

MOHAMED SATHAK COLLEGE OF ARTS AND SCIENCE

(A MUSLIM MINORITY INSTITUTION)

Affiliated to University of Madras, Recognized by UGC & AICTE and Reaccredited by NAAC

Sholinganallur, Chennai-600119, Tamil Nadu, India

An ISO 9001: 2015 Certified and UGC 2(F) recognized Institution

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PERSONAL INFORMATION		
NAME	Joy Sebastian Prakash. J	
AGE	36 Years	
DESIGNATION	Assistant Professor	
SCHOOL	School of Life Science	
DEPARTMENT	PG & Research Department of Biotechnology	
EMAIL	joysebastianprakash@mscartsandscience-edu.in	
PHONE	+91-9790182929	
WORK EXPERIENCE		
Current: Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai.		
Previous: Angel Poultry Farms Pvt Ltd., Tiruchirappalli. Exonn Biosciences, TICEL Biopark, Chennai.		
EXPERIENCE IN YEARS	ACADEMIC	1 Years / 8 Months
	INDUSTRY	4 Years / 0 Months
EDUCATIONAL QUALIFICATION		
PH.D.	Ph.D. Medical Biotechnology - 2020	
M.PHIL.	M.Phil. Biotechnology - 2013 - 85.8%	
P.G.	M.Sc. Biotechnology - 2011 - 80.2%	
U.G.	B.Sc. Biotechnology - 2009 - 8.95 (CGPA)	
NET / SLET	SET (Life Sciences) Qualified - 2025	
SUBJECTS TAUGHT		
UNDERGRADUATE		POSTGRADUATE
1. Immunology		Bioinformatics
2. Bioinformatics		Plant & Animal Biotechnology
3. Biostatistics		Enzymology
4. Bioentepeneuship		
RESEARCHER IDENTIFICATION		
ORCID ID	0000-0001-5456-4336	
VIDWAN ID	541910	
GOOGLE SCHOLAR LINK	https://scholar.google.com/citations?user=HgqgD5UAAAAJ&hl=en	
AREA OF SPECIALIZATION		
1. Quantum Dots for diagnostic applications		
2. Medical Image Analysis		
RESEARCH SUPERVISION		
DEGREE	COMPLETED	ONGOING
P.G.	02	01
M.PHIL.	NA	NA
PH.D.	-NIL-	-NIL-

PROFESSIONAL DEVELOPMENT

(a) LIST OF PUBLICATIONS (in chronological order)

1. Vignesh Krishnan, **Joy Sebastian Prakash J**, Manigandan Venkatesan, G Devanand Venkatasubbu, Arivalagan Pugazhendhi, Kathirvel Brindhadevi and T Kalaivani. Synthesis of mesoporous SiO₂ nanoparticles and toxicity assessment in early life stages of zebrafish. *Microporous and Mesoporous Materials*. **2022**; 330 (111573). **I.F - 5.876**;
2. **Joy Sebastian Prakash**, Murugesan Ramachandran and Karunanithi Rajamanickam. Facile synthesis of zinc alloyed cadmium selenide (Cd/ZnSe) quantum dots and its photocatalytic activity and *in vivo* toxicity assessment in *Danio rerio* embryos. *BioNanoScience*. **2021**; 11(2): 437-446.
3. Karthik Natesan, Ponnusamy Ponnurugan, Balasubramanian Mythili Gnanamangai, Venkatesan Manigandan, **Sebastian Prakash Joseph Joy**, Chinnappan Jayakumar and Govindasamy Amsaveni. Biosynthesis of silica and copper nanoparticles from *Trichoderma*, *Streptomyces* and *Pseudomonas* spp. evaluated against collar canker and red root-rot disease of tea plants. *Archives of Phytopathology and Plant Protection*. **2021**; 54: 56-85.

