

CURRICULUM VITAE

Name : **MAJOR Dr. R. RENGAIYAN**

Name of the College : Arignar Anna Govt. Arts & Science College
Nehru Nagar, Karaikal – 609605

Department : Department of Physics

Designation : Assistant Professor in Physics & Associate NCC Officer

Date of Joining : (i) From 17.10.1986 to 10.11.1988(Consolidated Salary Basis)
(ii) From 11.11.1988 to Till Date (on Regular Basis)

Father's Name : T. Rethinassamy

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Community : OBC – Sengunthar(Kaikolar)

Employment Details

Name of the Institution	Designation	Position	Period		Pay Scale (Rupees)
			From	To	
Tagore Arts College, Lawspet, Pondicherry - 605 008	Lecturer in Physics	Consolidated Salary Basis	17/10/1986	10/11/1988	1,200/- p.m.
Tagore Arts College, Lawspet, Pondicherry	Lecturer in Physics	Regular	11/11/1988	31/08/1989	2200-75- 2800-200- 4000
Arignar Anna Govt. Arts & Science College, Nehru Nagar, Karaikal - 609 605	Lecturer in Physics	Regular	01/09/1989	04/02/2009	8000-275- 13500
Arignar Anna Govt. Arts & Science College, Nehru Nagar, Karaikal - 609 605	Asst. Professor in Physics	Regular	05/02/2009	Till Date	15600 – 39000 + AGP Rs 6000/-

Educational Qualification

<u>Sl. No.</u>	<u>Name of the Course</u>	<u>Subject</u>	<u>Board / University</u>	<u>Year of passing</u>	<u>% of marks</u>
<u>1</u>	<u>S.S.L.C</u>	<u>General Subjects</u>	<u>Board of Secondary Education, Tamilnadu</u>	<u>June 1978</u>	<u>72.20 %</u>
<u>2</u>	<u>H.S.C</u>	<u>Science Stream</u>	<u>Board of Secondary Education, Tamilnadu</u>	<u>June 1980</u>	<u>67.33 %</u>
<u>3</u>	<u>B.Sc.,</u>	<u>Physics</u>	<u>University of Madras</u>	<u>July 1983</u>	<u>80.81 %</u>
<u>4</u>	<u>M.Sc.,</u>	<u>Physics Specialization: Electronics</u>	<u>University of Madras</u>	<u>June 1985</u>	<u>62.17%</u>
<u>5</u>	<u>M.Phil</u>	<u>Physics Specialization Petro Physics</u>	<u>Annamalai University, Annamalai Nagar, Chidambaram</u>	<u>August 1987</u>	<u>72.20 %</u>
<u>6</u>	<u>B.Ed.</u>	<u>Education</u>	<u>Annamalai University, Annamalai Nagar, Chidambaram</u>	<u>Jan 1992</u>	<u>61.56 %</u>
<u>7</u>	<u>Ph.D.</u>	<u>Physics</u>	<u>Periyar University, Salem</u>	<u>August 2008</u>	<u>Commended</u>

Orientation / Refresher Attended

- Job Orientation Program in Physics conducted by Pondicherry University, Pondicherry from 02-04-1987 to 06-04-1987 at JIPMER, Puducherry
- The 6-week course on Computer Oriented Mathematical Methods-Module III sponsored by the Department of Electronics, Govt. Of India conducted by the Pondicherry Engineering College from 15-05-1989 to 23-06-1989.
- UGC sponsored Orientation course conducted by Academic Staff College, Pondicherry University, Puducherry from 01.06.2001 to 28.06.2001.
- UGC sponsored Refresher course conducted by Academic Staff College, Pondicherry University, Puducherry from 11.12.2001 to 31.12.2001.
- UGC sponsored Refresher course conducted by Department of Physics, Annamalai University, Annamalai Nagar, Chidambaram from 15.12.2004 to 04.01.2005.
- UGC sponsored Refresher course conducted by Pondicherry University, Puducherry from 15.02.2008 to 06.03.2008.

NCC Training / Course Attended

- NCC Pre Commission Training course at NCC Officers Training Academy, Kamptee, Nagpur from 24.07.2000 to 21.10.2000.
- NCC Refresher Course at NCC Officer Training Academy, Kamptee, Nagpur from 24.02.2003 to 25.03.2003.
- Civil Defense and Disaster Management course at National Civil Defense College, Nagpur from 19.01.2004 to 30.01.2004.
- NCC Refresher course at NCC Officer Training Academy, Kamptee, Nagpur from 26.10.2009 to 24.11.2009.
- NCC Refresher course at NCC Officer Training Academy, Kamptee, Nagpur from 08.10.2012 to 24.11.2012.

