

## RESUME



**Dr. V. SELVAM**  
**Assistant Professor**  
**RaniAnnaGovt.CollegeforWomen**  
**Tirunelveli – 627 008**  
**TAMILNADU**

### PERSONALDETAILS

Qualification :M.Sc.,Ph.D.,  
Designation :AssistantProfessor  
Department :Physics  
Community : Backward Class  
Religion :Christian  
Nationality :Indian  
MaritalStatus :Married  
ResidentialAddress :7/22B, Pandarathattuvilai,  
PaloorKottavilai,Karungal Post,  
Kanyakumari District – 629 157.  
Mobile No. :94435 81044  
EmailID :[vselvamdr@gmail.com](mailto:vselvamdr@gmail.com)  
[vselvam\\_45@yahoo.com](mailto:vselvam_45@yahoo.com)

## ACADEMIC QUALIFICATIONS

Degree	Specialization	College	University	Year of Passing
UG B.Sc	Physics	Lekshmiapuram College of Arts & Science, Neyyoor, Kanyakumari District.	Madurai Kamaraj University	1989
PG M.Sc	Physics	University Department of Physics, M.S University, Tirunelveli.	Manonmaniam Sundaranar University	1992
Ph.D	Physics	University Department of Physics, M.S University, Tirunelveli.	Manonmaniam Sundaranar University	2000

## TEACHING EXPERIENCE

COURSES/ CLASSES TAUGHT	NAME OF THE INSTITUTIONS	DURATION		Years
		From	To	
UG, PG and M.Phil	Self financing College Experience	03.12.1995	25.12.2007	12 years
UG, PG and M.Phil	Sethupathy Government Arts College, Ramanathapuram	26.12.2007	13.10.2008	10 Months
UG, PG and M.Phil	Raja Doraisingam Government Arts College, Sivagangai	14.08.2008	09.09.2014	6 years One month
UG and PG	Rani Anna Government College for Women, Tirunelveli	10.09.2014	Till date	8 years 10 Months

**ORIENTATION/REFRESHERCOURSESUNDERGONE**

Name of the course	Name of the Academic Staff College / Univeristy / Institution	Duration in days	Period	
			From	To
Orientation Course	Bharathidhasan University, Trichirapalli	30	26.12.2007	24.01.2008
Refresher Course in Physics	Bharathidhasan University, Trichirapalli	21	08.08.2009	28.08.2009
Refresher Course in Nano Sciences (Physics)	University of Kerala	21	25.11.2015	15.12.2015
Refresher Course in Research Methodology and Data Analysis	Teaching Learning Centre, Ramanujan College, University of Delhi	15	17.05.2021	31.05.2021
Refresher Course in Physics	Teaching Learning Centre, Ramanujan College, University of Delhi		10.04.2022	24.04.2022

## RESEARCHWORKGOINGON-Ph.D

S.No	Name& Reg.No.	Topic	Status
1	M.THAMBURATTY 19111172132003	Study of Structural Transitions, Level Density And Giant Resonances In Heated Fast Rotating Nuclei	doing
2.	M.ABIRAMI SUNDARI 19211172132017	Search For Exotic Shapes And Shape Changes Of Hot Nuclei At Very Large Angular Momenta	doing
3.	R. SANYANA PRIYA 19221172132018	Role of fluctuations on the structural transitions of hot rotating nuclei	doing

