## RESEARCH DEVELOPMENT CELL

ST. JOSEPH'S COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
CUDDALORE - 607 001

### **ANNUAL REPORT 2019-2020**

Research Development Cell (RDC) and Career Guidance and Placement Cell of the college have jointly organized an Orientation Programme on UGC/CSIR NET and SET examinations for the students, scholars and staff members on 23.09.2019. Rev. Fr. A. Alex was the resource person. Five faculty members who have cleared the exams shared their experience.

The Research Development Cell of the College and Patent Information Centre of Tamil Nadu State Council for Science and Technology (TNSCST) jointly organized a two days National level Symposium on the topic "Intellectual Property Rights (IPR) - Bridging Academia & Industry" on 6<sup>th</sup> and 7<sup>th</sup> of January 2020. The Symposium was inaugurated by Dr. R. Srinivasan, Member Secretary, TNSCST, Chennai Shri. Muthukumaran Devarajan, Senior Strategist - IP & Competitive Intelligence, GE India Technology Centre, Bangalore, Shri. P. Balamurugan, Deputy Controller of Patents & Design, Patent Office, Chennai, Ms. T Sahila, Project Scientist, Patent Information Centre - TNSCST, Chennai, Dr. Rishikesan Sankaranarayanan, Business Development Director, Lifex Biolabs Inc., CA-USA, Singapore and Mrs. R. Sindhuja, Examiner of Trade Marks, Trade Mark Registry, Chennai delivered lectures on the first day. Dr. U. P. Senthil Kumar, Senior Vice-President, Research and Development Centre, Orchid Pharma Ltd., Chennai, Ms. Preethi Narayanan, Patent Consultant, Chennai and Dr. I. Geetha, Senior Technical Officer, ICMR – Vector Control Research Centre, Puducherry spoke on the applied aspects of IPR on the second day. Dr. Balanehru Subramanian, Director, CIDRF, Sri Balaji Vidyapeeth, Puducherry delivered the valedictory address. Around two hundred and fifty participants including students, research scholars and teaching faculty from academia and members from industries attended the symposium.

Coordinator, RDC

Principal

Dr. M. ARUMAI SELVAM, M.Sc., M.Phil., Ph.D.,
PRINCIPAL

St. Joseph's College of Arts & Science
(AUTONOMOUS)
CUDDALORE - 607 001.

# RESEARCH DEVELOPMENT CELL

ST. JOSEPH'S COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS)
CUDDALORE - 607 001

#### ANNUAL REPORT 2020- 2021

Research Development Cell (RDC) of the college organized a Poster Presentation competition for the students on the theme "The Scientific Breakthrough that I like the most" on the occasion of National Science Day on March 1<sup>st</sup> 2021. Seventeen Students from UG and PG programmesof the college participated in the competition. Dr. P. Marie Arockianathan, Associate Professor and Head, Dept. of Biochemistry has evaluated the posters. The winners of UG were Ms.V. Dhanasri A20MBE54, I MBE (I Prize), Ms. Patil Sheetal A20BCE47, I BCE (II Prize) and Ms.S. Fazila A18CSEA09 & Ms. M. Aswini A18CSEA02 I CSEA, (III Prize). The winners of PG wereMs. P. Jeevitha A19MBC09, II MBC (I Prize), Mr. P. Ram Balaji A20MAE09, I MAE (II Prize) and Ms.V. Ranjitha A19MBC15, II MBC (III Prize). All the other students were given consolation prize for their active participation.

RDC organized an Interdisciplinary meeting on 24<sup>th</sup> April 2021 through online mode at 3.00pm. Coordinator of RDC Dr. S. Joseph Christian Daniel gave an introductory remark. Principal, Vice-Principal, Controller of Examinations and Dean of studies addressed the gathering. Views on Interdisciplinary research were shared by the faculty members and the concluding remark wasgiven by Rev. Fr. Secretary. Coordinator of the RDC proposed the vote of thanks.

