

# **Professional Objective:**

To prove myself as a dedicated and energetic employee in a progressive organization that gives me scope to apply my knowledge and skills and be a member of a team, that dynamically works towards the success and growth of the organization.

## **Personal Skills:**

Confident to face any challenge that is put forward to me and to come out successful at any field, industrious, team facilitator, and adaptable to any environment.

#### **Educational Details:**

Course	Institution	University	Year of Passing	% Secured	Class
Full time Ph.D under Faculty of Electrical Engineering. (Specialisation : Electrical Machines)	Cochin University of Science & Technology	Cochin University of Science and Technology	2013		
M.Tech in Electrical Machines.	College of Engineering, Trivandrum.	Kerala University.	2007	8.84 (CGPA)	First (1 <sup>st</sup> Rank)
B.E in EEE.	The Indian Engineering College.	M.S. University.	2004	76.3%	Distinction

Pre-Degree	Christian College.	Kerala University.	1999	66.2%	First
Matriculation	Chinmaya Vidyalaya,Tvm.	CBSE	1997	70.2%	First

**Personal Achievements:** 

- Reviewer of IEEE Transactions on Industrial Electronics, Electric Power Components and Systems Journal (Taylor & Francis), Progress In Electromagnetics Research (PIER) Journals.
- I have got four International Journal Papers published in reputed journals including that in IEEE Transactions on Industrial Electronics which has currently got the highest Impact factor among Electrical Engineering Journals i.e. 5.468.
- Six of my IEEE International Conference papers are published in IEEE Conference Proceedings and are available with IEEXPLORER.
- I was awarded University Junior Research Fellowship for carrying out my research leading to Ph.D at School of Engineering, Cochin University of Science and Technology.
- The Hybrid Stepper Motor designed by me for Future IRS(Indian Remote Sensing) missions was accepted by ISRO(Indian Space Research Organization) and the motor has been fabricated.
- As part of my Ph.D work I have worked along with the Chandrayaan team of ISRO for the Design, Analysis and Realization of a Zero Cogging BLDC Motor for Spacecraft Applications.
- First Rank in M.Tech (Electrical Machines), (2005-2007 batch College of Engineering, Trivandrum ) from Kerala University.
- > Nominee for the Young Scientist Award at 20<sup>th</sup> Kerala Science Congress.
- Best Conference paper award at the 8<sup>th</sup> National Conference on Technological Trends held at College of Engineering, Trivandrum.

- Instrumental in setting up first P.G. program of Jyothi Engineering College i.e. M.Tech in Power Electronics and became the P.G. Co-Ordinator & presently serving as the Head of the Department.
- Published three National Conference Papers.
- I have delivered a half day Lecture on "Familiarization of Maxwell Software Package" in the TEQIP sponsored short term course for Engineering College Faculty at College of Engineering, Trivandrum.
- I have also delivered an invited lecture at Rajiv Gandhi Institute of Technology, Kottayam on the topic "Introduction to Finite Element Analysis"
- General Co-Ordinator of the ISTE Sponsored three day short term course on"Emerging Trends in Power Electronics and Systems" sponsored by ISTE and organized by Dept. of Electrical Engineering, Jyothi Engineering College, Thrissur during 1-3 February 2012.
- I have Completed my B.E in Electrical and Electronics Engineering with Distinction, i.e by passing all the papers at the first attempt and securing above 75% marks.

#### **Teaching & Research Experience:**

Teaching Experience :

Organization	: Jyothi Engineering College, University of Calicut Thrissur, Kerala, India.
Designation	: Professor & Head of the Department of Electrical and Electronics Engineering.
Total years of Service	: 9 Years and 10 months (as on 1 <sup>st</sup> August 2014)

## <u>Research Experience</u> :

1) Research Centre : College of Engineering Trivandrum &

Indian Space Research Organization (ISRO) Inertial Systems Unit

Period of Research : August 2007 to August 2008 (One Year)

Topic of Research : "Design, Analysis and Realization of a Hybrid Stepper Motor
For Spacecraft Applications" which was a live project of ISRO
Meant for the Solar Array Drive Assembly of Future Indian
Remote Sensing Applications .