**Number of M.PhilProjectsGuided:26**

### Research Contributions:

1. Fine structure in the  $^{14}\text{C}$  decay of  $^{222,223}\text{Ra}$ ., G. Shanmugam, **V. Selvam** and V.Ramasubramanian, Proceedings of the DAE symposium (India) **35B**, 1992.
2. Odd - Even effect in cluster decay G. Shanmugam, **V. Selvam** and B. Kamalaharan, Proceedings of the National Symposium on Recent Trends in Nuclear Physics, Tirunelveli (1993).
3. Giant Dipole Resonance in hot rotating  $^{197}\text{Tl}$  nucleus G. Shanmugam, **V. Selvam**, and D.PathinettamPadiyan, Proceedings of the National Workshop on "PHYSICS WITH RECOIL SEPARATORS" by Nuclear Science Centre, New Delhi during January 21-22, held at the Dept. of Physics, Andhra University.
4. Role of volume element in the study of thermal fluctuations in the sd shell nuclei, G. Shanmugam, KalpanaSankar and **V. Selvam**, Proceedings of the DAE International Nuclear Physics Symposium - (INPS '95), Mumbai, **A48**, A-71(1995).
5. Shape transitions in hot rotating nuclei with  $A = 60-100$ , G. Shanmugam and **V. Selvam**, Proceedings of the DAE Nuclear Physics Symposium - India, **40B**, 60(1997).
6. Hyper deformation through Jacobian instability and clustering in Zirconium isotopes, G.Shanmugam, **V.Selvam**, V.Ramasubramanian and G.Alpheus Benjamin, Proceedings of the International Workshop on Rare Nuclear Processes (IWRNP-98), held at Nuclear Science Centre, New Delhi.
7. Shape Transitions in Hot Rotating Nuclei, **V. Selvam**, Proceedings of the DAE Symposium-'98, held at Bhabha Atomic Research Centre, Mumbai, India.
8. Hyper deformation through Jacobian instability and clustering in Zirconium isotopes, G.Shanmugam, **V.Selvam**, V.Ramasubramanian and G.Alpheus Benjamin, Pramana **J. Physics**, **33B**(1999) 112.
9. Shape of Hot Rotating Transitional Nucleus  $^{133}\text{Nd}$ , G.Shanmugam, **V.Selvam**, V.Ramasubramanian and G.Alpheus Benjamin, Pramana **J. Physics**, **33B**(1999) 112.
10. Spectral Averaging Methods and Nilsson Model, G.Shanmugam and **V.Selvam**,

Physical Review **C59**, 1199 (1999).

11. Inclusion of Temperature Dependent Shell Corrections in Landau theory of Hot Rotating nuclei, **V.Selvam** and G.Shanmugam, *Pramana J. Physics*, **57**(2001) 223.

12. Shape transitions in Hot Rotating Strontium and Zirconium isotopes, G.Shanmugam and **V.Selvam**, *Physical Review* **C62**, 014302 (2000).

13. Role of temperature on Nuclear level density parameter, **V. Selvam** & C. Krishnan Proceedings of the DAE Symposium on Nuclear Physics, **46B**, (2003)132.

14. Theoretical search for Hyper deformation in Zirconium isotopes, **V. Selvam** & V.Ramasubramaniam Proceedings of the DAE Symposium on Nuclear Physics, **46B**, (2003)134.

15. Super deformation in hot rotating transitional nuclei, **V. Selvam** & V.Ramasubramaniam Proceedings of the DAE Symposium on Nuclear Physics, **47B**, (2004).

16. Structure of hot rotating transitional nuclei  $^{133}\text{Nd}$ , **V. Selvam** & V.Ramasubramaniam Proceedings of the DAE Symposium on Nuclear Physics, **47B**, (2004).

17. Exotic Decay in Nuclei  $Z = 58 - 114$ , P.GershomJebaraj and, **V.Selvam** Proceedings of the DAE – BRNS Symposium on Nuclear Physics, **51**, 318(2006).

18. Shape of Hot Rotating  $^{197}\text{Tl}$  Nucleus, **V. Selvam** and K. SakthiMurugesan Proceedings of the DAE – BRNS Symposium on Nuclear Physics, **52**, 360(2007).

19. Shape evolutions in hot rotating  $^{72}\text{Kr}$  nucleus, **V. Selvam** and D.R. JayaharDevadhason Proceedings of the DAE – BRNS Symposium on Nuclear Physics, **55**, 192(2010).

20. Role of fluctuations in the shape transitions of hot rotating nuclei, **V.Selvam** and P.Rekha, Proceedings of the DAE – BRNS Symposium on Nuclear Physics, **56**, 346(2011).

21. Hyperdeformation Through Jacobian Instability In Excited Krypton Isotopes, V. Selvam and D.R. JayaharDevadhason, Proceedings of the DAE - BRNS Symp. on Nucl. Phys. **57** (2012) 346.

