

Holy Cross College (Autonomous)

Nagercoil-629 004

Affiliated to Manonmaniam Sundaranar University, Tirunelveli Nationally Accredited with A+ Grade (CGPA 3.35) by NAAC IV Cycle An ISO 9001: 2015 Certified Institution SSR 2019-2020 to 2023-2024

6.3.3 Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

Crossian Centre for Research and Development

Holy Cross College (Autonomous), Nagercoil

Report of the Research Committee for the Academic year 2023-2024

The Crossian Centre for Research and Development (CCRD) of Holy Cross College (Autonomous), Nagercoil meticulously organizes programmes to promote research interests. It works with the noble objectives of accomplishing research excellence in various disciplines, disseminating information on publishing scholarly research and instilling knowledge on IPR and patent. The Crossian Research Forum meets every second day order during the Hour of Blossoming to discuss on endorsing quality and innovative research among the research community. Our Research Ecosystem consists of a Chairperson, Dean of Research, Nodal Officer, Research Advisory Committee, Research Ethics Committee and Crossian Research Forum.

INTERNAL MEETS

1. Research Advisory Committee Meeting

The Dean of Research convened the Research Advisory Committee Meeting on:

- ♣ August 10, 2023, to deliberate on the Strategic Plan for the academic year.
- ♣ October 12, 2023, to review the proposals for the Crossian Research Seed Money 2023-'24 received from Faculty and discuss the extension of the Crossian Research Seed Money Scheme to scholars.
- Committee members thoroughly reviewed all six proposals, analyzing their objectives,

methodology, novelty, and social relevance. After careful consideration, the committee recommended four proposals out of the six. Subsequently, on November 29, 2023, the committee reconvened at St. Joseph's Hall to review five proposals for the Crossian Research Seed Money Scheme received from scholars.

- → On December 15, 2023, to select and declare Seed Money proposals submitted by scholars. Committee members thoroughly reviewed all five proposals, analyzing their objectives, methodology, novelty, and social relevance. After careful consideration, the committee recommended all proposals for approval.
- 4 On April 1, 2024, to establish criteria for Endowment Prize Fixation. The discussion primarily focused on prioritizing publication criteria, particularly concerning Scopus and Web of Science (WoS) indexing. Members engaged in a thorough discussion and agreed to prioritize author indexing in Scopus papers and publication in core collection journals of WoS.





2. Research Ethics Committee Meeting

The Crossian Centre for Research and Development organized the Research Ethics Committee meeting on August 19, 2023. Dr. Sr. S. Sahayaselvi, Principal, served as the resource person, enlightening attendees on the topic "Maximizing Research Scholar's Productivity: Strategies for Enhanced Research Output".





The Dean of Research convened a meeting of the Research Ethics Committee for all Science members on February 21, 2024, at St. Joseph's Hall. Dr. Sr. S. Sahayaselvi, Principal, emphasized the importance of increasing publications and led a discussion on effective strategies to achieve this goal.

During the meeting, the Dean directed attention to the section on Research & Development of the UGC guidelines for Institutional Development Plans, as outlined on page 14 of 63. The Dean elaborated on the guidelines provided by the UGC, particularly emphasizing the establishment of ethical practices.

3. Crossian Scholars Forum

The Crossian Centre for Research and Development organized the Crossian Scholars Forum on September 7, 2023, at Sr. Emilie's Seminar Hall. The forum focused on the topic "2023 Research Focus". Dr. S. Mary Mettilda Bai served as the moderator, encouraging scholars to enhance their academic endeavors by increasing quality publications, obtaining patents, enriching career profiles, engaging in research collaborations, maintaining a work diary, and ensuring regular attendance.

The Crossian Centre for Research and Development hosted the second Crossian Scholars Forum for the 2023-2024 academic year on April 29th, 2024, at St. Joseph's Hall. The forum focused on the topic 'Tracking Progress of Work Diaries.' Dr. Sr. S. Sahayaselvi delivered the keynote address, highlighting the significance of quality publications, patents, career advancement, research collaborations, and the maintenance of work diaries, attendance, and research ethics.





