

## **FACULTY PROFILE**

**DR. R. BIJUKUMAR**

**KALABHAM, KRA 167(A)**

**KONCHIRAVILA MANACAUD PO**

**TRIVANDRUM 695 009**

**Ph: 9847946828**

**Email:rbijukumar@yahoo.com**



### **PROFESSIONAL PROFILE**

#### **EDUCATION**

PhD

- From Kerala University under the guidance of Dr. Bijan. B. Das, Research Professor BITS Ranchi (Former Deputy Director, VSSC Thiruvananthapuram) and Dr. R. S. Moni Professor, Marian College of Engineering Trivandrum (Former Director of Technical Education , Kerala).
- Title: Strategic combination of Diversity techniques to Improve Signal-to- Noise Ratio in a Wireless Communication system.

M.Tech.

- Communication Systems from Madurai Kamaraj University. Passed out in December 2000 with 80% marks and Distinction.

BE

- Electronics & Communication Engineering from Madurai Kamaraj University. Passed out in July 1992 with 74% marks.

#### **EXPERIENCE**

Total 22.2 years of which, 21.2 years of teaching experience and 1 year industrial experience.

- Working in College of Engineering Perumon as Professor and Head of Department of ECE from 03.07.17 till now.
- Worked in College of Engineering Muttathara as Head of Department of ECE (30.12.16 to 30.06.17) and Principal-in-charge (27.07.16 to 29.12.16)(work arrangement).
- Worked in College of Engineering Aranmula as Principal-in-charge from 13.05.16 to 25.07.16.
- Worked in College of Engineering Trikaripur, Cheemeni as Principal-in-charge from 01.12.14 to 11.05.16.
- Worked in T K M Institute of Technology, Karuvelil, Kollam as the Professor and Head of the Department of Electronics & Communication Engineering Branch from 05-12-05 to 28.11.14
- Worked in Noorul Islam College of Engineering, Kumaracoil as an Assistant Professor in Electronics and Communication Engineering from 01-02-05 to 03-12-05 and Lecturer in the same Department from 02-01-01 to 31-01-05.

- Worked in P S N A College of Engineering and Technology Dindigul as a Lecturer in Computer Science and Engineering Department from 1997 June to 2000 December (from 1999 August to 2000 December went for higher studies).
- Worked as an Assistant Engineer Trainee in J J T C, a Govt. of Tamilnadu Undertaking from 1995 January to 1996 January.

#### **TRAINING UNDERGONE:**

- Preparedness for Accreditation by NBA a two day workshop organized by College of Engineering Thalassery on 14<sup>th</sup> and 15<sup>th</sup> December 2017.
- Strategic planning for Engineering Colleges, an one day workshop organized by Continuing Education Cell of College o Engineering Vadakara on 18<sup>th</sup> February 2016.
- Teaching Learning in Higher Technical Education , two day symposium organized by SPFU-Tamil Nadu, SPFU-Kerala and IIT Madras held at IIT Madras on 22<sup>nd</sup> and 23<sup>rd</sup> January 2016.
- Hi-Impact Leadership –Blue print for success, a three day management enhancing programme organized by GEC Barton Hill from 8-10 October 2015.
- Academic Excellence through Research an one day workshop organized by SPFU and DTE, Kerala on January 31<sup>st</sup> 2015 at GEC Barton Hill.
- AICTE sponsored SDP course on Trends in Power Electronics and Industrial Drives held from 7th to 20th May 2012 conducted by Arunachala College of Engineering for Women, Manavilai. (14days).
- Attended the AICTE-MHRD sponsored SDP course on Advances in Wireless Technologies and Networking held from 13th to 24th June 2011 conducted by National Institute of Technology, Calicut.(12days).
- Attended the AICTE-MHRD sponsored SDP course on Advances in Wireless Technologies and Networking held from 15th to 26th June 2009 conducted by National Institute of Technology, Calicut.(12days).
- Attended the AICTE sponsored Short term course on Trends in Wireless Technologies and Telecommunication held from 16th to 25th June 2008 at NSS College of Engineering Palakkad(10 days).
- Participated in the AICTE sponsored SDP on Soft Techniques for Measurement and Automation Organized by Noorul Islam College of Engineering during 5th to 17th December 2007.(13 days)
- Participated in the DRDO Sponsored National Seminar on Soft Techniques for Microstrip Antennas at St. Xavier's College of Engineering during 6th and 7th October 2008.(2 days)
- 9 days intensive training course on Signals and Systems and DSP organized by College of Engineering Trivandrum from 28-05-02 to 05-06-02.

- One day training programme on Implementing Quality Management System in Colleges Based on ISO 9000:2000 Standards organized by Sree Chithira Thirunal College of Engineering Trivandrum on 28th January 2006.
- One day seminar on Wavelets and Coding Theory organized by T K M College of Engineering on 31st January 2006.
- Attended the UGC sponsored one day Workshop on Hidden Markov Models on 7 th October 2006 conducted by University of Kerala.
- Three day workshop on Applications of Applications of Digital Signal Processing held at Amrita Viswa Vidya Peetham, Ettimadai, Coimbatore from 28-03-07 to 30-03- 07.
- Attended the training programme TETE-07 on Teaching Effectiveness in Technical Education from 27th -29th June 2007 organised by TKM Institute of Technology, Kollam.