Conferences / Workshops / Seminars attended

- **R.Rengaiyan**, P.M. Anbararan, A.Kalyanasundaram and S.Selvanandan, "An effective light trapping scheme for silicon solar cell with low order aberration and high throughput microlenses", in National Conference on Emerging Trends in Engineering and Technology organized by Channabasaveshwara Institute of Technology, Tumkur, Karnataka during 24th and 25th April, 2008. pg. 92-105.
- **R.Rengaiyan**, Attended one day "Workshop on recent trends in nanomaterials" conducted by Department of Physics, Periyar University, Salem on 31st March, 2008.
- **R.Rengaiyan**, P.M.Anbarasan, A.Kalyanasundaram and S.Selvanandan, "Field Angle Variation Study on Conic Interconnect Lens System For Higher Coupling Efficiency" Organised by Indian SpectroPhysics Association (ISPA), Pachaiyappa's College, Chennai - 600 030, held during 1 & 2, February, 2008, pg.44
- A.Kalyanasundaram P.M.Anbarasan, **R.Rengaiyan** and S.Selvanandan, "Aberration Study On Interconnect Lens System Through Huygens Optical Transfer Function And Contour Wavefront Map" Organized by Indian SpectroPhysics Association (ISPA), Pachaiyappa's College, Chennai - 600 030, held during 1 & 2, February, 2008, pg.45
- P.M.Anbarasan, **R.Rengaiyan**, A.Kalyanasundaram and S.Selvanandan, "An effective light trapping scheme for silicon solar cell with low order aberration and high throughput microlenses" International Conference on Solar Cells (SOLACE-IC,2008) Organised by Department of Physics, CUSAT, Cochin, during 21-23, January, 2008, pg 195-198.
- S.Selvanandan, P.M.Anbarasan, R.Rengaiyan and A.Kalyanasundaram, "Design, Optical study and Geometric MTF computation for Aplanatic lens using ZEMAX®" in International Conference on materials for advanced technologies, ICMAT-2007 held at National University of Singapore, Singapore during 1- 6July, 2007.

- **R.Rengaiyan** and P.M.Anbarasan, "A New and Simple Approach to Tolerance Analysis of Null Lens Using Zemax®" pg.74, in the National Conference on Recent Trends in Optoelectronics and Laser Technology (NCOL- 2007), University of Kerala, April, 9 - 11, 2007
- P.M.Anbarasan, K.Vasudevan, K.B.Rajesh, S.Selvanandan, A.Kalyanasundaram, &**R.Rengaiyan** "A light trapping scheme of microlens to silicon solar cells", pg.83 in the International Conference On XXXII OSI Symposiums - held at MS University of Baroda - Gujarat during 1-3 Mar. 2007
- P.M.Anbarasan, S.SelvanandanA.Kalyanasundaram, **R.Rengaiyan** and K.B.Rajesh *A novel study on Power coupling efficiency enhancement in multi-mode step- index fiber using refractive and diffractive microlenses", in the International conference on Photonics-2006 held at Hyderabad Central University during 13- 16 Dec. 2006.
- P.M.Anbarasan, S.SelvanandanA.Kalyanasundaram, **R.Rengaiyan** and K.B.Rajesh "Microlenses focused beam on silicon solar cells for high efficient light trapping scheme", presented in the International conference on Photonics-2006 held at Hyderabad Central University during 13-16 Dec. 2006.
- S.Selvanandan, P.M.Anbarasan, A.Kalyanasundaram, **R.Rengaiyan** "An Investigation on the focal performance of cylindrical microlenses in dielectric incident space.", in the National conference on Recent Advances in Materials science (NCMS-2006) held at Periyar University during Feb-16-17, 2006. 61
- **R.Rengaiyan**, P.M.Anbarasan ,S.Selvanandan, and A.Kalyanasundaram, "Tapered microlenses-ended fiber for medical applications using laser-to-fiber coupling theory.", in the National conference on Recent Advances in Materials science (NCMS-2006) held at Periyar University during Feb-16-17, 2006. P.66
- A 3-day workshop on PCB Fabrication and its Applications (Financed by UGC) conducted by Department of Physics and Electronics Science, A.V.C. College (Autonomous), Mannampandal from 06.01.1994 to 08.01.1994
- Workshop on Recent Trends in Crystal Growth financed by UGC and organized by Department of physics and Electronics Science, A.V.C. College (Autonomous) Mannampandal from 21.07.1995 to 28.01.1995.