2) Research Centre : Cochin University of Science & Technology &

Indian Space Research Organization (ISRO) Inertial Systems Unit

Period of Research : September 2008 to September 2011 (Three Year)

Topic of Research: "Design, Analysis and Realization of a Zero-Cogging Permanent Magnet Brushless DC Motor for Spacecraft Applications" which was a live project of ISRO meant for the CMG Applications of future Chandrayaan missions.

## **Total Research Experience** : 4 Years

## Total Teaching & Research Experience : 9 Years (as on 1<sup>st</sup> August 2014)

## Subjects handled for B.Tech Electrical Engineering:

- 1) D.C Machines
- 2) A.C Machines
- 3) Special Electrical Machines
- 4) Generalized Theory of Electrical Machines
- 5) Power Electronics & Industrial drives
- 6) Electromagnetic Field Theory
- 7) Electric Circuit Theory
- 8) Basic Electrical Engineering
- 9) D.C and A.C Machines Lab

#### Subjects handled for M.Tech Power Electronics:

- 1) Electric Drives
- 2) Special Electrical Machines and Drives
- 3) P.G. Thesis Work Co-Ordinator
- 4) P.G. Seminar Co-Ordinator

## **Publication List**

## **International Journal Papers**

[1] Praveen R.P., Ravichandran M.H et.al, "A Novel Slotless Halbach Array Permanent Magnet Brushless DC Motor for Spacecraft Applications", IEEE Transactions on Industrial Electronics, vol.59, no.9, pp. 3553-3560, September 2012. (Impact Factor : 5.468 – ISI Thomson) Citations :6

- [2] Praveen R.P., Ravichandran M.H, V.T.Sadasivan Achari, Dr.Jagathy Raj V.P., Dr.G.Madhu, Dr.G.R.Bindu, "Design and Analysis of a Hybrid Stepper motor for Actuating the gimbal of Control Moment Gyroscope", International Review of Electrical Engineering (IREE), vol.5,No.4,Part A, August. 2010, pp.1488-1495. (Impact Factor: 1.364 – ISI Thomson) Citations:2
- [3] Praveen R.P., Ravichandran M.H et.al, "Optimal Design of a Surface Mounted Permanent-Magnet BLDC Motor for Spacecraft Applications", International Review of Electrical Engineering (IREE), vol.6, no.5, October 2011, pp.2318-2328. (Impact Factor: 1.364 – ISI Thomson)
- [4] Praveen R.P., Ravichandran M.H et.al, "Design and Analysis of Zero Cogging Brushless DC Motor for Spacecraft Applications", ECTI Transactions on Electrical Engineering, Electronics and Communications, vol.9, no.1,February 2011, pp.113-120.

## **International Conference Papers**

- [1] Praveen R.P., Ravichandran M.H, Sadasivan Achari V.T., Dr.Jagathy Raj V.P., Dr.G.Madhu., Dr.G.R.Bindu; "Design and Finite Element Analysis of Hybrid Stepper motor for Spacecraft Applications", Proceedings of IEEE International Electric Machines and Drives Conference (IEMDC), Miami, U.S.A, May. 2009, Page(s): 1051-1057. (Number of Citations : 3)
- [2] Praveen R.P. ,Ravichandran M.H,et.al; "Design and Analysis of Zero Cogging Brushless DC motor for Spacecraft Applications", Proceedings of IEEE International ECTI-CON 2010 Conference ,Chiang Mai, Thailand, May. 2010, Page(s):254 -258. (Number of Citations : 6)
- [3] Praveen R.P., Ravichandran M.H et.al; "Design and Analysis of Enclosed Rotor Halbach Array Brushless DC Motor for Spacecraft Applications", Proceedings of IEEE International Conference on Electrical Machines (ICEM), Rome, Italy, September. 2010, pp.1-6. Number of Citations : 4)
- [4] Praveen R.P., Ravichandran M.H et.al; "A Novel Slotless PMBLDC Motor for precise positioning Applications", Proceedings of IEEE International Conference on Communication, Control and Computing Technologies (ICCCCT), Kanyakmari, India, October. 2010, pp.250-254.

