

PROFILE



Name : M. ARULMOZHI
Designation : Associate Professor
Department : Physics
Date of Birth : 01.06.1970
Date of Appointment : 22.06.1998

CONTACT DETAILS

Present address : 15-3-4, Varadharajanar Street,
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ACADEMIC:

S. No.	Degree	University/Institution	Year of Completion
1.	B.Sc.	Fatima College, Madurai.	1990
2.	M.Sc.	Fatima College, Madurai.	1992
3.	PGDCA	Madurai Kamaraj University	1996
4.	Ph.D.	Madurai Kamaraj University	2001
5.	CYP/HRD Diploma	Annamalai University	2007
6.	Certificate Course in Computer Maintenance and Hardware	J. A. College for Women, Periyakulam.	2009

Total Experience : UG - 15 years
PG - 8 years

Area of Specialization /Interest : Condensed Matter Physics

Academic Affiliation

- NSS Programme Officer (2006-2009)
- IQAC Co-ordinator (2009-till date)

Professional Affiliation

- Member of Women Physicists' Association of Mother Teresa Women's University, Kodaikanal since 2004-'05.
- Life Member of Indian Association of Physics Teachers since 2007-'08.
- Member of the Board of Studies in Physics of Fatima College (Autonomous), Madurai during 2012-'13.

RESEARCH EXPERIENCE

Projects Undertaken

Minor Project

Title of the Project : Studies on external perturbations in nanoquantum wells
Funding Agency : UGC
Period : 2007-2009
Amount Sanctioned : Rs. 65,000/-

Major Project

Title of the Project : Investigations on excitons in nanostructures
Funding Agency : UGC
Period : 2013-2016
Amount Sanctioned : Rs. 12,50,800/-

Research Guidance

M.Phil.(guided) – 4
Ph.D. (guiding) - 1

PUBLICATIONS : International

- Binding energy of the hydrogenic donor and that of a Wannier exciton in the $|z|^{2/3}$ quantum well. Physical Review B 51(4), 2592, 1995.
- Effect of magnetic field on the binding energy of hydrogenic donor in the $|z|^{2/3}$ quantum well. Physica Scripta 54, 651, 1996.

- Electron states in a rectangular quantum well. *Physica Scripta*, 60, 469, 1999.
- Electron-hole transition energies in $|z|^{2/3}$ quantum well – Matching in the middle method, *International Journal of Physics and Mathematical Sciences*, ISSN: 2277-2111 (Online), 2012.

National

- Donor binding energies in nanoquantum wells with external perturbations. *Oriental Journal of Physics*, 7 – 15, Jan – June, 2012.
- Higher Education – Present Scenario and Challenges Ahead
New Frontiers in Education, Vol. 45, No-1, 3 – 7, January – March, 2012.

PRESENTATIONS : Paper entitled,

- **A Study on Low dimensional semiconductor nanomaterials** in the National Seminar on “Recent Trends in Chemistry – RTC3” at Jayaraj Annapackiam College (Autonomous), Periyakulam on 26 & 27.02.2009.
- **Basic Science Education – Re-emerging Interest** in the National Conference on “Quality and Relevance in Higher Education – New Challenges” at Jayaraj Annapackiam College (Autonomous), Periyakulam on 02 & 03.03.2009.
- **Surface quantum wells in nanoscale** in the National Conference on “Recent Trends in Physics” at Jayaraj Annapackiam College (Autonomous), Periyakulam on 23 & 24.03.2009.
- **Teaching, Learning & Evaluation – Challenges Ahead** in the National Seminar on “Quality Enhancement Strategy – Towards Excellence” at Yadava College, Thiruppalai, Madurai on 31.08.2009 & 01.09.2009.
- **Novel behavior in the Mechanical properties of nanostructured materials** in the National Conference on “Recent Trends in Chemistry – RTC4” at Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 18 & 19.02.2010.
- **Nanomaterials in ICT** in the National Conference on “Computer Science and Engineering – NCCSE 2010” at Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 24 & 25.02.2010.
- **Development of Skills & Competencies – role of library** in the National Conference on “Digital Vision 2020” at Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 05 & 06.03.2010.
- **Value formation and technology updation – two sides of a coin** in the National Conference on “Inculcation of values for holistic life amidst technological scenario” at Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 06 & 07.12.2010.
- **Energy calculations – Solution of Schrodinger equation using Runge-Kutta method** in the National Conference on “Applicable Mathematics” at Jayaraj Annapackiam College for Women (Autonomous), Periyakulam on 20 & 21.12.2011.

- **Autonomy – a journey towards excellence** in the National Colloquium for IQAC Co-ordinators on “Best Practices in Higher Educational Institutions” at Arul Anandar College, Karumathur on 20 & 21.07.2012.
- **Analysis of Osmotic pressure of water at different sites of Theni Dt.** in the National Seminar on “Treasure Troves in Physics” at P. V. P. College, K.Singarakottai, Dindigul on 22.01.2013.
- **Energy levels in nanoquantum wells of varied potential profiles by quantization rule** in the National Conference on ”Recent Trends in Advanced Materials” at Jayaraj Annapackiam College for Women, Periyakulam on 05 & 06.02.2013.

Seminars/conferences/workshops participated - 9

Books Published

- Practical Physics, ACCA Publications, Periyakulam in 2007.
- NSS – Not Me But You, ACCA Publications, Periyakulam in 2008.

Awards and Recognition

- Mock Peer Team Member for Re-accreditation by NAAC at Yadava College, Thiruppalai, Madurai on 26.02.2010.
- Member of the Expert Committee in the discussion session on “Motivation to students towards research” in the National Level Seminar on “Recent Trends in Physics” at SFR College for Women, Sivakasi during 29 & 30.12.2010.s