


Dr. Carmel Pushpa Raj J, M.Sc., B.Ed., M.Phil., Ph.D,

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Employment

18, June 2012 – Till Date  Assistant Professor of Mathematics,
St .Joseph's College (Autonomous), Tiruchirappalli – 620 002

Education

- 2015 – 2020  **Ph.D. (Mathematics), Bharathidasan University, Tiruchirappalli (Part Time)**
Thesis Title: “*Studies on Fixed Point Theorems in Metric Spaces, b-Metric Spaces and Complex Valued b-Metric Spaces*”
- 2011 – 2012  **M.Phil (Mathematics), Loyola College (Autonomous), Chennai – 34**
(86.3 % - *First class with Distinction*)
Dissertation Title: “*A study on graph labeling*”.
- 2010 – 2011  **B.Ed (Mathematics), St.Xavier's College of Education (Autonomous), Palayamkottai, Tirunelveli – 2**
(76.6 % - *First class with Distinction*)
- 2008 – 2010  **M.Sc (Mathematics), St. Joseph's College (Autonomous), Tiruchirappalli - 2**
(83.42 % - *First class with Distinction*)
Project Title: “*Network of Queues*”.
- 2005 – 2008  **B.Sc (Mathematics), St. Joseph's College (Autonomous), Tiruchirappalli - 2**
(81.54 % - *First class with Distinction*)
- 2003 – 2004  **HSC, St. Antony's Higher Secondary School, Kosavapatty, Dindigul – 624 304**
(82.75 %)
- 2001 – 2002  **SSLC, St. Antony's Higher Secondary School, Kosavapatty, Dindigul – 624 304**
(92.6 %)

Additional Qualification

- December 2018  Passed CTET (Paper –II), CBSE, Delhi
- February 2016  Passed the State Eligibility Test for Lectureship 2016 (TNSET-2016)
- August 2014  Passed TNTET (Paper –II), TRB, Chennai
- June 2011  Passed CTET (Paper –II), CBSE, Delhi
- 2008 – 2009  PGDCSA, St. Joseph's College (Autonomous), Tiruchirappalli - 2
(73.44 % - First class)

Research Publications




1. **Carmel Pushpa Raj J**, Arul Xavier A, Maria Joseph J & M. Marudai. (2022). Common fixed point theorems under rational contractions in complex valued extended b -metric spaces. *International Journal of Nonlinear Analysis and Applications (IJNAA)*, 13 (2022) 1, 3479-3490 DOI: <https://doi.org/10.22075/ijnaa.2020.20025.2118>.
2. V. Vairaperumal , **J. Carmel Pushpa Raj** , J. Maria Joseph and M. Marudai (2021). Common fixed point theorems under rational contractions in complex valued extended b-metric spaces. *Nonlinear Functional Analysis and Applications* , Vol. 26, No. 4 (2021), pp. 685-700. DOI: <https://doi.org/10.22771/nfaa.2021.26.04.03>
3. Arul Xavier A, **Carmel Pushpa Raj J**, Maria Joseph J and M. Marudai (2021). Common fixed point theorems in complex valued extended b-metric spaces under rational contractions. *Journal of Physics: Conference Series* 1964 (2021) 022028. DOI: <https://doi.org/10.1088/1742-6596/1964/2/022028>
4. **J. Carmel Pushpa Raj** , V. Vairaperumal , J. Maria Joseph and E. Ramganes (2020), Common fixed point theorem for mapping with the generalized weakly contractive conditions in metric spaces. *Journal of Mathematical and Computational Sciences*, 10 (2020), No. 3, 572-583. DOI: <https://doi.org/10.28919/jmcs/4487>
5. **J. Carmel Pushpa Raj** , V. Vairaperumal , J. Maria Joseph and E. Ramganes (2019) Fixed Point and Common Fixed Point Theorems in Complex Valued b- Metric Spaces, *Advances in Mathematics: Scientific Journal*, 8 (2019), no.3, 772–780, DOI: <https://doi.org/10.37418/amsj>

6. Dayana Roselin D , **Carmel Pushpa Raj J** , Maria Joseph J and M. Marudai (2019). Best Proximity Point Theorems on Dislocated and Dislocated Quasi b-metric spaces, *Adalya Journal* 8 (2019) – Issue no - 9 1351 – 1356.
7. Dayana Roselin D , **Carmel Pushpa Raj J** , Maria Joseph J and M. Marudai (2019). Fixed point and Common fixed point Theorems on Complex Valued b-metric spaces, *Infokara Research*, 8(2019) Issue no - 9, 882-892.
8. **Carmel Pushpa Raj J** , Maria Joseph J (2014), Best Proximity Point Theorems For Generalized Proximal Contractions . *Jamal Academic Research Journal (JARJ)* Volume (1), 279-283.


