

Bio-Data

1. Name : Dr. V. ANTONY AROUL RAJ
2. Gender : Male
Date of Birth : 02.11.1971
3. Birth : 02.11.1971
4. E-mail ID : antonyaroulraj@gmail.com
5. **Qualifications** :



S. No.	Degree	Institution	Year	Division/Class
1	M. Tech (Energy Technology)	Pondicherry Engineering college	1993	FIRST CLASS WITH DISTINCTION
2	Ph.D.	Anna University, Chennai	2010	By Thesis

PhD Thesis Title : A studies on PCM based modular heat exchangers for free cooling in Green buildings

Employment Experience

S. No.	Position & Organisation	Nature of Job	Period
1	Professor Mechanical Engineering Sciences div. Easwari Engineering college, Bharathi Salai, Ramapuram, Chennai- 600089	Research & Teaching	18.06.2006 - Till Date
2	Lecturer Hindustan Engineering College Chennai	Research & Teaching	07.06.2002
3.	Teaching Research Associate Pondicherry engineering College	Teaching & Research	07.06.2002 – 15.06.2006

List of Publications *(For last 5 years only)*

1. RV M.Rajagopal, R Dinesh Babu, Antony Aroul Raj V Investigation on phase change material-based flat plate heat exchanger modules for free cooling applications in energy-efficient buildings, *Advances in Building energy research*, 1-23, 2016
2. VR Karthik Panchabikesan, , Antony Aroul Raj, Sujatha Abaranji, Effect of direct evaporative cooling during the charging process of phase change material based storage system for building free cooling application—A real time experimental investigation *Energy and buildings* 152 (1), 250-263 2017
3. Antony Aroul Raj. V and Velraj. R. A review on free cooling of building using phase change materials, Elsevier, *Renewable and Sustainable energy reviews*.vol.14, Issue 9, pp.2819-2829, December 2010.
4. Antony Aroul Raj. V and Velraj. R. Heat transfer and pressure drop analysis for a PCM based modular heat exchanger for free cooling application.Elsevier, *International Journal of Thermal Sciences*. April 2011 pp 2819-2830
5. V Antony Aroul Raj, Experimental investigation of the LHS system and comparison of the stratification performance with the SHS system using CFD simulation, Elsevier, 78-389, February 2014
6. Antony Aroul Raj V, Hariharan. C., Velraj. R., R. V., Seeniraj.Numerical Investigations Of Outward Solidification In Cylindrical Pcm Storage Unit. *Applied Mechanics & Materials* . 2015, Vol. 787, p177-181. 5p.
7. Solomon G Ravikumar, Ravikumar T S, Raj V Antony Aroul Raj, Velraj R, "Performance Analysis of Thermal Storage Unit with Possible Nano Enhanced Phase Change Material in Building Cooling Applicatrions", *Energy Storage Science and Technology*, Vol – 2, 91-102, March 2013
8. V. Antony Aroul Raj and R. Velraj, Numerical investigation of PCM based modular heat exchanger for free cooling: International conference on energy and environment engineering ICEE 2009., Pondicherry Engineering College, Pondicherry. India.(2009).
9. V. Antony Aroul Raj, and R.Velraj, Energy efficient design of PCM based modular heat exchanger for free cooling application in buildings. Proceedings: International conference on emerging trends in energy and environment engineering ICETEE 2010., Sairam Engineering College.

10. V Antony Aroul Raj, C. Hariharan, Numerical Investigations of Outward Solidification in Cylindrical PCM Storage Unit, IJAMM, 787 pp177-181, 2015, ISSN 1662-7482
11. V. Antony Aroul Raj and R. Velraj, Numerical investigation of PCM based modular heat exchanger for free cooling: International conference on energy and environment engineering ICEE 2009., Pondicherry Engineering College, Pondicherry. India.(2009).
12. V. Antony Aroul Raj, and R.Velraj, Energy efficient design of PCM based modular heat exchanger for free cooling application in buildings. Proceedings: International conference on emerging trends in energy and environment engineering ICETEE 2010., Sairam Engineering College
13. V Antony Aroul Raj, C. Hariharan, Numerical Investigations of Outward Solidification in Cylindrical PCM Storage Unit, ISERMAT, Pro-273, 179 January 2015.

Sponsored Research Projects

SI No	TITLE	AGENCY	YEAR	AMOUNT
1	User friendly functional Simulation tool development through experimental validation for integration of PCM in energy efficient buildings for thermal management	DST	2017	33.06 Lakhs
2	Design & development of Energy Efficient Buildings Using solar Passive Architecture	Tamil Nadu Energy Development Agency, Govt. of Tamil Nadu	2006 - 10	10.0 lakhs

Awards and Honours:

1. **Best project Award -**
For final year PG project on year 2002. **Pondicherry Engineering college**
2. **Best Student Award – UG 1993 Pondicherry Engineering college.**

Guest faculty/Resource person for other programmes.

1. Handled Refrigeration and air conditioning training classes for **M/S Orchid chemicals and TTTI, Tharamani .**
2. Handled classes on fan and pump design for **Lucas TVS, PADI**
3. Handled classes as resource person at **Velammal Engineering college** for Anna University sponsored FDP on Heat Transfer.
4. Resource person for refrigeration and air-conditioning and CFD short term course and seminars.

Key roles

- **Students chair** for Indian society for Heating Refrigeration and Air- conditioning Engineering, Chennai chapter (**ISHRAE**).

Memberships of Professionals Societies.

1. Member of Indian society for Heating Refrigeration and Air- conditioning Engineering, Chennai chapter (**ISHRAE**).
2. Member of Society of Automotive Engineering (**SAE**).

Other credentials

- Good Knowledge research tools like **MATLAB and CFD .**