4. Faculty Meet - Presentation of the Revised Research & Consultancy Policy

Dr. S. Mary Mettilda Bai presented the revised Research and Consultancy Policies 2024 to the Faculty on April 12th and April 22nd, 2024, ensuring that all faculty members were acquainted with the institutional regulations.





RESEARCH MOTIVATIONAL SCHEMES

1. Incentives to the Faculty for Research 2022-2023 (June 2022 – December 2023)

As a source of motivation, the College provides incentives to the faculty for their research contribution, through Crossian Centre for Research and Development based on the Research policy of the institution.



On April 22, 2024, the Crossian Centre for Research & Development distributed incentives to deserving faculty for the calendar year 2023 during the General Body Meeting.



2. Crossian Research Seed Money Scheme (CRSMS)

In order to make research as campus culture, the Crossian Centre for Research & Development established Crossian Research Seed Money Scheme. Dean of research has made an announcement for the proposals for Crossian Research Seed Money Scheme (CRSMS) on 25-08-2023. As per the announcement 6 proposals were received. The Research Advisory Committee (RAC) scrutinised all the 6 proposals and recommended 4 proposals for the seed money of Rs. 20,000/- on 27.10.2023.

Following are the accepted proposals:

- 1. CRSMSP 2023-'24/Faculty-1: Efficacy of *Quisqualis indica* and *Bougainvillea* flower extracts on fish pathogens and as colour enhancer in ornamental fishes.
 - Principal Investigator (PI): Dr. J. Vinoliya Josephine Mary
- 2. CRSMSP 2023-'24/Faculty-2: Spectral Investigation and Quantum Chemical Insights of certain Sulfonylurea Herbicides and their Impact on Microorganisms.
 - Principal Investigator (PI): Dr. S.J. Jenepha Mary
- 3. CRSMSP 2023-'24/Faculty-3: Biomedical potential of green synthesised silver nanoparticles from the endocarp of Palmyra palm, *Borassus flabellifer*.
 - Principal Investigator (PI): Dr. C. Anitha
 - Co-Investigator (Co-PI): Dr. P.T. Arokya Glory
- 4. CRSMSP 2023-'24/Faculty-6: Utilising Eco-Friendly Metal Oxide Nanoparticles as Highly Efficient Catalyst for Rocket Fuel Thermal Decomposition.
 - Principal Investigator (PI): Dr. P. Aji Udhaya

Two special need-based research projects were sanctioned for the department of Botany for the academic year 2023-2024.

Crossian Research Seed Money Scheme to the Research Scholars

During this academic year, Crossian Research Seed Money Scheme was introduced to the scholars and announcement was made on 16-10-2023. As per the announcement, 5 proposals were received and after the thorough analysis of the Research Advisory Committee all the five proposals were accepted on December 15, 2023.

Following are the accepted proposals:

- CRSMSP 2023-2024/Scholars-1: Metal organic framework for sensing applications.
 Ms. S. Sabadini & Dr. Y. Christabel Shaji, Department of Chemistry
- 2. CRSMSP 2023-2024/Scholars-2: Intertwining Threshold Spaces and Human-Animal Dynamics in the Select Works of Easterine Kire.
 - Ms. W. Failry Jenifer & Dr. H. Jimsy Asha, Department of English
- 3. CRSMSP 2023-2024/Scholars-3: Disentangling the Effect of Green Banking Adoption Practices on Performance: Top Management Commitment as a Moderator.
 - Ms. N. Saromi & Dr. S. Shahayaselvi, Department of Commerce
- 4. CRSMSP 2023-2024/Scholars-4: Footprints of Reality in Future: Intrinsic Voyage through Becky Chambers' *Monk & Robot Series*.
 - Ms. P. Asmin Janisha & Dr. H. Jimsy Asha, Department of English
- 5. CRSMSP 2023-2024/Scholars-5: Employee commitment and cognitive engagement as moderators in the relationship between quality of work life and work life balance: A conditional moderated moderated-mediation model.
 - Ms. C. Annie Riya Michael & Dr. M. Gnana Muhila, Department of Commerce

Disbursal of the II Instalment of the Seed Money

On August 22, 2023, the Crossian Centre for Research & Development disbursed the second installment payment to the investigators of the Crossian Research Seed Money Scheme Projects 2022-2023 Batch.

