Dr. M. Mary Jaculine

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Education

- **Ph.D.** in Physics, University of Madras, 2014
- **M.Phil** in Physics, University of Madras, 1995
- **M.Sc** in Physics, Madurai Kamaraj University, 1989
- **B.Sc** in Physics, Madurai Kamaraj University, 1987

Teaching Experience

- **Associate Professor of Physics** (2019–present), Department of Science and Humanities, Loyola-ICAM College of Engineering and Technology, Chennai-34.
- **Assistant Professor Grade II** (2015–2019), Velammal Engineering College, Chennai.
- **Lecturer** (2008–2009), SRM University, Ramapuram, Chennai.
- **Senior Lecturer** (2001–2007), Jeppiaar Engineering College, Chennai.
- **Lecturer** (1991–2001), Annai Velankanni College, Kanyakumari.

Academic Responsibilities

- Board of Studies Member – Physics
- Course Coordinator– Physics for information Science

Administrative Responsibilities

- Convenor– Licetronicles Newsetter

Publications and Book Chapters

- M. Mary Jaculine, C. Justin Raj, S. Jerome Das, "Hydrothermal synthesis of highly crystalline Zn_2SnO_4 Nanoflowers and there optical properties", Journal of Alloys and Compounds 577 (2013) 131-137.
- M. Mary Jaculine, S. Jerome Das, Hee-Je Kim, Byung Chul Kim, Kook-Hyun Yu, C. Justin Raj, "Zinc stannate nanoneedles for $CdS/CdSe$ quantum dot sensitized solar cells", Materials letters 111 (2013) 28-31.
- M. Mary Jaculine, C. Justin Raj, Hee-Je Kim, A. Jeya Rajendran S. Jerome Das, "Zinc Stannate nanoflower (Zn_2SnO_4) photoanodes for efficient dye sensitized solar cells", Materials Science in Semiconductor Processing 25 (2014) 52-58.
- K. Raja, M. Mary Jaculine, M. Jose, Sunil Verma, A. A. M. Prince, K. Ilangovan, S.Jerome Das, "Sol-Gel synthesis and characterization of $\alpha - Fe_2O_3$ nanoparticles", Superlattices and Microstructures 86 2015) 306-312.
- J. Emima Jeronsia, L. Allwin Joseph, M. Mary Jaculine, P. Annie Vinosha, S. Jerome Das, "Hydrothermal synthesis of zinc stannate nanoparticles for antibacterial applications", Journal of Taibah University for Science 10 (2016) 601-606.
- Sheeba Anu Jacob, R. Ragu, M. Mary Jaculine, A. Daisy, S. Jerome Das, "Exploring the consequences of lanthanum incorporation on micro-structural, nanoscale morphological and magnetic traits on manganese dioxide nanoparticles", J Mater Sci: Mater Electron.
- S. Muruganandam, M. Mary Jaculine, R. Epshiba, M. Jayavel, K. Suresh, P. Krishnan, G. Murugadoss, "Electrochemical, magnetic and heterostructure of $YSnO_2CdO$ nanocomposite for multi-functional applications", Journal of Alloys and Compounds 1002 (2024) 175180.

Areas of Interest

By Research: Nanomaterials and its application
By Teaching: Materials Science, Physics for Information Science, Well being and traditional practices, Disaster risk reduction and management
By Experience: well being

Software Skills

- Tools: Virtual lab

Conferences Attended (National / International)

International Conferences

- ICFMS (2012)
- ICRAM (2012)
- NCRAM (2013)
- ICETP (2013)

Paper Presentations

- M. Mary Jaculine, Sheeba Anu Jacob, J. Prince Joshua, S. Jerome Das, "Hydrothermal Synthesis and Characterization of Zn_2SnO_4 Nanoparticles in National conference on Recent Advances in Materials" (NCRAM-2013) on 9-10 April 2013, B.S. Abdur Rahman University, Chennai-600 048. (ISBN: 978-81-8984354-0, Pages 161-165)
- M. Mary Jaculine, C. Praveena, J. Mary Linnet, S. Jerome Das, "Synthesis and characterization of Spinel CO_3O_4 nanoparticles" in International conference on Emerging Trends in Physics (ICETP 2013) on 20-22 February 2012, St. Joseph's College of Arts and Science, Cuddalore - 607 001. (ISBN: 978-81-8209-353-9, pages 169-173).

Workshop / FDP: Attended

Year	Title / Organizer
2020	"Emerging Trends in Material Frontiers" – Mohamed Sathak AJ College of Engineering (3 days)
2020	"Evolution of Teaching Learning Process - Post Covid 19" – Bharath Institute of Science and Technology (5 days)
2020	"Advancement in Science and Humanities" – Panimalar Institute of Technology (5 days)
2021	"Digital Tools in Teaching" – School of Social Sciences and Languages
2021	"Creative Thinking " – ICT Academy (5 days)
2021	"Delivering High Impact Presentation" – ICT Academy (5 days)
2021	"VIRTUAL LABS " – PALS-VLABS 2021-22 INITIATIVE with NITK (3 days)

MOOCs Course Details

- NPTEL – "Physics of Materials"
- NPTEL – "Nanotechnology,Science and Applications" (Elite)