#### **PUBLICATIONS- INTERNATIONAL JOURNAL**

- Published a paper titled “Mitigation of Dual Doppler shifts in SIMO OFDM based Aeronautical Communications using Direction of Arrival” in International Journal of Advanced Research Trends in Engineering and Technology, Vol II, Special Issue XXV, April 2015, along with Anjitha .M.
- Published a paper titled “An ICI Reduction Scheme for OFDM Systems in Time- Varying channels” in International Journal of Advanced Research Trends in Engineering and Technology, Vol II, Special Issue XXV, April 2015, along with Saranya. V.
- Published a paper titled “Reliable Hydra SSD Architecture for General Purpose Controllers” in International Journal of Modern Engineering Research, Vol 4, Issue 2, February 2014.
- Published a paper with title “Mitigation of channel impairments due to noise and Raleigh fading channel in an MIMO-OFDM system” in International Journal of Imaging and Robotics- 2011 Spring Vol.5, Number S11 pp 80-94.
- Published a paper with title “Signal to Noise Ratio improvement in a Zero Forcing MIMO Channel under Deep Fading Conditions” in International Journal of Communication Engineering Applications Vol.2, Issue.2, 2011pp102- 111.
- Published a paper with title “Performance comparison of decoding algorithms used in MIMO-OFDM Systems while combating channel impairments ” in International Journal of Emerging Technologies 2(2) pp 106-113 2011.

#### **INTERNATIONAL CONFERENCE:**

- Presented a paper titled as “An Opportunistic Relaying Technique In Cooperative networks Under Deep Fading Conditions” in International conference on Recent Advances in Engineering, Science and Technology organized by Noorul Islam University, Kumarakoil, Tamilnadu on 17th April 2015.

- Presented a paper titled as “Performance Improvement of Bit Interleaved Coded Multiple Beam formed MIMO-OFDM” in International conference on Recent Advances in Engineering, Science and Technology organized by Noorul Islam University, Kumarakoil, Tamilnadu on 17th April 2015.
- Presented a paper titled as “Estimation and Mitigation of Dual Dopplershift in OFDM Based Aeronautical Communications” in International conference on Advances in Computer and Electronics World organized by TKM Institute of Technology, Kollam, Kerala on 26th and 27th March 2015,.
- Presented a paper titled as “A Robust OFDM Receiver for ICI Mitigation in Time varying Channel” in International conference on Advances in Computer and Electronics World organized by TKM Institute of Technology, Kollam, Kerala on 26th and 27th March 2015.
- Presented a paper titled as “QoS Guaranteed Resource Scheduling for High Speed Broadband Communication” in Inter National Conference on Emerging Trends in Engineering and Technology, organized by Travancore Engineering College, Oyoor, Kollam on 31st March and 1st April 2014.
- Presented a paper titled as “Performance Improvement in a MIMO Channel In Deep Fading Conditions ” in Inter National Conference, organized by BMC College of Engineering, Sasthamcotta, Kollam on 25th and 26th March 2011.
- Presented a paper titled as “Reduction of bit error rate in wideband communication systems by using forward error correction codes” in Inter National Conference, on Advances in Information, Communication Technology and VLSI Design organized by PSG College of Technology, Coimbatore on 6th and 7th August 2010.
- Presented a paper titled as “PAPR Reduction in OFDM with Optimum Bit Error Rate” in Inter National Conference, on Emerging Adaptive Systems and Technologies organized by Noorul Islam College of Engineering Kumaracoil on 25th to 27th October 2007.

#### **NATIONAL CONFERENCE:**

- Presented a paper titled as “Design and Performance Analysis of Burst and Random Error Correcting Codes” in first National Conference on Recent Advances in Industrial Networks organized by Department of Electronics and Instrumentation in Noorul Islam College of Engineering Kumaracoil on 17th and 18th March 2005, ISBN 55857.
- Presented a paper titled as “Performance Analysis of Turbo Coded CDMA system” in National Level Conference & Seminar on Signals, Systems and Communication organized by Department of Electronics and Communication Engineering in Jayam College of Engineering and Technology, Dharmapuri on 27th and 28th March 2006, ISBN 55857
- Presented a paper titled as “OFDM-PAPR Reduction Scheme” in third National Conference, NATCON-07 organized by Department of Electronics and Communication in Noorul Islam

College of Engineering Kumaracoil on 8th and 9th February 2007, ISBN 55857

- Presented a paper titled as “Peak to Average Power Reduction of OFDM Signal by Spectral Masking” in National Conference on VLSI and Communication, organized by Department of Electronics and Communication in SAINTGITS College of Engineering Kottayam on 16th and 17th March 2007.

#### **RESOURCE PERSON**

- Delivered a talk in National Conference at College of Engineering Trikaripur on 8<sup>th</sup> and 9<sup>th</sup> March 2017.
- Chaired a session in National Conference at College of Engineering Trikaripur on 8<sup>th</sup> and 9<sup>th</sup> March 2017.
- Chaired a session in National Conference at College of Engineering Vadakara on October 2016.
- Acted as Resource person for a FDP at LBS College of Engineering for Women, Poojappura on June 2015.
- Chaired the communication systems session in International Conference at TKM Institute of Technology Karuvelil Kollam on March 2015.
- Acted as Resource person for a FDP at College of Engineering Thalassery on September 2015.
- Chaired the communication session track on International Conference held at Amal Jyothi College of Engineering Kanjirapally on 24 to 26 July 2014.
  - Question paper setter- Cochin University for Science and Technology.
  - Scrutiny committee member- APJ Abdul Kalam Technological University
  - PhD Thesis reviewer.
  - APJ Abdul Kalam Technological University External Academic Auditor.
  - AICTE Expert Panel Member.

#### **MEMBERSHIP IN PROFESSIONAL BODIES**

ISTE Life Member

#### **FIELD OF INTEREST**

- Digital Communication
- Wireless Communication
- Information Theory and Coding

I hereby declare that the details furnished above are true and correct to the best of my knowledge and belief