Recipients of II Installment for CRSMS Projects 2022-2023 Batch: Dr. F. Brisca Renuga and Sr.

- K. Francy, Dr. A. Punitha, Dr. S. Vimal Dolli and Dr. A. Sameema, Dr. Y. Christabel Shaji and Dr.
- S. Ajith Sindhuja, Dr. S. Lizy Roselet and Dr. M. Sherly Treasa, and Dr. R. Krishna Priya

3. Research Relevant Prizes

Crossian Centre for Research & Development, honour the faculty for their research efforts with award/ prizes such as: i) **Best Researcher Award**, ii) **Mrs. Maria Pushpam Alphonse's and Mr. and Ms. Antony George's Endowment prize** for the staff who have published articles in Scopus/ WoS/ SCI/ SSCI journals, iii) **Fr. Martin's Endowment prize** for the staff whose research scholar has been awarded Ph.D.

Endowment Prizes & Best Researcher Award 2023

On April 8, 2024, the Crossian Centre for Research & Development honored faculty members with endowment prizes and bestowed the Best Researcher Award during the Student's valedictory ceremony at the Golden Jubilee Hall.



RESEARCH ENDEAVOURS

1. International Conference

In collaboration with the Research and Development Cell, Sree Ayyappa College for Women, Nagercoil Crossian Research Forum organised two Days International Conference on "Innovative Trends in Multidisciplinary Research" with paper presentation on 07th & 8th July 2023 in the Multipurpose Hall. Dr. Satyanarayana Parayitam, Professor at the University of Massachusetts, Dartmouth delivered the keynote address in the inaugural session. The proceeding of the Conference and the CCRD newsletter for the academic year 2022-2023 was released by Dr. Satyanarayana Parayitam and Dr. K.V. Jayashree respectively.





The first technical session began at 11:30 a.m. with Dr. E. Babu Raj, Professor at Blue Hora University, Ethiopia, presenting on "Systematic Analysis and Publishing Process in Research." This thought-provoking session enhanced participants' abilities to choose appropriate methods for their research aims and objectives. The paper presentation session started at 2:00 p.m., featuring **66** presenters across various disciplines in parallel sessions.

The second day began with an address by Dr. J.K. Vijayakumar, Director of Library Sciences at the American University of Antigua, on "Systematic Literature Review and Evidence-Based Research Process." Following a short break, Dr. P.K. Suresh Kumar, Head of the IT Division at Kerala University Library, delivered a lecture on "Research Ethics and Academic Integrity". After lunch, Dr. Satyanarayana Parayitam discussed "Research Design, Sampling, and Multidisciplinary Approaches." Certificates were distributed to the participants, as well as paper presenters during the valedictory session. The sessions were engaging with friendly interactions. A total of 333 attendees from various institutions and disciplines benefited from this program.

2. State Level Workshop

The Crossian Centre for Research & Development organized a State Level Workshop on the "Art of Research Proposal for Tapping Research Grants" on October 7, 2023, in St. Joseph's Hall. Dr. J. Arumugam, Librarian at PSG College of Technology, Coimbatore, served as the resource person. Dr. Arumugam provided detailed insights into research fundamentals, the purpose of research, qualities of a good research proposal, strategies for writing research proposals, and various funding agencies.



3. Training Programme

The Crossian Centre for Research and Development conducted a training programme on "Empowering Researchers with E-Resources: Unlocking Inflibnet and N-List" for scholars on October 25, 2023, at the Library Reading Hall. Dr. V. Jeyakala, Librarian at Holy Cross College, Nagercoil, served as the resource person. Dr. Jeyakala delivered a comprehensive presentation on Inflibnet and N-List, highlighting the wealth of electronic resources and databases available to researchers. She shared practical insights and tips on how scholars can effectively utilize these valuable resources for academic and research purposes.