List of papers published in International/National Journals

- **R.Rengaiyan**, P.M.Anbarasan, A.Kalyanasundaram and S.Selvanandan, "Variable field angle study on conic interconnect lens system for higher coupling efficiency", J. AttidellaFond.GiorgioRonchi, Italy, (Italian Journal of Optics) Vol. 63, No 14 (2008) P.1-14.
- P.M. Anbarasan, A.Kalyanasundaram and **R.Rengaiyan**"A Novel light trapping scheme of microlenses focused beam on silicon solar cells"- J. Attidella Fond. GiorgioRonchi, Italy, (Italian Journal of Optics) Vol. 62, No.3 (2007) P.363-374
- S.Selvanandan, P.M.Anbarasan, A.Kalyanasundaram and **R.Rengaiyan** "A Scheme to improve the coupling efficiency between laser diode and single mode fibre via hemispherically ended GIF microlenses" J. Attidella Fond. Giorgio Ronchi, Italy, (Italian Journal of Optics) Vol62, No.4, (2007) P.654-668
- S.Selvanandan, P.M.Anbarasan, A.Kalyanasundaram and **R.Rengaiyan**, "Theoretical study on focal performance of cylindrical microlens in dielectric incidence space", J.AttidellaFond.GiorgioRonchi, Italy, (Italian Journal of Optics) Vol 61, No.6,(2006) P.737-744.
- S. Santhoshkumar&**R. Rengaiyan**, "A Novel Study on Shorter Wavelength Radiations in the event of Solar Eclipse", J.AttidellaFond.GiorgioRonchi, Italy, (Italian Journal of Optics) Anno LXVI.n.1 P.3-9.
- S. Santhoshkumar&**R. Rengaiyan**, "Influence of Solar Eclipse on Seawater", Journal of Natural Science, vol. 3, No.1, P. 69-74 (2011).
- S.Bhuvaneswari, **R.Rengaiyan**&P.M.Anbarasan, "Fuzzy Interpretation of Absorption in Solar Cells, Journal of Energy Technologies and Policy", ISSN 2224-3232, Vol.1,2011, P. 45-52.
- **R. Rengaiyan** et al., Influence of Solar eclipse in Sea water, International Journal of Natural Science, Vol.1, 2012.
- **R. Rengaiyan** et al., Influence of Solar eclipse in Sea water, Journal atmospheric and solar-terrestrial physics, Vol.51, pp.271-278, 2013.
- **R. Rengaiyan** et al., Trace elemental analysis and antibicrobial activities of elephantopusScabe L, Journal of Phytology, Vol.4(4), pp:08-13, 2013.

- **R. Rengaiyan** et al., Vedhic mythology of solar eclipse and its scientific validation, Indian journal of traditional knowledge, Vol.13(4), pp:716-724,2014
- K. Suguna, P.B. Nagabalasubramanian, P.M. Anbarasan, **R. Rengaiyan**. Experimental and quantum chemical study on geometry, stability, electronic structures, electronic Absorption, solvents effect and efficiency of β,ϵ -carotene-3,3'- diol as Natural Sensitizers for Dye Sensitized Solar Cells, Int. J. Adv. Sci. Eng. Vol. 1 No. 4 1-9 (2015) 1 ISSN 2349 5359.

Papers Published in Conference Proceedings

- S. Santhoshkumar & **R. Rengaiyan**, "Search for next neutron shell closure in super heavy region", proceedings of the International Symposium on Nuclear Physics, Vol. 54 (2009), PP. 200-201.
- S. Santhoshkumar & **R. Rengaiyan**, "Level density and structural changes in $^{20,22}\text{Ne}$ ", proceedings of the International Symposium on Nuclear Physics, Vol. 54 (2009), PP. 394-395.
- S. Santhoshkumar & **R. Rengaiyan**, "Structural Stability of long lived super heavy nucleus $^{292}122$ ", proceedings of the International Symposium on Nuclear Physics, Vol. 54 (2009), PP. 400-401.
- S. Santhoshkumar & **R. Rengaiyan**, "Next Proton magicity in the Island of Stability", proceedings of the DAE Symposium on Nuclear Physics, Vol. 55(2010), PP. 206-207.
- S. Santhoshkumar & **R. Rengaiyan**, "Level density of New chemical element 117", proceedings of the DAE Symposium on Nuclear Physics, Vol. 55(2010), PP. 266-267.
- S. Santhoshkumar & **R. Rengaiyan**, "Prediction of Next Island of magicity", proceedings of the DAE Symposium on Nuclear Physics, Vol. 56(2011), PP. 450.
- S. Santhoshkumar & **R. Rengaiyan**, "Level density O^{16} ", proceedings of the DAE Symposium on Nuclear Physics, Vol. 56(2011), PP. 580.