-PHY Association of Department of Physics, Women's Christian College ignites the flame of curiosity in students by involving them in various physics related co-curricular activities. Since its inception, the association has provided plenty of opportunities to students who aspire to develop their skills and venture into higher levels of physics education.

Sci-fi writing contest was conducted by the HI-PHY association on 6th February 2021 for students of all 3 years of B.Sc Physics of WCC to unleash their creativity and hold physics concepts on paper.

An important annual event of the association is the HI-PHY Fest, an intercollegiate physics event which provides a platform for the undergraduate students to showcase

their talents and physics knowledge. This year, HI-PHY'21 was conducted virtually on March 30, 2021. Students from 13 Arts and Science and Engineering colleges participated enthusiastically in competitions like paper presentation, quiz, Numericals, creative thinking, Just-A-Minute and Click-a-Concept. The participants were assessed by the faculty of the Department of Physics, WCC and cash prizes were awarded to the winners and runners-up of these events. The Overall Championship was bagged by PSGR Krishnammal College for Women, Coimbatore.



Students from all three years were encouraged to represent the department in various intercollegiate competitions and won prizes. 13 students participated in SYMBAN'21 of Madras Chrisitan College, 12 students participated in RIPPLES'21 organised by Ethiraj College for Women and 5 students participated in FIZIKA'21 organised by Presidency College. The Class II UG students participated in PHYXPLOSION'21 organised by LadyDoak College, Madurai and bagged the Overall Championship.

Field / Institution visits (purpose & outcome)

On 19th March, 2021 the National Center for Coastal Research (NCCR) and the National Institute of Ocean Technology (NIOT) celebrated its FOUNDATION DAY and students from different disciplines were invited. 13 students from Department of Physics accompanied by Dr. Kalavathy Santhi, and Dr. Hannah Ruben along with the students and staff of the Department of Chemistry, Women's Christian College, took part in the virtual conference, where the officials and staff of NCCR were addressing about the foundation day as well as shared videos and discussed regarding the activities which they have done during the previous year. A delegate, Dr. Sidney Thurston,

Program manager, International Coordinator of National Oceanic and Atmospheric Administration (NOAA), USA took over the conference and shared the experiences of NOAA in terms of Oceans, Coasts, Weather and Climate. After a quick break we had a fascinating interactive session with one of the higher officials of NCCR where he explained about Remote Sensing, modelling (of maps) and its applications in a nutshell.