To promote research culture among students RDC organized a series of online lectures on various topics from 26.05.2021 to 05.07.2021. Mr. F. Paul Arokiadass, Assistant Professor, Department of Chemistry and Dr. D. Sumitha, Assistant Professor, Department of Microbiology served as organizing secretaries for the lecture series. Dr. Joseph C. Daniel, Associate Professor and Head, Department of Microbiology, St. Joseph's College of Arts and Science (Autonomous), Cuddalore delivered a Lecture on 26.05.2021 titled "Projects – Dos and Don'ts", Dr. Martin Aruldoss, Assistant Professor, Department of Computer Science, Central University of Tamil Nadu, Thiruvarur delivered the second Lecture on 27.05.2021 on the topic "Introduction to Research Oriented Projects", Dr. B. Rajarajeswari Jayarani, Assistant Professor of English,

Arignar Anna Government Arts College, Villuppuram delivered the third Lecture on 28.05.2021 on the topic "An Insight Into Research", Dr. F.R. Alexander Pravin Durai, Associate Professor of Commerce, St. Joseph's College (Autonomous), Trichy delivered the fourth Lecture on 29.05.2021 on the topic Building Research Skills –A Stepwise Approach" and the fifth Lecture was delivered by Dr. K. Bhakiaraj, Assistant Professor, Department of Chemistry, St. Joseph's College of Arts and Science (Autonomous), Cuddalore on 5<sup>th</sup> July, 2021 on the topic "Extraction of Essential Ingredients from Plant Materials and their Application".

Instrumentation Centre of the College processed a total of 8 samples using FTIR and UV-Spectrophotometer during the academic year 2020-21.

Coordinator, FDC

Principal

Dr. M. ARUMAI SELVAM, M.Sc., M.Phil., Ph.D.,
PRINCIPAL

St. Joseph's College of Arts & Science
(AUTONOMOUS)
CUDDALORE - 607 001.

# RESEARCH AND DEVELOPMENT CELL

ST. JOSEPH'S COLLEGE OF ARTS AND SCIENCE (AUTONOMOUS) CUDDALORE - 607 001

### **ANNUAL REPORT 2022 - 2023**

Research & Development Cell (RDC) Inaugural Event was held on 07.10.2022 during 11.30 am to 1.00 pm at R. Ratchagar Hall. The programme was started with a prayer. Dr. R. Vidya, Assistant Professor, Department of Computer Science delivered the welcome address. Director of Research and Development Cell Rev. Fr. Dr. S. Xavier gave an introductory remark about the Members of the Committee, facilities and activities of the Cell. Dr. S. Sebastin, Assistant Professor, Department of Physics introduced the Eminent Resource person Prof. Dr. D. Arivuoli, Former Director, Crystal Growth Centre, Former HOD Physics, Anna University, Former Chairman, Anna University sports Board. Dr. R. Krishnan, Assistant Professor, Department of Microbiology introduced the distinguished expert Dr. M. Kalai Selvan, Director & Professor, CAS in Marine Biology, Parangipettai. Dr. P. Marie Arockianathan, Head, Department of Biochemistry introduced the resource person Dr. P. Kangueane, Publisher, Biomedical Informatics, Chennai. External experts from different fields interacted with the committee members regarding the Start-up Research, External Funding and Publications. Dr. M. Arumai Selvam, Principal, Dr. J. Jon Arockiaraj, Vice-Principal and Rev. Fr. Dr. A. Alex, Dean of studies addressed the gathering. Rev. Fr. G. Peter Rajendiram, Secretary of the college presided over the function and delivered the presidential address. Dr. D. Sumitha, Assistant Professor, Department of Microbiology proposed the vote of thanks.

