

# COCHIN UNIVERSITY OF SCIENCE AND TECHNOLOGY

## FACULTY DATABASE

### INFORMATION DATA SHEET FOR FACULTY MEMBERS

(Filled forms please send to registrar@cusat.ac.in)

(INSERT ADDITIONAL ROW(S) WHERE EVER NECESSARY)

<b>Name:</b>	Dr. JAMES KURIAN
<b>Department :</b>	Electronics
<b>Contact Details</b>	
<b>Address for communication</b>	Professor, Department of Electronics, CUSAT, Kochi, 682022
<b>Email</b>	<a href="mailto:james.cusat@gmail.com">james.cusat@gmail.com</a>
<b>Phone</b>	Mob. No. 9447291196
<b>Intercom</b>	2526
<b>1. Academic Background</b>	
Qualifications:	
Qualifying Post Graduate Degree:	M. Tech., Digital Electronics, Cochin University of Science and Technology, India.
Ph. D with NET	
Ph. D without NET	Cochin University of Science and Technology, India.
Post Graduate Degree(s)	M.Sc (Physics- Solid State Electronics)-Kerala University, M. Tech., Digital Electronics, Cochin University of Science and Technology, India.
Under Graduate Degree(s):	B. Sc, Physics, Kerala University.
Any other PG degree/ Diploma relevant to the subject:	

Signature (in Hard Copy Only)

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<b>2. Research Performance</b>						
<b>2.1</b>	Each published /accepted paper in Journal/conferences					
<b>Sl. No</b>	<b>Authors (As published in the paper)</b>	<b>Title</b>	<b>Journal</b>	<b>Year</b>	<b>Volume</b>	<b>Page No</b>
1	Theresa Bernard, Midhun M.S and James Kurian	An Embedded Ethernet Based Remote Monitoring/Control of Robot Arms	<i>National Conference on Emerging Trends In VLSI, Embedded System, Opto-Electronics &amp; Signal Processing</i>	2015		28-31
2	James Kurian and P.R. Saseendran pillai	An Encoded Infrared Sheet of Light Beacon System for Precise Localization of Indoor Mobile Robot Vehicles	<i>Journal of Automation, Mobile Robotics and Intelligent Systems</i>	2009	3	34-41
3	James Kurian and P.R. Saseendran pillai	A DISLiB based Natural Language Guiding System for Assisting Visually Impaired in Indoor Structured Environment	<i>Journal of Technology and Disability</i>	2009	21	35-42
4	James Kurian and P.R. Saseendran pillai	Realization of an FPGA Sub System for Reducing Odometric Localization Errors in Wheeled Mobile Robots	<i>Journal of Automation, Mobile Robotics and Intelligent Systems</i>	2009	3	26-33

5	James Kurian and P.R. Saseendran pillai	An Infrared Sheet of Light Beacon Based Intelligent Traffic and Transport Control system	<i>International Review of Automatic Control</i>	2008	1	258-262
6	James Kurian and P.R. Saseendran pillai	Design and Realization of a Web Based Controller for Laboratory Robot Manipulator	<i>National Conference on Machine Intelligence</i>	2008		141-145
7	James Kurian and P.R. Saseendran pillai	An FPGA Sub System for Terrain Irregularity Corrections by Reducing Odometric Localization Errors in Wheeled Mobile Robots	<i>National Conference on Machine Intelligence</i>	2008		285-293
8	Binu George, Anand Raj, M.H. Supriya, James Kurian and P.R. Saseendran pillai	Doppler Compensated Underwater Acoustic Communication System	<i>The Journal of the Acoustical Society of America</i>	2004		2507
9	Anil Kumar.C.P., Sajith.N.Pai, Soniraj.N., Supriya.M.H., James Kurian, Madhavan.C. and Saseendran Pillai.P.R	An Echo Analysis Technique for Estimating the Fish Population	<i>The Journal of the Acoustical Society of America</i>	2004		2584
10	Anil Kumar C.P., Sajith N Pai, Soniraj N, P.R.Saseendran Pillai,James Kurian, C Madhavan, Supriya M.H, & T.K.Mani	Studies on Geometrical Backscattering Models of Marine Bodies	<i>145<sup>th</sup> Meeting of the Acoustical Society of America</i>	2003		157-161

