



Dear Delegates.....

Warm greetings to all of you.

“Our Nation’s future is in the hands of young people and the way in which we harness the potential of these clever people means a lot to the society and our Nation at large” said our former president Dr APJ Abdul Kalam. Having worked with the great visionary who ignited the minds of the young, sown the seeds of inspiration, nurtured them with perspiration to aspire their dreams.

There are enormous potentials and talents hidden in the budding students which must be brought out, nourished, harnessed, integrated and transformed into useful sustainable development for societal applications of our Nation.

Thus, the Annual National competition ‘Sacred Heart Young Innovator Award’ (SHYIA) organized by Sacred Heart College (Autonomous), Tirupattur is really a great opportunity for the student community. This event is envisaged to arts and science students pursuing graduate and postgraduate programmes with an aim to inculcate and bring out their creative and original ideas. “Great is a student who profits on his opinions, but greater is a student who profits on his ideas.”

The traumatic spell of the pandemic shall never deter us from our thinking and longing into new ventures. Instead, the events like SHYIA instills hope in the minds of the young Scientists and Researchers, who zeal for inventions and thus the innovations are still glowing in the minds of young people.

It gives me a great pleasure to write these words for the annual magazine of the event SHYIA – 2023 conducted for the students of arts and science colleges in the whole of Tamil Nadu and as well as in the nearby States. This certainly opens the gates of thinking as well as means of developing and nurturing the scientific & innovative temper among the young minds.

I am very glad that Sacred Heart College (Autonomous), Tirupattur is pursuing this noble venture of grooming the minds of the students to benefit our National needs.

While this event marks the third consecutive year, I wish the management and the organizers a

grand success. May your efforts go a long way in inspiring and motivating the young students to pursue their research in their respective fields with passion, persuasion and perseverance so that they become innovators and inventors of the future India.

So dear students, mind that 'Sky is the limit' for your imagination and innovations. I conclude quoting the words of St,John Bosco "It is enough for you to be young for me to love you".

With wishes and regards

**Rev. Dr. Francis P Xavier SJ**

**Rector**

**Loyola Institutions**

**Chennai - 600034**



Dear Participants and Organizers of SHYIA, 2023

Warm Greetings!

I am happy to hear that events focusing on harnessing the scientific zeal and creative temper among students have started sprouting out in spite of the pandemic threat and panic we had experienced. SHYIA, as I understand, is an unique and an important event attempted by Sacred Heart College, Tirupattur to harness the budding talents. Given its geographical position, I am

sure that competitions such as these will enthuse and encourage a number of students to bring out their scientific skills they possess. Today our Nation needs many young people to dream big and find scientific solutions to many problems the country faces.

I am very glad to note that Sacred Heart College (Autonomous), Tirupattur has already taken this noble endeavour of grooming and furthering the efforts of young innovators in scientific research. This will not only sow the seeds of creativity in the minds of students but also lead to a wider arena where the whole society and our Nation at large will be benefitted.

I wish the organizers and participants all the very best and success. God bless.

With wishes and Prayers

**Rev. Dr. K. P. J. Reddy**

**Professor Emeritus**

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## PROJECT SUBMISSION

- Projects have to be submitted through college in the prescribed format. **Prize Award - Project (Product)**
- Project Type: Product/Process
- Provide description about the project and technology used.
- Furnish student and college contact details.
- Upload needed photos, videos, sketches of the project.

1<sup>st</sup> Prize :: Rs. 10,000/-

2<sup>nd</sup> Prize :: Rs. 5,000/-

3<sup>rd</sup> Prize :: Rs. 3,000/-

### Prize Award - Project (Process)

1<sup>st</sup> Prize :: Rs. 10,000/-

2<sup>nd</sup> Prize :: Rs. 5,000/-

3<sup>rd</sup> Prize :: Rs. 3,000/-

Consolation prizes of Rs. 1000/- each for inspiring project in each discipline

# SCORING CRITERIA

## 1. IDEA GENERATION

The content of various ideas and innovative solutions have to be proposed and the application/implementation process has to be clearly outlined.

## 2. INNOVATIVE APPROACH

The proposed work needs to be innovative. The project should explore technological tools or methods that are new to industry with practical approach, adapted to local constraints.

## 3. SCALABILITY AND SUSTAINABILITY PLAN

The scalability and sustainability plan should clearly describe how the activities and their innovative outcomes will impact stakeholders.

# RULES, REGULATIONS AND ELIGIBILITY

1. Participants must be bonafide students of Arts, Commerce and Science Colleges in India.
2. Only one submission per student/team (team consists of maximum of 5 students).
3. Online registration is mandatory for all participants.

