#### Loyola College



Loyola College is a Catholic minority institution administered by the Society of Jesus, popularly known as Jesuits. On the 15th of June 1925, Rev. Fr. Francis Bertram, with a group of committed Jesuits, founded Loyola College in Chennai. With its affiliation to the University of Madras, the college started functioning with just 75 students on roll in three undergraduate programs of Mathematics, History and Economics. The college was recognized under sections 2(f) and 12(B) by UGC on 3rd March 1956 with a grant-in-aid from the Government of Tamil Nadu. Quality and access have remained the core values that guide Loyola to develop, administer and evaluate the curriculum, adopt teaching-learning and evaluation methodologies in alignment with global trends and social relevance.

The college aims at training young men and women of quality to be leaders in all strata of life and serve all, including the downtrodden, marginalized and Dalits in society with justice and compassion. Recognizing the credentials of Loyola College, the UGC conferred the status of "College with Potential for Excellence" in 2004 and 2010. In the fourth cycle of NAAC accreditation, Loyola College was awarded a score of A++, 3.55 out of 4 CGPA. The UGC elevated Loyola College to the status of "College of Excellence" for the period from April 1st 2014 to March 31<sup>st</sup> 2019. The college ranked 2nd in the category of college in NIRF 2017. It was ranked 6th in NIRF 2018, 2019 & 2020, 3rd in 2021 and 4th in 2022 by the Ministry of Education, Government of India. As of the Academic Year 2022 – 23, there are 22 PG Programs, 24 UG Programs (Arts, Sciences and Commerce), 11 M. Phil. Programs, 12 Ph. D. Programs with 9554 Students, 347 Academic Staff and 185 Administrative Staff.

#### Loyola Institute of Frontier Energy (LIFE)



LIFE is an interdisciplinary and collaborative research institute in Loyola College. The basic tenet of LIFE is borderless, collaborative and interdisciplinary research in science with a balance between pure and applied sciences and the ultimate view of translating the fruits of research for improving the quality of life of the society. The thrust areas are: Energy, Environment and Bio-Ethics.

#### Department of Chemistry



The Teaching of Chemistry in Loyola College, was initiated by Professor R. Viraraghava Sarma in 1926 and began with 64 students who chose Mathematics, Physics and Chemistry as their optional subjects for the intermediate course. Laboratory accommodation was provided in the southern wing of the main building. By far the most significant step in the growth of the department began with the arrival of Rev. Fr. Lourdu Yeddanapalli, S.J. in 1945. He joined the department early in 1946 and in the same year the Honours course in Chemistry was begun. The curriculum has been suitably modified to meet the challenging needs of the Indian Society.

### About the **Conference**

The corrosion awareness day was launched by the world corrosion organization on 24th April 2020. Due to the shortage of resources by environmental and anthropogenic activities, approximately 2.5 trillion dollars of money is been spent every year, this is equivalent to 3.4% of the world GDP. The awareness created among educators, scholars and students by the corrosion experts and coating industry professionals to deal with what can be done to mitigate and control it. Research contribution to this field is necessary since we are running out of minerals. Every year several research articles were published using coating technology, nanoscale material modification, material selection, corrosion inhibitors, etc. It is impossible to completely eradicate the harmful corrosion environment, but it is possible to avoid alloys being in contact with a harmful environment by creating a barrier between them. Recently, nanocomposite coatings are engineered to provide attractive and cost-effective functional surface coatings with superior properties for anticorrosion. Subcategories like self-healing, stimuli-responsive nanocomposite coatings, organicinorganic hybrid nanocomposite coatings, electroactive nanocomposite coatings, etc. It is important to emphasize that nowadays corrosion issues are not solely connected with the degradation of metals. Appropriate system design is also important for effective corrosion protection in the material science aspect. It offers the corrosion engineers design options in corrosion control with advanced materials. Engineered properties created through specialized processing and synthesis technologies give advanced materials superior performance over conventional materials and include ceramics, high-value-added metals, electronic materials, composites, polymers and biomaterials. This can involve considering many factors, such as material selection, process and construction parameters, geometry for drainage, avoidance or electrical separation of dissimilar metals, avoiding or sealing of crevices, corrosion allowance, operating lifetime, maintenance and inspection requirements. Green inhibitors are eco-friendly and cheap to utilize and offer high inhibition efficiency against corrosion. Several types of organic green inhibitors include plants (extracts, oil), ionic liquids, amino acids, drugs, natural polymers, etc. Let us try joining together in concentrating research in the field of corrosion to find out solutions to avoid the metal economy loss in the future and by saving our Nation against corrosion.





National Conference on Advancements and Recent Trends in Material Development and Coating Technology in Corrosion (NCAMC-23) (Corrosion Awareness Day 2023) 03-03-2023

#### Convener

Dr. S. John Mary (Corrosion Science and Nanotechnology Unit, LIFE, Loyola College)

### Chairmen

Dr. M. Selvanayagam (Director, LIFE, Loyola College) &

Dr. D. Suresh Kumar (Head, Dept. of Chemistry, Loyola College)

Organized by Loyola Insititute of Frontier Energy (LIFE) & Department of Chemistry Loyola College, Chennai.

Venue: YD Hall, Loyola College, Chennai.

### Area of Focus

- Biomaterials
- 2D Nanocomposites
- Material Selection
- Polymer Coatings
- Surface Interface and Thin Film Formation
- Green Inhibitors
- Meta Material and Meta Surfaces

# **Dates to Remember**

Last date for Abstract Submission : 23-02-2023 Notification of Acceptance : 25-02-2023 Last date for Manuscript Submission: 28-02-2023

# **Registration Link :**

https://forms.gle/A9GS6CT6rSo7KiEG9

# **Registration Fee :**

Category	Registration fee
Faculties / Scientists	Rs 600
Industrial Participants	Rs 700
Research Scholars	Rs 250
UG & PG students	Rs 200

# **Payment Details:**

Indian Overseas Bank M/S DIRECTOR LIFE Account No : 171201000009998 IFSC : IOBA0001712 Branch : Loyola College Campus

### PATRONS

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# **Guidelines for Authors**

**Abstract:** Title (Times New Roman, size 14), Name of the Author, Affiliation, Email ID and phone number (Times New Roman, Font size 12) The abstract should not exceed 300 words and a minimum of 6 keywords is necessary.

**Full Paper:** Title (Bold, Times New Roman, Font Size 14) Name of the Author, Affiliation, Email ID, phone number and Subheadings (Times New Roman, Size 12)

**Content:** Times New Roman, Font size 12, Not exceeding 6 pages. Plagiarism (Less than 10%) should be checked and the report is to be attached.

Abstracts must be sent to ncamc2023@gmail.com

# Publication

Selected Abstracts will be asked to submit the full length articles which will be published in UGC CARE/ SCOPUS/ WOS Indexed journals and other reviewed manuscripts will be published as book chapter in proceedings with ISBN number.

# **Contact Details**

Email ID:

ncamc2023@gmail.com life@loyolacollege.edu

### **Phone numbers:**

9841738105 9492243222 9962739022