(PLEASE REFER ANNEXURE)

(Please add a separate sheet to list all published articles)

(b) RESEARCH GRANTS / FUNDS RECEIVED

-NIL-

(Please add a separate sheet to list all funds/grants received)

(c) BOOK(S)/BOOK CHAPTER(S) EDITED / PUBLISHED

1. **Joy Sebastian Prakash**, Rajamanickam K. Synthesis, Characterization and MRI Properties of Cysteamine stabilized Cadmium Zinc Selenide (Cd(Zn)Se) quantum dots for cancer imaging. B. Gulyas *et al.*, (eds.) *ICTMI-2017*, Springer, Singapore. **2019**. Page No: 17 - 27.
2. **Joy Sebastian Prakash**, Rajamanickam K and Arunnath RM for Alzheimer' Disease Neuroimaging Initiative. Measures of Diffusion Tensor Tractography of regions associated with Default Mode Network in Alzheimer's Disease. B. Gulyas *et al.*, (eds.) *ICTMI-2017*, Springer, Singapore. **2019**. Page No: 29 - 40.

(Please add a separate sheet to list all book(s)/book chapter(s))

(d) WORKSHOPS / CONFERENCES / SEMINAR - ATTENDED

1. Non-linear optical properties of Cd(Zn)Se quantum dots for bimodal imaging. "SERB-DST Sponsored National conference on Nanotechnology in Medicine". 8th - 9th September, 2017.
2. Synthesis, Characterization and MRI properties of Cysteamine stabilized Cadmium Zinc Selenide (Cd(Zn)Se) quantum dots for cancer imaging. "International Conference on Translational Medicine and Imaging (ICTMI - 2017)". 28th - 30th August, 2017.
3. Instrument Wellness Program. 6th February, 2017. Eppendorf Training Centre, Chennai. Tamil Nadu.
4. One Day National Workshop on Medical Image Processing. 9th September, 2016. Department of Computer Applications, Anna University Regional Campus, Coimbatore. Tamil Nadu.
5. UGC-SAP-DSA Sponsored National Seminar-cum-Workshop on Molecular Endocrinology. 14th - 18th March, 2016. Department of Endocrinology, Dr.ALM Post Graduate Institute of Basic Medical Sciences, University of Madras, Taramani Campus, Chennai. Tamil Nadu.

(Please add a separate sheet to list all workshop/conferences/seminar attended)

(e) WORKSHOPS / CONFERENCES / SEMINAR - ORGANIZED

1. Co-organized 3rd International Conference on "Unravelling Therapeutic Resources from Nature's Treasure" - 13th & 14th August, 2025 by Department of Biosciences, MSCAS.

(Please add a separate sheet to list all workshop/conferences/seminar organized)

(f) FACULTY DEVELOPMENT PROGRAMME ATTENDED

1. "FDP on Leadership Vision" 10th June, 2024 to 14th June, 2024. Organized by Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai - 600119.
2. "FDP on Microsoft Digital Skills" 01st July, 2024 to 06th July, 2024. Organized through Naan Mudhalvan Program at University of Madras, Chennai.
3. "Virtual Faculty Development Program on Frontiers in Biotechnology" 27th August, 2024 to 31st August, 2024. Organized by Centre for Drug Discovery and Development, Sathyabama Institute of Science and Technology, Chennai.
4. "International Faculty Development Program on Emerging Trends in Medical Biotechnology" 23rd September, 2024 to 27th September, 2024. Organized by BS Abdur Rahman Crescent Institute of Science and Technology, Chennai.
5. "FDP on Medical Coding" 06th June to 11th June, 2025. Organized through Naan Mudhalvan Program at University of Madras (Taramani Campus), Chennai.

(g) SHORT-TERM / ONLINE COURSES ATTENDED

1. "Image Processing Onramp". 02nd November, 2021. MathWorks Training Services.

(h) EXPERIENCE IN ADMINISTRATIVE RESPONSIBILITIES

1. Co-ordinator, Unnat Bharat Abiyan, Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai.

(i) MEMBERSHIP OF PROFESSIONAL BODIES / ACADEMIC BODIES / BOARD OF STUDIES

-NIL-

(j) COLLEGIATE COMMITTEE MEMBERSHIPS

-NIL-

(k) REVIEWER IN JOURNAL / EDITORIAL BOARD MEMBERSHIPS

Reviewer - Journal of Fluorescence, SpringerNature.

