

FACULTY PROFILE

1. Personal profile:

Name: B.Jefferson Raja Bose

Designation: M.E

Karunya e-mail id: Jefferson@karunya.edu

Phone no:9443543919

2. Educational profile (With year and college name):

B.E or B.TECH: B.E (Mechanical Engineering) (1999 and Amrita Institute of Technology and Science, Bharathiar University)

M.E. or M.TECH or M.S: M.E(Energy Engineering)(Dec 2001 and College of Engineering., Guindy Campus,Anna University)

PhD: pursuing (Karunya University)

3. Area of Research: Advanced Heat Transfer; Computation Fluid Dynamics; Advanced Fluid Mechnnics; Nano-fluids.

4. Research guidance:(Project Guided)

- Application of Vapour Chamber for Electronics Cooling System.
- Simulation of Blood flow through Coronary artery and Heart using 'FLUENT'
- Development and Evaluation of a Gas to Gas Compact Heat Exchanger for Low Temperature Applications
- Design of Waste Heat Assisted Vapour absorption Air Conditioning System for an Automobile
- Study and Analysis of Micro channel Heat sink subjected to Air Jet Impingement
- Modeling of One Dimensional Ablation
- Modelling, Simulation and Validaiton of pressure and Temperature variations of a 4 – stroke compression ignition Engine Fuelled with Bio-Diesel
- Studies on Organic Loading of Variable masses like Rice Waste and Vegetable waste in Biomethanisation.
- Engine Performance and Optimization of Process parameter for production of Biodiesel from waste cooking oil using response surface Methodology.

5. Publications (Journals, Conferences, Patents):

International Journal publications

- J.David Rathnaraj, **Jefferson Raja Bose**, Michael N Kumar(2006);Simulation and experimental Investigation on variation of swirl with valve lift in DI diesel engine using CFD; *Journal on Engineering and Technology*, Vol.1, No.3 February 06-April 06, ISSN No. 0973 – 2632, Pages 75-87
- S. Harish, L. Godson Asirvatham, **B. Jefferson Raja Bose** and A. Bensely, Experimental analysis of parallel plate and cross-cut pin-fin heat sinks for electronic cooling applications, - *Thermal Science Journal*. Vol.14, No.1, pp. 147-156, (2010). [IMPACT FACTOR: 0.8]
- L. Godson Asirvatham, Deepak K, Enoch C, Raja B, and **Jefferson**, Heat transfer characteristics of silver/water nanofluid in a shell and tube heat exchanger, *Archives of Civil and Mechanical Engineering.*” Volume 14, (2013), pp.489-496, [IMPACT FACTOR: 0.9].
- Nizar Ahammed, L. Godson Asirvatham, Joel Titus, **Jefferson raja Bose** and Somchai Wongwises, “Measurement of thermal conductivity of graphene-water nanofluid at below and above ambient temperature”, *International Communications in Heat and Mass Transfer*, (Accepted), (2015), [IMPACT FACTOR: 2.598].

International Conference publications

J. David Rathnaraj, B. Jefferson Raja Bose, and Michael N. Kumar , “Simulation and Experimental Studies of Variable Swirl Intake Port in DI Diesel Engine Using CFD”, - FEDSM 2006, 6th Symposium on Applications in Computational Fluid Dynamics, July 17- 20, 2006 Miami, Florida

L. Godson Asirvatham, **B. Jefferson Raja Bose**, D. Devassia, D. Kunhappan,” Convective Heat Transfer Coefficient of Nanofluids in Uniformly Heated Mini-channel Under Constant Wall Heat Flux Condition” ASCHT 2011, The Third Asian Symposium on Computational Heat Transfer and Fluid Flow, September 22 – 26,2011,Kyoto, Japan

6. Experience (Administrative & other job experience):

Teaching 14 **yrs**, in School of Mechanical Sciences
Assistant Professor: Karunya University, Karunya Nagar, Coimbatore.

Worked as Assistant Controller of Examinations for 2 years

7. Courses handled (Theory and Labs):

Theory

Engineering Thermodynamics
Thermal Engineering
Fluid Mechanics and Machinery
Heat and Mass Transfer
Engineering Mechanics
Finite Element Methods
Basic Mechanical Engineering

Labs

Thermal Engineering Lab
Heat transfer and internal combustion engines lab
CFD Lab
MATLAB
Software Lab
Computer Aided Graphics Lab
Workshop
Foundry, Smithy, Welding & sheet metal lab
Engineering Drawing Lab
Dynamics lab

8. Others (Awards & Honors, Membership & Reviewer, Seminars & Lectures):

Guest Lectures:

1. “Refresher Course on Computational Fluid Dynamics”, Faculty of Engineering , Christ University, Bangalore, April 26 – 01 May, 2012