11	T.K.Mani, P.R.Saseendran Pillai, James Kurian & Supriya M.H	Rain Parameter Estimation Using Impact Generated Low Frequency Acoustic Signals	<i>145th Meeting of the Acoustical Society of America</i>	2003		
12	James Kurian and P.R. Saseendran pillai	Design and Development of a remotely operated underwater multi-robot manipulator controller	<i>Oceans 2003 Marine Technology and Ocean Science Conference</i>	2003	1	355
13	Binu George, Anand Raj, M.H. Supriya, James Kurian and P.R. Saseendran pillai	Development of a spread spectrum communication system for underwater telemetry applications	<i>National Symposium on OCEAN ELECTRONICS</i>	2003		55-61
14	Sajith N. Pai, C.P.Anil Kumar. N. Soniraj, S. Balu, M.H. Supriya, James Kurian C. Madhavan and P.R. Saseendran pillai	Backscattering models of Sardines	<i>National Symposium on OCEAN ELECTRONICS</i>	2003		146-149
15	Anil Kumar.C.P., Sajith.N.Pai, Soniraj.N., Balu.N., Supriya.M.H., James Kurian, Madhavan.C., and Saseendran Pillai.P.R	Development of an Algorithm for Biomass Estimations	<i>National Symposium on OCEAN ELECTRONICS</i>	2003		150-156.

16	C.P. Anil Kumar, Sajith N. Pai, N. Soniraj, S. Balu, M.H. Supriya, James Kurian C. Madhavan and P.R. Saseendran pillai	Numerical analysis for geometrical backscattering of selected marine specie	<i>National Symposium on OCEAN ELECTRONICS</i>	2003		157-161
17	Mariamamma Chacko, James Kurian, P.R.S. Pillai, and Paulose Jacob	An onboard operation support Information system and data logger for sea going vessels with an Ethernet interface	<i>Journal of Shiptechnic</i>	2002	18	85 – 94
18	James Kurian, K. G. Balakrishnan, and K.G. Nair	A PC Based Non-Destructive Microwave Imaging System for Detection of Flaws/Defects in Non-Metallic Media	<i>National Conference on Technology Convergence for Information Communications &amp; Environment</i>	2001		213-220
19	James Kurian, Supriya M.H & P.R.S. Pillai	Design and Implementation of a Computer Controlled Transducer Positioning system for an acoustic Underwater Test Facility	<i>National Conference on Technology Convergence for Information Communications &amp; Environment</i>	2001		221-224
20	James Kurian, Supriya M.H and P.R.S. Pillai	Development of an Automated Transducer Positioning System for an Underwater Test Facility	<i>National Symposium on OCEAN ELECTRONICS</i>	2001		84-88
21	Anil Kumar C.P, Sajith N Pai, Soniraj, James Kurian, Supriya M.H, C Madhavan, and P.R.S. Pillai	Studies of Target Strengths of Fishes Under Captive Conditions	<i>National Symposium on OCEAN ELECTRONICS</i>	2001		124-129