Papers Presented

1. Paper Entitled “Fixed Point and Common Fixed Point Theorems in Complex Valued b-Metric Spaces”, in NCMSA-2020, St. Joseph’s College, Tiruchirappalli-620 002.
2. Paper entitled “Fixed point theorems on Multi Valued Mappings in b- metric spaces” in ICMCE-2015 at VIT-Chennai.
3. Paper entitled “Common fixed point theorem on partial metric space” in NCMSA-2014 at St. Joseph’s College, Tiruchirappalli – 620 002
4. Paper entitled “Best Proximity Point Theorems for Generalized Proximal Contractions” in ICOMAC-2014 at Jamal Mohamad College, Tiruchirappalli – 620 020

Resource Persons:


- December 2023  **Young Student Scientist Programme – 2023**
TNSCST & Extension Department, St. Joseph’s College, Tiruchirappalli –2
- July - Dec 2023  **A series of lectures on Business Mathematics for CA aspirants**
St. Joseph’s College, Tiruchirappalli – 620 002
- July - Dec 2022  **A series of lectures on Business Mathematics for CA aspirants**
St. Joseph’s College, Tiruchirappalli – 620 002

Seminars / Conferences / Workshops Organized

February 2024  **National Conference on Recent Developments in Pure and Applied Mathematics (NC-RDPAM24) – (Co-Convener)**
St. Joseph's College, Tiruchirappalli – 620 002

Seminars / Conferences / Workshops / Webinar Programmes attended

May 2024  **Hi Impact 15 days Faculty Development Programme**
St. Joseph's College, Tiruchirappalli – 620 002

February 2024  **National Conference on Recent Developments in Pure and Applied Mathematics (NC-RDPAM24)**
St. Joseph's College, Tiruchirappalli – 620 002


December 2023  **Faculty Development Programme on Academic Research in Science**
St. Joseph's College, Tiruchirappalli – 620 002


November 2023  **Faculty Development Programme on Patents and Consultancy**
IQAC, St. Joseph's College, Tiruchirappalli – 620 002

October 2023  **Faculty Development Programme on Intricacies of Writing for Research Publications and Projects**
IQAC, St. Joseph's College, Tiruchirappalli – 620 002

June 2023  **Orientation program for the Teaching Faculty**
IQAC, St. Joseph's College, Tiruchirappalli – 620 002


March 2023  **Faculty Development Programme in Mathematics,**
St. Joseph's College, Tiruchirappalli – 620 002

February 2023  **Faculty Development Programme on LOCF - A reformative Roadmap towards Excellence** St. Joseph's College, Tiruchirappalli – 620 002

December 2022  **Two day Orientation program for young Professors,**
Jesuit Higher Education Commission, Jesuit Madurai Province,
St. Xavier's College of Education (Autonomous), Palayamkottai - 627 002.



March 2022  **International conference on Mathematical Sciences & Applications**
(ICMSA 2022) St. Joseph's College, Tiruchirappalli – 620 002

- February 2022  **Seminar on Convergent Sequence: A Geometrical Approach,**
St. Antony's College of Arts And Sciences for Women
Thamaraipadi, Dindigul.
- December 2021  **Seminar on Hybrid teaching and Learning,**
St. Joseph's College, Tiruchirappalli – 620 002
- October 2021  **International Webinar on Multiplicative Inverse Functional Equations and their Applications,**
St. Joseph's College of Arts and Science, Cuddalore – 607 001
- October 2021  **Seminar on Preparing E-Content for MOOCs on SWAYAM**
St. Joseph's College, Tiruchirappalli – 620 002
- September 2021  **Seminar on Open Educational Resources - Search, Identify, Repurpose and Create your OER**
St. Joseph's College, Tiruchirappalli – 620 002
- May 2021  **Two day online workshop on Latex**
School of Advanced Sciences, VIT Chennai.
- August 2020  **State Level Webinar on E-Content Development for Teaching Mathematics,**
The MDT Hindu College, Tirunelveli
- August 2020  **National Level Webinar on Time Scale: A Survey with Analysis**
Cauvery College for Women, Trichy
- August 2020  **National Level Webinar on Designing Finite State Automata**
Holy Cross College, Trichy-2
- July 2020  **National Online Workshop on Empirical Research: Tools & Techniques**
XIBA, St. Xavier's College, Palayamkottai – 627 002
- July 2020  **Webinar On Introduction To Automata Theory**
Idhaya College For Women, Sarugani
- July 2020  **National Webinar on ICT Tools for Teaching and Learning**
IQAC, St.Xavier's College, Palayamkottai
- June 2020  **Online FDP on Inclusive Procedures and Process in Assessment & Accreditation by NAAC, St. Joseph's College, Tiruchirappalli – 620 002**