22. Shape Evolutions in Hot Rotating Transitional Nuclei, V. Selvam and J.M. Beula, Proceedings of the DAE - BRNS Symp. on Nucl. Phys. **57** (2012) 348.

23. Fine Structure In Cluster Radioactive Decays, V.Selvam and D.R. RoshlinSheeba Rani, Proceedings of the DAE – BRNS Symp. on Nucl. Phys. **57** (2012) 350.

24. Nuclear Level Density Parameter In Hot Rotating Nuclei, D.R. JayaharDevadhason and V. Selvam, Proceedings of the DAE - BRNS Symp. on Nucl. Phys. **58** (2013) 76.

25. Shape Transitions and Jacobian Instability in Excited Krypton Isotopes, V. Selvam, D. R. JayaharDevadhason and J. M. Beula, *Braz. J. Phys.* **44** (2014)765.

26. Structural changes in Hot Rotating Transitional Nuclei, R. HemalinSubala and V. Selvam, Proceedings of the DAE - BRNS Symp. on Nucl. Phys. **59** (2014) 144.

27. Structural Changes in Hot Rotating  $^{74}\text{Kr}$  Nucleus, D. R. JayaharDevadhason & V. Selvam, Proceedings of the

DAE-BRNS Symposium on Nuclear Physics **60** (2015).

28. Shape Evolutions in Hot Rotating  $^{92}\text{Mo}$  Nucleus, D. R. JayaharDevadhason & V. Selvam, Proceedings of the DAE-BRNS Symposium on Nuclear Physics **61** (2016).

29. Spin Dependent Level Density Parameter In Hot Nuclei, D. R. JayaharDevadhason & V. Selvam, International Conference on Materials, Emerging – Devices and Energy – Efficient Technologies (MEETCON - 2017), Department of Physics & Department of Electrical and Electronics Engineering, St. Xavier's Catholic College of Engineering, Nagercoil.

30. Fluctuations on Nuclear Level Density Parameter, D. R. JayaharDevadhason & V. Selvam, Proceedings of the DAE-BRNS Symposium on Nuclear Physics **61** (2018).

31. Structural changes of nuclei studied with high excitation energy and large angular momentum, V. Selvam & D. R. JayaharDevadhason, Indian J. of Res. Found., **5** (2016), 9 - 16.

32. Exotic cluster decay in nuclei with  $Z=52-62$ , D.R.RoshlinSheeba Rani & V.Selvam, Indian J. of Res. Found. **6** (2017) 30 – 36.

33. Shape transitions and fluctuations of hot rotating  $^{197}\text{Tl}$  nucleus, R.HemalinSubala & V.Selvam, Indian J. of Res. Found. **6** (2018) 38 – 45.

34. Giant dipole resonance in excited nuclei, M.Thamburatty & V.Selvam, Indian J. of Res. Found. **7** (2019) 1 – 5.

35. Theoretical Search for Hyper Deformation in  $^{53}\text{V}$  at the International Conference on Emerging Materials and its Applications (ICEMA-2022) organized by the Department of Physics, St.Xavier's College(Autonomous), Palayamakottai-627002 on 01 March 2022.

36. Jacobian Instability in Nuclei with Very Large Angular Momenta at the National Conference on Recent Trends in Physics held on 16 March 2023 organized by the Department of Physics Sri Sarada College For Women (Autonomous), Tirunelveli – 627011, TamilNadu.

37. Jacobi Transitions in high Nuclei at high spin and Temperature at the CSIR Sponsored National Conference on Applied Physics over current scenario - 2023 (NCAP-2023) organized by the Department of Physics and Research Centre, Malankara Catholic College, Mariagiri, Kanyakumari, on 11&12 May 2023.

### Seminars/Conferences Attended:

1. Qualified the Pre-Ph.D. Theoretical Physics Methodology Course work conducted by the Department of Physics, ManonmaniamSundaranar University, Tirunelveli during Jan. 93 - Aug. 94.

2. Participated in the National Symposium on "RECENT TRENDS IN NUCLEAR PHYSICS" Organized by the Department of Physics, ManonmaniamSundaranar University, Tirunelveli, during March 15-18, 1993.