22	Mariamamma Chacko, James Kurian, and Paulose Jacob	Design and Implementation of a Microcontroller Based Onboard Cockpit Display and Data Logger for Sea Going Small Crafts	<i>SMART 2000, International Conference on SHIP AND MARINE -TECHNOLOGY</i>	2000		123-130
23	James Kurian, K.G. Balakrishnan, and K.G. Nair	A Simple Regulated Power Supply for Characteristics Studies of Klystron Oscillators	<i>Journal of Physics E: Meas. Sci. Technol.</i>	1992	3	1146-1148
24	P. Ramakrishnan, James Kurian and K.G Balakrishnan	Dynamic Characteristic And Transmission Studies of Ferroelectric Liquid Crystal : 4'(n-Octyl benzoxyloxy)-4-(2-Octyloxy)-biphenyl	<i>FERROELECTRICS</i>	1991	113	395-403
25	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair	Microwave Non-Destructive Flaw/Defect Detection System for Non-Metallic Media Supported by Microprocessor Based Instrumentation	<i>Indian RUBBER &amp; PLASTICS AGE</i>	1991	27	43-48
26	James Kurian, Ajayakrishnan V, Santhosh Arvind, Gopikakumari R and Sridhar C.S	Modeling and Processing of Sonar Echo Supported by an Efficient Data Base management System	<i>National Symposium on OCEAN ELECTRONIC</i>	1991		76-78
27	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair	Microwave Non-Destructive Flaw/Defect Detection System for Non-Metallic Media Supported by Microprocessor Based Instrumentation	<i>RUB-PLAS-91, seminar on Rubber and Plastics.</i>	1991		43-48

28	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair, Nair,	Microwave Non-Destructive Flaw/Defect Detection System for Non-Metallic Media Supported by Microprocessor Based Instrumentation	<i>International Journal of Microwave Power and Electromagnetic Energy</i>	1989	24	74-78
29	James Kurian and K.G Balakrishnan	Under/Over Voltage Protection Circuit With Delay	<i>Electronics For You</i>	1989		97-98
30	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair	Microwave Non-Destructive Flaw/Defect Detection System For Non Metallic Media Backed Up by a Microprocessor based Instrumentation	<i>Proceedings of the First KERALA SCIENCE CONGRESS</i>	1989		325-327
31	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair	A Novel Instrumentation for Flaw/Defect Detection Using Microwaves	<i>National Seminar on Instrumentation. Department of Physics, Cochin University of Science and Technology, Cochin</i>	1989		7
32	P. Ramakrishnan, James Kurian and K.G Balakrishnan	Ferroelectric Liquid Crystals For a Better Dynamic Display	<i>NACONES-89, National Conference on ELECTRONICS CIRCUITS and SYSTEMS</i>	1989		160-162
33	James Kurian P. Ramakrishnan and K.G Balakrishnan	Microprocessor Interfaced Noiseless Heater Power Controller	<i>National Symposium on Instrumentation (NSU-13), Mysore</i>	1988		25-28

34	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair	An Instrumentation for Flaw / Defect Detection in Tyres	<i>National Symposium on Instrumentation (NSU-13), Mysore</i>	1988		25-28
35	James Kurian, K.A. Jose, K. G. Balakrishnan, and K.G. Nair	Microprocessor Based Microwave Non- Destructive Testing System For Non- Metallic Media	<i>National Seminar on Microwave Propagation &amp; Antennas</i>	1988		

2.2	Text Books / Reference Books/subject books/monograph/Chapters of Books Published				
SI No.	Title with ISBN Number	Publisher with Place of Publication			Year
1.					
2.					

2.3	Patents / Technology transfer/Product/Process:				
2.3.1	Each patent awarded				
SI No.	Title	Sanction Number			Year
1.					
2.					

2.3.2	Each Technology transfer through Central / State / University / Quasi Government agencies.				
SI No.	Name of Technology transfer	Agency			Year



1.					
2.4	Externally Funded Research / Consultancy Projects through University / Institution (Both completed and Ongoing Projects):				
Project Cost in Lakhs	SI No.	Title	Funding Agency	Amount & Duration	Principal investigator/ Co-investigator
	1.	Two-Wire Robot Controller Network	UGC Minor Project	Rs 15000/- 3 Years	Principal investigator
	2.	PC Based Advertisement Displays	Consultancy	1.755 Lakhs 1 Year	Principal investigator
	3	Development of algorithms for spread spectrum underwater communication systems	NPOL, Kochi -21 (completed)	4.991 Lakhs 1 Year	Co-investigator
	4	Development of algorithms for Fish and DSL biomass estimation	Department of Ocean Development	69.11 Lakhs 1 Year	Co-investigator
	5	Design and Implementation Of Multiple CDMA Communication System	NPOL, Kochi -21	4.996 Lakhs 1 Year	Co-investigator
	6	Pilot study on Computerized Golf Course irrigation and Remote Monitoring/Control system	Consultancy	Rs.50000/- 1 Year	Principal investigator