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## SHYIA – 2023 REPORT

### Sacred Heart Young Innovator Award (SHYIA 2023) - Report

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Sacred  
Heart

College, every year, recognizes young inventors and introduces their innovations and ideas to the society through the event called SHYIA (**Sacred Heart Young Inventor Award**). The event for 2023 was held on Monday, **06.03.2023** in the **Kamaraj Arangam**, at **9.30 a.m.** in the College premises.

The Principal of Sacred Heart College, **Rev. Dr. D. Maria Antony Raj, SDB**, cut open the ribbon and inaugurated **SHYIA 2023**. He welcomed and appreciated the participants for their efforts. After the inaugural ceremony the judges evaluated the products and processes presented by the participants.

The



esteemed adjudicators for the event were, **Dr. S. Vijayanand**, Assistant Professor (Senior Grade), Department of Biotechnology, Thiruvalluvar University, Serkkadu, Vellore, **Dr. A. Manimaran**, Assistant Professor (Senior Grade), Department of Mathematics, School of Advanced Sciences, Vellore Institute of Technology (Deemed to be University), Vellore, **Dr. Y. Edison Nesadoss**, Head, Department of Social Work, Voorhees College, Vellore District, and **Dr. S. Srinath**, Director, Ziwvit Educational and Research Centre, Tamil Nadu.

The event concluded at 4.30 P.M. with the valedictory function. **Rev. Dr. John Alexander, SDB** the **Rector and Secretary** presided over the valedictory function and released the **fourth edition souvenir of SHIYA**. **Rev. Dr. K. A. Maria Arockiaraj, SDB**, the **Additional Principal, Shift II**, delivered the key note address. The Judges after being introduced, offered their insights and valuable feedback to the participants.

**The Computation and Mathematical** domain was coordinated by **Dr. S. U. Vasantha Kumar** and **Dr. A. George Louis Raja**. **The Life Sciences** domain was coordinated by **Dr. Niyas Ahmed** and **Dr. M. Manikandan**. **The Language and Social Sciences** domain was coordinated by **Dr. S. Sasikumar** and **Dr. K. Arockiaraj**. **Physical and Chemical Sciences** was coordinated by **Dr. S. A. Martin Britto Dhas** and **Dr. S. Shekar**.



A total  
of **390**

**participants from 11 colleges** attended the event. **Eight colleges** from within the state and **three colleges** from other states participated. A total of **135 Research Projects** belonging to various domains; **Computing and Mathematical Sciences - 25 Projects**, **Languages and Social Sciences - 24 Projects**, **Physical and Chemical Sciences - 27 Projects**, **Life Sciences - 63 Projects**, were exhibited.



The



proposals were classified as research processes and research products. The best proposals were selected based on **Novelty, Originality, Presentation, Utility/Application, and Patentability.** Prizes and certificates were awarded to the winners of each domain.

The following were the prize winners: For **Language and Social Sciences**, **Mr. Rahul Kumar and his team** from **Sacred Heart College** won the **First place** for their project titled, **Augmented Reality Shopping/Virtual Reality Shopping.** **P. Divya & team** from **Sacred Heart College** won the **Second place** for the project titled **Smart Helmet Project to Avoid Accidents.** **Sehban Ahmed** from **Islamiah College** won the **third place** for the project on **Computational Estimate of Air Quality.**



**Computational and Chemical Sciences: Maria Joseph and team Sacred Heart College won the first place for the project Oxygen from Hydrogenated Water using Indigenously Constructed Shock Tube. The second place was won by A.F. Poomani and team from Sacred Heart College for The Guardian Google's. V. Kalaiselvi and team from Sacred Heart College won the third place for the project titled Organic Mosquito Repellent and Herbal Commercial Products.**

**Computing and Mathematical Sciences prize winners are as follows: D. Sagayaraj and S. Don Richard, from Sacred Heart College won the first place for Coyley Digraphs of the Group Generated by Higher Order Derivatives. Elavarasan & team from Sacred Heart College won the second place for their title Knight Tour Crypto System. The third place was won by P. Monika & S. Vinothini from Sacred Heart College for their project on Rail Fence and Odd Even Transposition Technique in Network Security.**

Prize winners of **Life Sciences** are as follows: The **first place** was won by **Swetha and team**, from **Sacred Heart College** for their project on **Formulation of Bio Products for Beauty and Safety Integumentary System**. The **second prize** was won by **B. Lokeshwari and team from Sacred Heart College** for their proposal on **Modified Form of Cattle Field**. The **third place** was won by **S. Deena Dayal and Vignesh from Loyola College, Chennai** for the project on **Bio Filter for the Bio Remediation of the Vehicle Exhaust Using Purple Sulphur Bacteria**. Two consolation prizes were given to each of the respective domains.

The **IPR (Intellectual Property Rights)** cell of the college, arranged for the patenting of the best inventions. **Rev. Dr. G. Theophil Anand, SDB, Vice-Principal, (Admin) Shift I**, and **Dr. P. Saranraj, Head of the Department of Microbiology**, coordinated the entire event.



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