## LPA 2022-2023

Loyola Physics Association for the academic year 2022-2023 was inaugurated on October 10, 2022. The inauguration programme was conducted at Y.D hall. The program was chaired by Thiru. D. Ravichandran IAS (Member Secretary, Tamil Nadu State Minorities Commission, Govt. of Tamil Nadu).



Rev. Dr. Francis P Xavier SJ, Rector, Loyola group of institutions and Rev Dr B Jeyaraj S. J, Secretary and Correspondent, Loyola College were the guests of honor. Dr G. Sreekumari, Assistant Professor (Shift I), Department of Physics officially took charge as the President of LPA; and Dr. S. Antony Inglebert (Shift II) as the Vice-President. The official

logo of LPA designed by Mr. Alex Joseph (II<sup>nd</sup> M.Sc. Physics) was launched during the event by the chief guest. The office bearers of LPA as well as the class representatives were officially appointed on the same date.



Mr. Jude Paul Dhanaraj S (II<sup>nd</sup> M.Sc. Physics) was sworn in as the General Secretary, Gokula Kannan M (III<sup>rd</sup> B.Sc. Physics-Shift I) and Srikanth R (III<sup>rd</sup> B.Sc. Physics-Shift II) as the Joint Secretaries, Renith Mathew S (III<sup>rd</sup> B.Sc. Physics-Shift I) and Arvin S A (III<sup>rd</sup> B.Sc. Physics-Shift II) as the Cultural Secretaries and Praveen T (III<sup>rd</sup> B.Sc. Physics-Shift I) and Keerthivasan C (III<sup>rd</sup> B.Sc. Physics-Shift II) were appointed as the Sports Secretaries of Loyola Physics Association. Class representatives were also given badges on the same day.

Loyola Physics Association has effectuated almost 10 programs in the span of this academic year. LPA 2022-2023 kick-started its academic programs with a lecture in "Magnetism and Magnetic materials" by Dr. A. Edward Prabu, (Scientific Officer IGCAR-Kalpakkam) held at Centennial Ph.D. Hall, Department of Physics on 20<sup>th</sup> October 2022. The lecture provided a comprehensive overview of the different types of magnetic materials, their properties, and how they can be used in various applications along with hands-on activities, providing a thorough understanding of magnetism and magnetic properties of materials.



Loyola Physics Association 2022-2023 ensured the timely and coordinated participation of the students from the department of physics in Ovations-23 (Interdepartmental Cultural Fest) held on 29<sup>th</sup> and 30<sup>th</sup> of September for which students from the department won several prizes.

LPA integrated with the Department of Physics in revitalizing Loyola Astronomy and Rocketry Club (LARC). LARC inauguration "RACE TO SPACE" was held on 21<sup>st</sup> December 2022 at Centennial PhD Hall. Dr. R. R. Elangovan, Professor, KCG College of Technology was the Chief Guest.



LARC is headed by Dr. S. Arul Mozhi (Assistant Professor, Department of Physics-shift -I), Dr. A. Stanley Raj and Mr. B. Shanmuagapriyan (Assistant Professors, shift II) as staff coordinators. Mr. Alex Joseph (II<sup>nd</sup> M.Sc. Physics) is the president, Harsha Varthan (III<sup>rd</sup> B.Sc. Physics), Secretary, Sai Srinivas (III<sup>rd</sup> B.Sc. Physics), Social Media Coordinator, Saai Karthikeyan (III<sup>rd</sup> B.Sc. Physics) and Akshaya Harshini (II<sup>nd</sup> M.Sc. Physics), documentation heads for the academic year22-23.

On 27<sup>th</sup> January 2023 Loyola Physics Association and Department of Physics hosted Inter-Collegiate cultural fest Physica'23 The event witnessed the participation of 114 students from 13 different colleges, competing in 11 different events. The event was inaugurated by the Guests of Honor, Mr. M.K. Subramanian and Mr. Joshy Paul, who shared their insights and experiences with the students.