4. Seminar

The Crossian Centre for Research & Development, in association with the Institution's Innovation Council, organized a seminar on "IPR in the Digital Era: Challenges & Opportunities for Researchers" for scholars on December 12, 2023. Ms. Meena Balakrishnan, IPR Attorney & Registered Patent Agent (IN/PA 3502) from Sprinton Law Office Law Firm, Coimbatore, served as the resource person. Ms. Meena Balakrishnan provided insights into intellectual property rights, discussing how the digital landscape has transformed the protection of intellectual property. She addressed challenges faced in safeguarding intangible assets and demonstrated various techniques for

refining searches, strategies for keyword-based searches, and free online search websites. She also covered common myths, the IDF Questionnaire, product patent processes, and demonstrated the patent application process using platforms such as Google Patents and Freepatents online.



5. Research Colloquium

The Crossian Centre for Research and Development at Holy Cross College (Autonomous), Nagercoil, in collaboration with the Research and Development Cell at Sree Ayyappa College for Women, Chunkankadai, organized a Colloquium on "Research Ethics" for scholars on February 14, 2024, at Sr. Emilie's Seminar Hall. Dr. P.K. Suresh Kumar, Head of the IT Division at Kerala University, served as the resource person. Dr. P.K. Suresh Kumar delivered a presentation highlighting the importance of COPE (Committee on Publication Ethics) and provided detailed information about IAIP (International Association of Internet Professionals). He gave clear instructions regarding plagiarism and its consequences in research, emphasizing the rules and regulations set forth by the UGC (University Grants Commission).



6. Orientation Programme

The Crossian Centre for Research & Development organized an Orientation Programme on "Mobilizing Research Funds" on March 7, 2024, at St. Joseph's Hall. Dr. N.S. Kumar, Managing

Director of Shanmugha Charitable Foundation and former Scientist & Associate Director at DRDO, served as the resource person. Dr. Kumar explained the intricacies involved in mobilizing research funds from various agencies.





CROSSIAN RESONANCE

Crossian Resonance, the biannual, multi-disciplinary, peer-reviewed and refereed national journal launched in June 2010 with ISSN 0976-5417, strives to reach research scholars from all directions and various cross-sections of society providing a platform to resonate scientific findings. It aims to foster the spirit and aspirations of the academics and to promote a research culture among the erudite. The journal has provided an opportunity and space to the Crossian scholars, Professors and research guides of our institution and other institutions at national and international levels.

1. June Issue of Crossian Resonance

The June 2023 issue (Vol 14, No 1) of "Crossian Resonance," the bi-annual Multidisciplinary Peer-reviewed and Refereed National Journal of our College, was released on October 7, 2023. The release took place during the State Level Workshop on the "Art of Research Proposal for Tapping Research Grants," with Dr. J. Arumugam serving as the resource person. The first copy was received by Dr. Sr. S. Sahayaselvi, Principal.



2. December Issue of Crossian Resonance

The December 2023 issue (Vol. 14, No. 2) of 'Crossian Resonance,' a bi-annual multidisciplinary peer-reviewed and refereed national journal, was released on April 8, 2024, during the Student's valedictory ceremony at the Golden Jubilee Hall. The release was officiated by Dr. M. Mary Gilda, Secretary, and the first copy was received by Dr. Sr. S. Sahayaselvi, Principal.



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The Crossian Centre for Research and Development also recognizes the faculty who involve themselves in attending workshops, seminars, FDP, PDP and other training programmes by providing incentives. During this academic year, totally 132 faculty attended Faculty Development Programmes and Management Development Programmes. 20 scholars were awarded with Ph.D. during this academic year and 26 new scholars were enrolled. 129 faculty members received financial support of Rs. 4,43,215/- (registration fees/travel expenses/membership fees) for participating/presenting papers in Conferences, Seminars, Workshops and Faculty Development Programmes. 43 faculty members received financial assistance of Rs. 3,89,026/- for patent drafting and filing.

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