3. Participated in the National Seminar on "CHARGED PARTICLE SPECTROSCOPY AND REACTIONS WITH HEAVY IONS" organized by the Department of Physics, Bangalore University, Bangalore, during June 16 - 18, 1993.

4. Participated in the one day Acquaintance Programme about "ACCELERATORS, ASSOCIATED FACILITIES AND RESEARCH PROGRAMMES" by Nuclear Science Centre, New Delhi, Organized by the Department of Physics, ManonmaniamSundaranar University, Tirunelveli held on February 11, 1994.

5. Six months Accelerator based experimental research training at Nuclear Science Centre, New Delhi, during the year 1994 - 1995.

6. Attended the one week HIRA training programme conducted by the HIRA Group, at Nuclear

Science Centre, New Delhi during September 1994.

7. Participated in the International Nuclear Physics Symposium (INPS-95) organized by the Department of Atomic Energy, India at Bhabha Atomic Research Centre, Mumbai during December 18-22, 1995.

8. Participated in the III National Workshop on Nuclear Structure Physics by Inter University Consortium for DAE facilities, Calcutta Centre held at Manonmaniam Sundaranar University, Tirunelveli from 29.1.1996 to 2.2.1996.

9. Selected & Participated in the **SERC**(Scientific and Engineering Research Council) school on NUCLEAR STRUCTURE PHYSICS held at PanthaNivas, Puri from November 18 – December 7, 1996, Organized by the Institute of Physics, Bhubaneswar.

10. Participated in the DAE Symposium on Nuclear Physics held at the Department of Physics, Bangalore University, Bangalore from Dec. 26 - 30, 1997.

11. Participated in the International Workshop on Rare Nuclear Processes (IWRNP-98), held at Nuclear Science Centre, New Delhi, India from Nov. 16-20, 1998.

12. Participated in the one day Seminar on “Nuclear Energy For Development” conducted by Department of Atomic Energy, India on 23<sup>rd</sup> January, 1999 at Manonmaniam Sundaranar University, Tirunelveli.

13. Participated in the VI National Workshop on Nuclear Structure Physics by Inter University Consortium for DAE facilities, Calcutta Centre held at The Department of Nuclear Physics, University of Madras, Chennai from 10.3.1999 to 14.3.1999.

14. Participated in the National Workshop on Nuclear Reactions with Heavy ions by Inter University Consortium for DAE facilities, Calcutta Centre held at The Department of Physics, Sambalpur University, Orisa During January 2000.

15. Short term training programme on “Environmental Physics” under QIP, by AICTE at the Department of Physics, Indian Institute of Technology, Chennai, from 11 - 16, Dec.(2000).

16. Participated in the two Workshops on “Physics with radioactive ion beams” and “Nuclear Physics facilities in phase – II beam hall” at Nuclear Science Centre, New Delhi during 19 – 21, June (2001).

17. Participated in the DAE – BRNS Symposium on Nuclear Physics organized by the Department of Atomic Energy, India held at Manonmaniam Sundaranar University, Tirunelveli, during December 26-30, 2002.

18. Participated in the DAE – BRNS Symposium on Nuclear Physics organized by the Department of Atomic Energy, India held at Bhabha Atomic Research Centre, Mumbai, during December 8-12, 2003.

19. Participated in the Workshop on Pedagogical skills under FDP organized by PSN College of Engg. & Technology, Tirunelveli on 16<sup>th</sup> Nov. 2006.

20. Participated in the DAE – BRNS Symposium on Nuclear Physics organized by the Department of Atomic Energy, India held at M. S. University of Baroda, Vadodara during December 11-15, 2006.