Physica-23 began with a prayer song by the PG students, followed by the lighting of the lamp by the dignitaries, including the Guests of Honor. The day was filled with learning and fun.



The participants competed in 11 different events which were designed to test the participants' knowledge, creativity, and problemsolving skills, providing them a platform to showcase their talents and skills. The level of original thinking exhibited by the participants was impressive.

Feedback forms were given to all the participants, and the responses were overwhelmingly positive. The participants appreciated the efforts of the organizing team and stated that the event was conducted meticulously.

The valedictory ceremony of the Physica-23 was graced by chief guest, DR. L. John Kennedy FRSC Professor, Physics Division, School of Advanced Sciences (SAS), VIT, Chennai. The winners of the different events were lauded and felicitated with certificates to appreciate their spirited participation. The overall first position was

secured by MCC shift 1, and MCC shift 2 secured the overall runners-up position. The chief guest shared his views on the importance of such events in enhancing the skills of students and congratulated the winners.



Loyola Physics Association had collaborated with the management and the faculties of Department of Physics to organize a series of other academic programs as well.

Dr. S. Jerome Das Second endowment lecture was conducted on 8<sup>th</sup> February 2023 at Lawrence Sundaram auditorium. Dr. S. Gunasekaran, Dean(R&D), St. Peter's Institute of Higher Education and Research Avadi, Chennai delivered the lecture.



On February 21<sup>st</sup> 2023, the tenth Dr. P. Sagayaraj Endowment Lecture was held at Centennial Ph.D. Hall. The lecture was delivered by Dr. K. S. Nagaraja, Associate Professor in Chemistry (retired) Loyola College Chennai-34.

Loyola Physics Association 2022-2023 actively encouraged the students to take part in the inter-departmental sports Meet 2023 held on 18<sup>th</sup> February at Loyola College Ground. The students of the department secured various prizes in the event also.

In the wake of National Science Day, Loyola Institute of Frontier Energy (LIFE) and Loyola Physics Association (LPA) together organized the National Science Day celebration on February 28th, 2022, at LIFE auditorium. The event aimed to create awareness about the importance of science and technology among students and the general public.



This event was inaugurated by Mr. Gunasekaran, the Editor-in-Chief of Sun News Network, who gave inspiring words to the students about the importance of science and the need to pursue careers in basic sciences. He also lauded the efforts of Loyola College in promoting scientific temper in the younger generation.

The event saw the participation of around 100 students from various schools in and around Chennai. The students were given career guidance and were shown the laboratory facilities of the college, including the ERI institute, sewage plant, biogas plant and herbal garden. The students were enthusiastic and were curious to learn about the different technologies and their applications. In addition to this, another set of students from government schools were given mentorship for two days before the event and were encouraged to create models that

showcased their knowledge in science. These models were exhibited in UG physics lab on the day of the event. The students interacted with the visitors and showcased their creativity and understanding of scientific concepts.



The event concluded on a high note a vote of thanks and was considered a huge success, with the students leaving with a better understanding and appreciation of science and technology, exampling the promotion of scientific temper.

On the same day the Loyola Astronomy and Rocketry Club (LARC) organized the Moon Festival in association with the Chennai Astro Club. The event aimed to promote interest and awareness about astronomy and space science among the general public, especially the youth. The event was inaugurated by Mr. Joseph Prabagar, former

Assistant Professor, Department of Physics, a resource person from the Tamil Nadu Astronomical and Science Society. He spoke about the moon and its significance in astronomy and space science. His talk was informative and inspiring, and it captured the interest of the audience. The event began at 7 pm, and people started flooding in to see the moon through the telescopes which were placed atop Jubilee Building and Quadrangle.