- June 2020  **Webinar on Applications of Nonlinear Analysis to Real World Problems**
St. Mother Theresa Engineering College, Thoothukudi-628 102
- June 2020  **National Webinar for Aspirants of CSIR Mathematics**
Ayya Nadar Janaki Ammal College, Sivakasi
- June 2020  **Webinar on the Journey with In-Know Yourself & Know the World**
St. Joseph's College, Tiruchirappalli – 620 002
- June 2020  **Webinar on Problem Solving Techniques in Algebra & Analysis**
St. Joseph's College, Tiruchirappalli – 620 002
- June 2020  **Online FDP in Pure & Applied Mathematics**
Jamal Mohamed College, Tiruchirappalli - 20
- June 2020  **Online Workshop on Mathematical Analysis (MATANA-2020)**
Loyola College, Chennai – 600 034
- June 2020  **Online FDP on Linear Algebra and Research Indicators**
Loyola College, Chennai-34
- June 2020  **Webinar on Key Issues in Research Methodology**
GTN Arts College, Dindigul
- June 2020  **National Webinar on Fractals via Fixed Point Theory**
Jayaraj Annapackiam College for Women, Periyakulam, Theni
- May 2020  **Webinar on CSIR-NET/SET Examinations in Mathematical Analysis**
Urumu Dhanalakshmi College, Tiruchirappalli – 19
- May 2020  **Webinar on Latex-Learning by Doing**
Idahaya College for Women, Kumbakonam
- May 2020  **Workshop on Introduction to SageMath**
ICT Mumbai & MTTTS Trust.
- May 2020  **Online Workshop on Mathematical Analysis for CSIR-NET/SET/GATE**
Sree Narayana Guru College, Coimbatore-641 105
- January 2020  **National Conference on Mathematical Science and Application
(NCMSA – 2020), St. Joseph's College, Tiruchirappalli – 620 002**
- September 2019  **International Colloquium on the Challenges of Higher Education
in The 21st Century, St. Joseph's College, Tiruchirappalli – 620 002**

- February 2019  **One day Workshop on Real Analysis**
Department Of Mathematics, National College, Tiruchirappalli-1
- January 2019  **International Conference on Discrete Mathematics (ICDM-2019)**
St. Joseph's College, Tiruchirappalli – 620 002
- December 2016  **National Conference on Applications of Mathematics - Recent Trends (4NCAM-RT),** St. Joseph's College, Tiruchirappalli – 620 002
- January 2016  **National Conference on Advancements in Mathematical Sciences (NCAMS-2016),** St. Joseph's College, Tiruchirappalli – 620 002
- December 2015  **International Conference on Mathematical Computer Engineering ICMCE-2015,** The School of Advanced Sciences, VIT Chennai
- January 2015  **National Conference on Discrete Mathematics**
St. Joseph's College, Tiruchirappalli – 620 002
- March 2013  **National Conference on Mathematical Sciences and Applications**
St. Joseph's College, Tiruchirappalli – 620 002
- February 2014  **International Conference on Mathematical Methods and Computation**
Jamal Mohamed College, Tiruchirappalli – 620 020
- November 2013  **Pedagogical Training For Mathematics Teachers (PTMT 2013)**
NBHM, MTTS Trust, SSN College of Engineering, Chennai
- August 2013  **One day Workshop on Latex**
St. Joseph's College, Tiruchirappalli – 620 002
- March 2012  **Instructional Workshop on Hypergraphs and Matroids**
Department of Mathematics, Annamalai University, Annamalai Nagar
- December 2011  **National symposium on Mathematical Methods and Applications (NSMMA-2011)** Department of Mathematics IIT Madras, Chennai
- June 2009  **Summer Training Programme in Mathematics**
Department of Mathematics, University of Madras, Chennai.







Administration

- 2012 – 2016  **Assistant Director, New Hostel,**
St. Joseph's College, Tiruchirappalli – 620 002.
- 2018 – 2019  **Association President,** Department of Mathematics (Shift – II)
St. Joseph's College, Tiruchirappalli – 620 002.






Prizes and Medals

- 2002 & 2004  School Academic Prize – SSLC & HSC.
- 2008  College Academic Prize – First in Elective
- 2014, 2016 ,
2019 & 2024  College Management Award – 100% Attendance
- 2023  Rev. Dr. A. Albert Muthumalai, SJ Best Mathematics
Research Paper Award


Strengths

-  *Desire to learn new things;*
-  *Can teach effectively;*
-  *Smart working;*
-  *Analytical skills;*
-  *Problem solving ability;*
-  *Flexibility & adaptability.*

Personal

-  *Age: 37;*
-  *D.O.B: 15.07.1987*
-  *Nationality: Indian*
-  *Gender: Male;*
-  *Marital status: Married.*

Interests

-  *Reading*
-  *Badminton*

References

-  **Dr. T. Rajaretnam, Ph.D**, Associate Professor (Rtd), Department of Mathematics,
St.Joseph's College (Autonomous), Tiruchirappalli-620 002, Tamil Nadu.
✉ t_rajaretnam@yahoo.com ☎ 94424 65156
-  **Dr. J. Maria Joseph, Ph.D**, Assistant Professor, Department of Mathematics,
St.Joseph's College (Autonomous), Tiruchirappalli-620 002, Tamil Nadu.
✉ joseph80john@gmail.com ☎ 99940 63887