

FACULTY PROFILE

NAME	Dr. AYSHA MUHSINA K	
DESIGNATION	ASSISTANT PROFESSOR	
QUALIFICATION	M.Sc, PhD	
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POSITIONS HELD IN COLLEGE

- **CLASS TUTOR (MSc PHYSICS)**

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TEACHING INTERESTS

**CLASSICAL MECHANICS
STATISTICAL MECHANICS**

RESEARCH AREAS

NONLINEAR OPTICS, THEORETICAL PHYSICS

MEMBERSHIPS IN BOARD/ ASSOCIATION/ PROFESSIONAL AFFILIATIONS

- **MEMBER, PG BOARD OF STUDIES IN RADIATION PHYSICS**

JOURNAL PUBLICATIONS

SL.NO.	TITLE	NAME OF JOURNAL / VOL. NO / ISSUE NO / PAGE NOS	ISSN NO	MONTH / YEAR
1.	Stationary States of Parity time symmetric dark	Optik- International Journal for Light and electron optics	Elsevier	2022

	solitons in Super Gaussian potential	265(2022), 169518		
2.	Two dimensional spatial solitons in parity-time symmetric potential	Optik- International Journal for Light and electron optics 127 (19), 7550-7556, DOI: 10.1016/j.ijleo.2016.05.038	Elsevier ISSN: 0030-4026	2016
3.	Parity-time symmetric coupled systems with Varying loss/gain coefficient	Journal Of Modern Optics, 63 (16), 1584-1591 , 2016 DOI: 10.1080/09500340.2016.1163425	Taylor and Francis ISSN: 0950-0340	2016
4.	Soliton beam dynamics in parity-time symmetric nonlinear coupler	European Physics JournalD 69: 171 DOI: 10.1140/epjd/e2015-60092-9	Springer ISSN: 1434-6060	2015
5.	Stablization of two dimensional spatial solitons in dissipative media	Physica scripta 89, 075205	IOP SCIENCE	2014
6.	Spatial solitons in a medium with lumped amplification and dissipation	Journal of Nonlinear Optical Physics and Materials DOI: 10.1142/S0218863515500113	World Scientific	2015

CONFERENCE PUBLICATIONS

SL.NO.	TITLE	NAME OF CONFERENCE	VENUE, MONTH / YEAR
1.	Dynamics of Dark Solitons in PT symmetric Trigonometric and Scarf II potentials	CNSD: CONFERENCE ON NONLINEAR SCIENCE AND DYNAMICS	SASTRA UNIVERSITY, TANJAUR 2022 DEC 17-22
2.	Two Dimensional Dark soliton in Parity time symmetric potential	International Conference (ICTEP)	FAROOK COLLEGE 5-6 February 2020

PAPER PRESENTATION AT STATE / NATIONAL/ INTERNATIONAL PROGRAMMES

SL.N O	TITLE OF THE PAPER	NAME OF THE INSTITUTION	NAME OF THE ORGANISER & SPONSORING AGENCY	VENUE & DATE
1.	Two Dimensional Dark soliton in Parity time symmetric potential	Farook College	UGC	FAROOK COLLEGE 5-6 February 2020
2.	Dynamics of Dark Solitons in PT symmetric	SASTRA UNIVERSITY, TANJAUR	Centre for nonlinear science and Engineering	SASTRA UNIVERSITY, TANJAUR

	Trigonometric and Scarf II potentials			17-22 December 2022
3.	Comparison of 1D and 2D solitons	Dept of Physics, SARBTM Govt College, Koyilandi	DCE	Dept of Physics, SARBTM Govt College, Koyilandi 5-6 November 2019

SEMINARS/CONFERENCES/WORKSHOPS ATTENDED

SL. NO	NAME OF THE PROGRAMME	NAME OF THE ORGANISER & SPONSORING AGENCY	VENUE & DATE	LEVEL *
1	CNSD-13: Conference on Nonlinear systems and Dynamics	Centre for nonlinear science and Engineering	SASTRA UNIVERSITY, TANJAUR 17-22 December 2022	International
2	International Conference on Theoretical and Experimental Physics (ICTEP)	Dept of Physics, Farook College	FAROOK COLLEGE 5-6 February 2020	International
1.	National Conference on New Horizons in Theoretical and Experimental Physics	DCE	Dept of Physics, SARBTM Govt College, Koyilandi 5-6 November 2019	National

OTHER PROGRAMMES ATTENDED

SL.NO	NAME OF THE PROGRAMME	NAME OF THE ORGANISER & SPONSORING AGENCY	VENUE & DATE	LEVEL *
1.	MOOC course in SWAYAM, 'Physics of semiconductors and devices'	IISc Bangalore	ONLINE 31/03/2019	
2.	Orientation programm	UGC	University of Calicut 08/02/2018 to 07/03/2018	
3.	Refresher course on 'Curriculum Design, Development and Evaluation'	MHRD-TLC University of Calicut	University of Calicut 09/10/2020 to 22/10/2020	
4.	Faculty development Programm on "Advances in Theoretical and Experimental Resaerch in Physics"	SRM institute of Science and Technology	SRM institute of Science and Technology 27/7/2020 to 8/8/2020	

5.	Refresher course on “Managing online classes and co-creating MOOCs 5.0”	Teaching Learning Centre, Ramanujan College, University of Delhi	Teaching Learning Centre, Ramanujan College, University of Delhi 11-25 May 2021	
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