2.5	Research Guidance :				
2.5 (a)	Ph D – Degree Awarded				
SI No.	Title	Name of co-guides (if any)	Name of student	University	Year
1.					
2.					
3.					

2.5 (b)	Ph D – Thesis submitted				
SI No.	Title	Name of co-guides (if any)	Name of student	University	Year
1.					
2.					
3.					

2.6	Awards / Medals / Fellowships Academic Recognitions:	
Award	Particulars	
1. RUBPLAS 91 EXCELLENCE AWARD FOR PROCESS INNOVATION	For Non-Destructive testing of automobile tyres	

2.7	Organiser / Convenor of International / National Conferences / Symposia / Seminars:			
	SI No.	Title and year	Chief organiser/ Convener	Co-organiser/ co-convener
International Level	1			
	2			
National Level	1			
	2			

<b>3</b>	Assessment of Domain Knowledge				
<b>3.1</b>	<b>Experience</b> Additional Teaching / Industrial Experience after obtaining minimum eligibility criteria for the particular post (Only Full-time teaching assignments and/ Industrial Experience not below the rank of Lecturer in UGC/AICTE approved institutions/ Assistant Manager / Officer in a public / multi-national Company, after obtaining the minimum educational qualifications for this post)				
	SI No.	Institution	Post held	Period (from ... to..)	No. of years
University PG Level	1.				
	2.				
University	1.				

UG/College level	2.				
Industrial Experience	1.				
	2.				

<b>3.2</b>	<b><i>Additional Research Experience after Ph. D</i></b>				
	<b>Institution</b>	<b>Post Held</b>	<b>Period</b>	<b>No. of years</b>	
Post-Doctoral Research					
Design of Experiments for P. G. Level laboratory course					
Maintenance and operations of sophisticated equipments					
(In the case of Teachers who are also doing research work, their teaching experience alone will be counted – credit for both teaching and research will not be awarded concurrently)					

<b>3.3</b>	<b><i>Academic / Administrative Experience (give particulars):</i></b>				
3.03 (a)	<i>Administrative experience:</i>				
SI No	<b>Post Held</b>	<b>Period</b>	<b>No. of years</b>		
1					

3.03 (b)	Academic experience (Member, Board of studies, Academic council / Faculty etc.)				
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SI No	Positions held	Period	No. of years
Participation in Training Programs/Workshop/Summer Winter-Schools, (organized by Govt. agencies/ UGC/AICTE, ICTP or similar International Organisations) :			
3.04			
Duration of Course	Title	Agency	Period
1 day	Disaster Management with special emphasis on Amateur Radio	Technical Education Quality Improvement Programme organized by Model Engineering College, Thrikkakara, Cochin	30 <sup>th</sup> September, 2005
2 days	Emerging Trends in software Engineering	Department of Computer Science, Cochin University of Science and Technology, Cochin	24-25, May 2010
2 days	Emerging Trends in Machine Intelligence	Haryana Engineering College	22-23 August 2008.
11 days	Modelling and optimization Techniques in Engineering	Sponsored by ISTE , Organized by SoE, CUSAT	18-29 October 2010
12 days	Emerging Trends in IT and its Applications	Sponsored by ISTE , Organized by SoE, CUSAT	1-12 November 2010

**Declaration**

I, Dr.James Kurian .....have read the notification and all other related instructions. All information and data furnished above are true to the best of my knowledge and belief.

Place: Kochi 22  
Date: 20-07-2015

**Signature**