Research and Development Cell (R&D) & Intellectual Property Rights (IPR) Cell of our College in collaboration with Patent Information Office, Chennai organized Intellectual Property Rights (IPR) awareness Programme (Under the National Intellectual Property Awareness Mission) on 03.02.2023 from 11.00 am to 1.00 pm in the Library Extension Hall for II PG (offline mode) and I PG students (online mode) in Alumni Hall in our college,

The chief guest invited for the function is Smt. R. Sindhuja, Examiner of Trademarks and GI Trademark Registry, Chennai briefly explained the importance of Intellectual Property Rights among the students. The Convener of the programme was

Rev. Fr. Dr. S. Xavier, COE & Head, Department of Physics and coordinated by Dr. S. Sebastian, Dr. D. Sumitha, Dr. S. Muthukumaran and Dr. S. Megala faculties from our

college. Nearly 532 students from both I PG and II PG attended the program and benefited and received the certificate.

RDC organized a Panel Discussion meeting for science stream faculty on 17.02.2023 from 11.30 am to 1.00 pm at Rev. Fr. Paul Rajkumar Hall to submit project proposal for external funding agencies. Rev. Fr. Dr. S. Xavier, Director of Research and Development Cell gave an introductory remark about the grants such as SERB- Core Research Grant, SERB- Startup Research Grant and TN Chief Minsters funding schemes. Dr. K. Bhakiaraj, Assistant Professor, Department of Chemistry, St. Joseph's College of Arts and Science (Autonomous), Cuddalore presented the details of the proposal submission. Interested faculties from various Science Departments (Chemistry, Zoology, Biochemistry, Computer Science, Microbiology, Statistics, Physics and BCA) attended the meeting.

Instrumentation Centre of the College processed a total of 30 samples using FTIR and UV-Spectrophotometer during the academic year 2022-23.

Coordinator, PDC

Principal

Dr. M. ARUMAI SELVAM, M.Sc., M.Phil., Ph.D.,
PRINCIPAL

St. Joseph's College of Arts & Science
(AUTONOMOUS)
CUDDALORE - 607 001.

#### RESEARCH DEVELOPMENT CELL

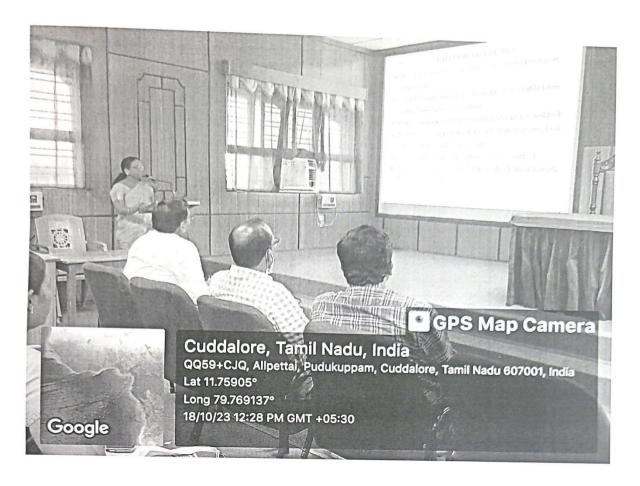
### ST. JOSEPH'S COLLEGE OF ARTS & SCIENCE (AUTONOMOUS), CUDDALORE

### **ANNUAL REPORT 2023-2024**

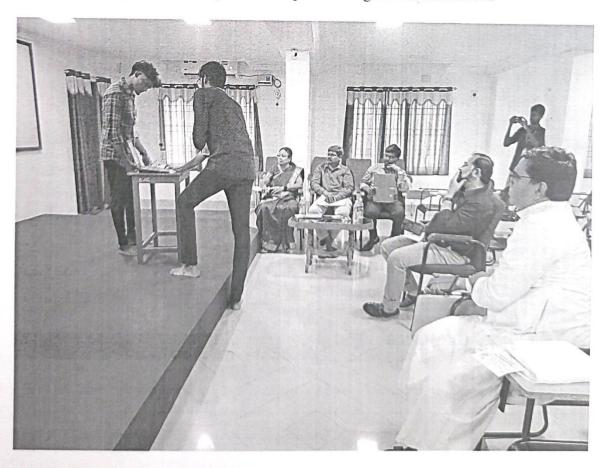
Scrutiny Committee meeting for the project proposals submitted under the scheme, "Financial assistance for Intramural Research Projects 2023-2024", was held on 18.10.2023. Six projects from various departments (Physics, Chemistry, Zoology, Biochemistry, Microbiology and English) were presented by the Principal Investigators. The members of the committee were Rev. Fr. Dr. S. Xavier (Chairperson), Dr. J. John Arockiaraj, Vice-Principal & HoD of Mathematics and Dr. P. Marie Arokianathan, Head, Department of Biochemistry. Funding was approved for all the six proposals and Rs. 13000/- was sanctioned.