- [5] Praveen R.P., Ravichandran M.H et.al; "Optimal Design of a Surface Mounted Permanent-Magnet BLDC Motor for Spacecraft Applications", Proceedings of IEEE International Conference on Emerging Trends in Electrical and Computer technology (ICETECT), Kanyakumari, India, March. 2011, pp.413-419.
  (Number of Citations : 1)
- [6] Ajeesh K.P., Ashis.R, Mary Helna, Nidheesh.K, Sreedevi C.R., Praveen R.P.; "A Novel Fuzzy Logic Controller based Automatic Caution Order System for Indian Railways" Proceedings of IEEE International Conference on Advanced Communication, Control and Computing Technologies (ICACCCT 2012), Ramanathapuram, Tamilnadu, pp.248-253, August 2012,.

## **National Conference Papers**

[1] Praveen R.P. ,Sadasivan Achari V.T., Ravichandran M.H., Dr.Bindu G.R.; "Design and Analysis of Hybrid Stepper motor using Finite Element Analysis", Proceedings of 31st National Systems Conference, December. 2007, Page(s): 87-88.

[2] Praveen R.P., Ravichandran M.H., Dr.Bindu G.R.; "Improved Design and Performance optimization of Hybrid Stepper motor for Spacecraft Applications", Proceedings of 20th Kerala Science Congress, January. 2008, Page(s): 407-410.

[3] Praveen R.P., Ravichandran M.H., Dr.Bindu G.R.; "*Design and Analysis of Hybrid Stepper motor for Spacecraft Applications*", Proceedings of 8th National Conference on Technological Trends, December. 2007, Page(s): 71-75.

## Seminars Presented:

- 1. Analysis of End Effect in Double Sided Linear Induction Motor and its effect on Rotary Machines.
- 2. Linear Generators for Direct Drive Power take-off in AWS.
- 3. Familiarization of Maxwell Software Packages
- 4. Introduction to Finite Element Analysis

## **Project Work:**

**Research Work (Ph.D) : Design, Analysis and Realization of Zero Cogging Permanent-Magnet Brushless DC Motor for Spacecraft Applications (A live project of ISRO-**Indian Space Research Organization).

Main Project: Design and Analysis of Hybrid Stepper Motor for Spacecraft Applications (M.Tech) was a live project for ISRO (Indian Space Research Organization).

Mini Project (M.Tech) : Modelling of a 2D Magnetostatic problem using Finite Element Analysis.

## Main Project (B.E.) : "Electrical Scheme in NTPC Kayamkulam" at the Electrical Maintenance Department of NTPC Kayamkulam

## **Industrial Training:**

IndustrialTraining was obtained from Indian Railways,NTPC(Kayamkulam),KEL(Kerala Electrical and Allied Engg. Co.Ltd.),IISU(ISRO Inertial Systems Unit)

## **Faculty Development Programs Attended:**

- 1. **"Methodology for Engineering Research"** sponsored by Directorate of Technical Education and organized by Dept. of Electrical Engineering, College of Engineering, Trivandrum during 15-17 November 2012.
- 2. **"Emerging Trends in Power Electronics and Systems"** sponsored by ISTE and organized by Dept. of Electrical Engineering, Jyothi Engineering College, Thrissur during 1-3 February 2012.
- 3. **"Emerging Trends in Power Systems and Mi Power Applications"** sponsored by ISTE and organized by Dept. of Electrical Engineering, Mar Baselios College of Engineering, Trivandrum during 21-25 November 2011.
- 4. **"Enhancing Career Prospects through self-development"** sponsored by TEQIP and organized by Dept. of Civil Engineering, College of Engineering, Trivandrum during 15-16 September 2006.

#### Membership in Professional Bodies:

- 1. Associate Member of Institution of Engineers (India) (IE) : AM100385-5
- 2. Life Member of Indian Society of Technical Education (ISTE) : LM-44816
- 3. Life Member of Energy Conservation Society (ECS) : 2395

## **Personal Details:**

Name	: Dr. Praveen.R.P
Father's Name	: S.Raveendran Nair
Date of Birth	: 08-02-1982
Sex	: Male
Linguistic Capability	: English,Malayalam,Hindi,Tamil
Interests	: Reading, Sports
Nationality	: Indian

Permanent Address	: Pravitha Bhavan , T.C-19/1638-7, Thamalam,Poojappura P.O, Trivandrum , Kerala.Pin:695012.
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I hereby declare that the above written particulars are true to the best of my knowledge and belief.

Place: Trivandrum, India Date : 27-08-2013

(Dr.Praveen.R.P)