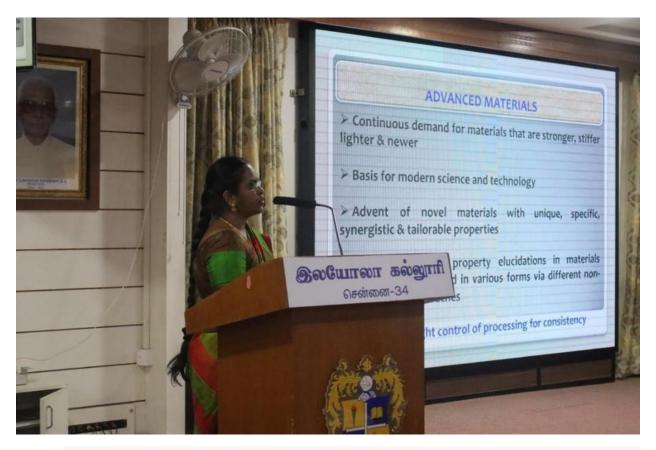
More than 150 people participated in the event, including students, amateur astronomers and the general public. The sky observation was the highlight of the event and the telescopes set up by the Loyola Astronomy and Rocketry Club and the Chennai Astro Club were in high demand. The attendees were thrilled to see the moon-craters and the dark spots on the moon's surface through the telescopes. They were also amazed to see the different phases of the moon and its changing appearance throughout the night.

Apart from the sky observation, there was also a short talk and demonstration on radio astronomy and radio telescope. The Loyola Astronomy and Rocketry Club members explained the basics of radio astronomy and the functioning of the radio telescope. They also demonstrated how radio astronomy can be used to study different celestial objects such as galaxies, quasars, and pulsars.

An Open talk On "Chat GPT" was conducted by Loyola Physics Association which was resourced by Dr A. Stanley Raj (Assistant Professors, Department of Physics- shift II). He provided a great overview of the technology and its potential applications in research. The lecture was attended by almost 60 participants including the faculties of Physics Department, research scholars and the representatives of the student bodies of the Department of Physics.



An 'International Conference on Materials for energy generation and storage' ICMGS-23' was conducted by the Loyola Physics Association (LPA) on 16<sup>th</sup> March 2023 at Lawrence -Sundaram auditorium. One of the key themes of the conference was the importance of developing sustainable and eco-friendly energy generation and storage solutions. Many of the speakers emphasized the need for reducing carbon emissions and transitioning towards a cleaner energy system. The conference provided a great platform for researchers and industry leaders to discuss the challenges and opportunities in this rapidly evolving field. It also highlighted the importance of interdisciplinary collaborations between science and engineering departments to address the complex challenges of energy generation and storage problem.



The event was inaugurated by Dr. K. Pandian, Professor and Head, Department of Inorganic Chemistry, UNOM after which the first lecture was given by Dr. Kavithaa S (Group Head & Scientist -D Materials & Metallurgy Group) C-SPM, followed by Dr. Loganathan Rajasekaran Assistant Professor of Physics Arignar Anna Govt. Arts College, Cheyyar and Dr. T. Joseph Sahaya Anand, Professor Faculty of Mechanical and Manufacturing Engineering Technology, Universiti Teknikal Malaysia Melaka (UTeM), Malaysia.

After the lectures of the invited speakers, Oral and Poster competitions were organized to which a total of 30 students representing different colleges participated. The prices were distributed for the best oral and poster presentations.

Overall, the International Conference on Materials for Energy Generation and Storage was a valuable event that brought together leading experts to share their knowledge and insights, and to promote collaborative research efforts in this important field.

Loyola Physics Association provided students in the Department of Physics a chance for innovation and exploration of their innate traits and talents. With respect to this, LPA has consolidated the efforts to represent the Department of Physics in various Inter-Collegiate Competitions held at Madras Christian College, Stella Maris College, Presidency College and many other colleges for which the students of the Department of Physics displayed exemplary performance and brought laurels and glory to the Department.

Loyola Physics Association conducted Intra-Department competitions to bolster the in-house talents of the department. This event wrapped up the association activities for the present academic year.