(l) CONSULTANCY, TRAINING AND DEVELOPMENT

-NIL-

ANY OTHER SPECIAL ASSIGNMENT(S)

-NIL-

ANNEXURE

LIST OF PUBLICATIONS

1. Saraswathi Subramanian, Karunanithi Rajamanickam, **Joy Sebastian Prakash J** and Murugesan Ramachandran for Alzheimer's Disease Neuroimaging Initiative (ADNI). A Study on structural atrophy changes and functional connectivity measures in Alzheimer's Disease. *Journal of Medical Imaging*. **2020**; 7(1): 016002 (PMC7043284).
2. Rajamanickam K and **Joy Sebastian Prakash**. Role of Ultrasonography in cancer theranostic applications. *Archives of Internal Medicine Research*. **2020**; 3(1): 032-043.
3. Kannan Baskar, Ragavendran Chinnasamy, Karthika Pandey, Manigandan Venkatesan, **Prakash Joy Sebastian**, Murugesan Subban, Adelina Thomas, Eliningaya J Kweka and Natarajan Devarajan. Larvicidal and histopathology effect of endophytic fungal extracts of *Aspergillus tamarii* against *Aedes aegypti* and *Culex quinquefasciatus*. *Heliyon*. **2020**; 6(10): e05331. **I.F - 3.776**
4. Natarajan Devarajan, Ragavendran Chinnasamy, Manigandan V, Kamaraj C, Govindasamy Balasubramani, **Joy Sebastian Prakash** and Perumal P. Larvicidal, histopathological, antibacterial activity of indigenous fungus *Penicillium* spp against *Aedes aegypti* L and *Culex quinquefasciatus* (Say) (Diptera: Culicidae) and its Acetylcholinesterase inhibition and toxicity assessment of Zebrafish (*Danio rerio*). *Frontiers in Microbiology*. **2019**; 10 (427). **I.F - 6.064**;
5. Prakash J, Manigandan Venkatesan, **Joy Sebastian Prakash J**, Bharath G, Shoaib Anwer, Pandiyarasan V, Prema D, Venkataprasanna K.S and G. Devanand Venkatasubbu. Investigations on the in-vivo toxicity analysis of reduced graphene oxide/TiO₂ nanocomposite in zebrafish embryo and larvae (*Danio rerio*). *Applied Surface Sciences*. **2019**; 481: 1360-1369. **I.F. - 7.392**;
6. Madhubala V, Kalaivani T, Angelin Kiruba, **Joy Sebastian Prakash**, Venkatesan Manigandan and Hanuma Kumar. Study of structural and magnetic properties of hydro/solvothermally synthesized α - Fe₂O₃ nanoparticles and its toxicity assessment in zebrafish embryos. *Applied Surface Sciences*. **2019**; 494: 391-400. **I.F - 7.392**.
7. **Joy Sebastian Prakash**, Prakash T, Murugesan R and Rajamanickam K. One-pot chemical synthesis and characterization of fluorescent Cd/ZnSe quantum dots using L-cysteine as stabilizing agent. *Journal of Nanomaterials and Molecular Nanotechnology*. **2018**; 7(3).
8. **Joy Sebastian Prakash**, Vinitha G, Murugesan Ramachandran, Rajamanickam K. Analysis on nonlinear optical properties of Cd(Zn)Se quantum dots stabilized using three different stabilizing agents. *Optical Materials*. **2017**; 72(C): 821-827. **I.F - 3.754**;
9. **Joy Sebastian Prakash**, Rajamanickam K. Aptamers and Their Significant Role in Cancer Therapy and Diagnosis. *Biomedicines*. **2015**; 3(3):248-269. (PMC5344239). **I.F - 4.757**;