21. Attended the UGC sponsored Orientation programme conducted by the Tamil Nadu State Council for higher education at Academic Staff college, Bharathidasan University, Tiruchirapalli from 26.12.2007 to 24.1.2008 and obtained Grade 'A'.
22. Attended the UGC sponsored Refresher Course in Physics at Academic Staff college, Bharathidasan University, Tiruchirapalli from 08.08.2009 to 28.08.2009 and obtained Grade 'A'.
23. Participated and given an invited talk in the National level seminar on Advances in Physics – Physica'09 organized by the Department of Physics, Marthandam College of Engg. And Technology, Marthandam on 21.11.2009.
24. Participated in the State level seminar on Recent Trends in Condensed Matter Physics (under UGC-DRS-Phase III programme) conducted by the School of Physics, Madurai Kamaraj University, Madurai during 15-16, Feb. 2010.
25. Participated in the National seminar on Emerging Trends in Advanced Materials Research sponsored by TANCHE, Govt. of Tamil Nadu, organized by the Department of Physics, Scott Christian College, Nagercoil during March 25-26, 2010.
26. Participated in the UGC sponsored National conference on Recent Trends in Crystal Growth and Nanotechnology organized by the Department of Physics, Arignar Anna College, Aralvaimozhi during 28-29 Jan.2011.
27. Participated in the State level seminar on Nanostructured materials sponsored by the Tamil Nadu State Council for Higher Education (TANSCHHE) held at the Department of Physics, S.T. Hindu College, Nagercoil during Feb. 11-12, 2011.
28. Participated in the CSIR-Govt. of India sponsored National seminar on Recent Advancements in Materials Research from 03.03.2011 to 04.03.2011 held at the Department of Physics, Scott Christian College, Nagercoil, Tamil Nadu.
29. Participated and given an invited lecture in the UGC sponsored National conference on Innovative Trends In Material Science organized by the Department of Physics, Arignar Anna College, Aralvaimozhi from 23.08.2013 to 24.08.2013.
30. Participated in the UGC sponsored National Seminar on Emerging Trends In Theoretical and Experimental Physics organized by the Department of Physics, SreeAyyappa College for women, Nagercoil from 08.01.2015 to 09.01.2015.
31. Participated in the UGC sponsored National Conference on Emerging Trends In Applied Physics NCETAP-2015 organized by the Department of Physics, Lekshmipuram College of Arts and Science, Neyyoor from 19.02.2015 to 20.02.2015.
32. Participated and given an invited lecture in the National conference on Recent Trends in Advanced Physics NSRTAP-2016 organized by the Department of Physics, Annai Velankanni College, Tholayavattam from 01.02.2016 to 02.02.2016.
33. Participated in the National Conference on Emerging Trends in Multidisciplinary Research organized by the Centre for Multidisciplinary Research, Rani Anna Govt. College for Women, Tirunelveli on 10<sup>th</sup> January 2017.
34. Participated and presented paper in the National Conference on Advanced Physics organized by the Department of Physics, Sri Sarada College for Women, Tirunelveli on 17<sup>th</sup> February 2017.
35. Participated in the state level seminar on Recent Advances in Materials Research (RAMR'17) held at the Department of Physics, Scott Christian College, Nagercoil, Tamil Nadu



on 17<sup>th</sup> March 2017.

36. Participated and presented paper in the International Conference on Materials, Emerging – Devices and Energy-Efficient Technologies MEETCON-2017 organized by the Departments of Physics & Electrical and Electronics Engineering, St. Xavier's Catholic College of Engineering, Nagercoil, Tamilnadu from 05.10.2017 to 06.10.2017.

37. Participated and presented paper in the UGC sponsored National Seminar on Emerging Trends In Physics (NSETP-2019) organized by the Department of Physics, Sadakathullah Appa College (Autonomous), Tirunelveli from 10.01.2019 to 11.01.2019.

38. Participated and given an invited lecture in the National Level Multidisciplinary conference organized by the Tamilnadu PG teachers Association held at Chennai from 19.01.2019 to 20.01.2019.

**39.** Participated in the FDP on Advances in Computational and Experimental Research in Physics organized by the Department of Physics, SRM Institute of Science & Technology, Chennai from 27.07.2020 to 08.08.2020.

40. Participated in the two weeks International workshop on emerging trends in the field of science and Technology conducted by Sathyabama Institute of Science and Technology, Chennai from 16.08.2021 to 28.08.2021.

**Date:09-04-2023**

**Name:V. Selvam**