Research & Development Cell (RDC) of the college organized a National Science Day competition jointly with Institute Innovation Council (IIC) for the students on the theme "Sustainable Development Goal" on 28<sup>th</sup> February 2024. The programme was inaugurated by Rev. Fr. Dr. M. Swaminathan, Secretary, St. Joseph's College of Arts & Science (Autonomous), Cuddalore. The students from UG & PG of our college participated in the competition. Twenty-eight teams participated in the competition and presented their ideas as Posters, Working model and Power Point presentations. Dr. P. Marie Arockianathan, Associate Professor and Head, Dept. of Biochemistry, Dr. I. Benjamin Franklin, Assistant Professor, Department of Computer Application, Dr. Mercy Antony, Assistant Professor & Head, Department of Statistics evaluated the project presentation. The winners of competition were Mr. S. Pavitharan & Mr. A. Feroz Khan, III BCA (I Prize-Rs.1500/-), Ms. D. Nivedha & Ms. Thamarai Dharshini, II B.Sc., Zoology (II Prize- Rs. 1000/-) & Mr. C. Sitharath & Mr. P. Surya, II BBM (III Prize- Rs.500/-). All the other participated students were given participation certificate for their active participation.

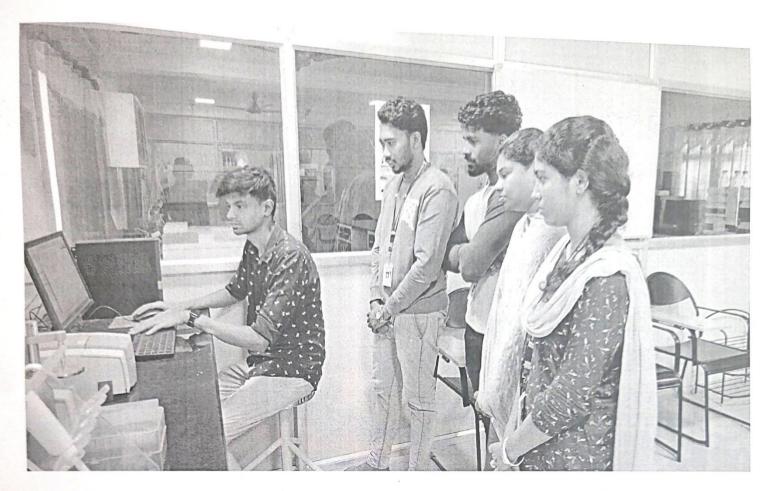
Research & Development Cell of our college provides consultancy for other institutes by organizing hands on training in the Rev. Fr. Dr. I. Ratchagar Instrumentation Centre for PG students and Research Scholars. Four students from Department of Physics, Dr. Kalaignar M. Karunanithi Govt. Institute for PG studies & Research, Karaikal participated in the training programme on 6<sup>th</sup> March 2024.



Project presentation by the Principal Investigator on 18.10.2023



Students presenting working model in National Science Day competition on 28.02.24



Hands on training for Dr. Kalaignar M. Karunanithi Govt. Institute for PG studies & Research, Karaikal on 06.03.24

Principal

Dr. M. ARUMAI SELVAM, M.Sc., M.Phil., Ph.D.,
PRINCIPAL
St. Jeseph's College of Arts & Science
(AUTONOMOUS)
CUDDALORE - 607 001.

Coordinator, RDC