Year 2020

#### 1 General Information

Dr. George James T
Kanjirakombil, karikode, Thodupuzha East P
O, Iduuki , Kerala
geojt3@gmail.com
04862228502
Associate Professor & HOD
Physics, Nirmala college, Muvattupuzha
Nano Device Simulation

# 2 Academic Qualification:

Exam	Board/ University	Subjects	Year	Division
Passed				
MSc	Pondicherry University	Physics	1990	
MPhil	Pondicherry University	Condenced Matter	1991	
		Physics		
PhD	Mahatma Gandhi Univer-	Nano Device Simulation	2012	
	sity			

# **3** Research Experience and Training:

Research Stage	Title of Work/ Theses	University where the work caried out
MPhil	Lattice Dynamics	Pondicherry University
PhD	Nano Device Simulation	Mahatma Gandhi University

## 4 Membership in Academic Bodies

Sl.No.	Activity	Period
1	Member, Academic Council	M G University Kottayam 2014 - 17
2	Member, BOS (UG)	M G University Kottayam 2014 -17
3	Member of Special Vigilance Squad of	M G University Kottayam, 2012-14
	Teachers, Idukki Zone,	
4	Member of Subject expert panel for	M G University Kottayam 2013 -17
	the recruitment of College Lecturers in	
	Physics,	
5	Member of Expert committee for re-	M G University Kottayam 2013-14
	view CBCSS Pattern,	
6	General Convenor Carrier oriented	M G University Kottayam 2013 onwords
	Add-On course	

# 5 Research Publications

- George James T, Saji Joseph and Vincent Mathew, "Eect Of Channel Layer Doping On The Performance Of Nanoscale DG MOS- FETs," Proce. Intl. Conf. On Emerging Trends In Electronic And Photonic Devices And Systems, Electro 2009, Bhu, pp. 50-54, 2009.
- George James T, Saji Joseph and Vincent Mathew, "Reduction of o-state Leakage Current on Fully Depleted DG-MOSFETs," in Proce. International Conference on Emerging Trends in Electronic and Photonic Devices and Systems (Electro 2009), Bhu, pp.151-154.
- T. George James, Saji Joseph, and Vincent Mathew, "Simulation of High– Dielectrics in Counter Doped Double Gate Metal Oxide Semi- conductor Field Eect Transistors," Journal of Nanoelectronics and Optoelectronic, vol.5, pp. 43-49, April 2010.
- 4. George James T, Saji Joseph and Vincent Mathew, "Eect of Counter- Doping Thickness on Double-Gate MOSFET Characteristics," Journal of Semiconductor Technology and Science, vol.10, no. 2, pp. 130-133, June 2010.
- 5. George James T, Saji Joseph, and Vincent Mathew, "Short Channel Eects In Counter Doped Nanoscale Double-Gate Mosfets," Research Lines, vol.3, no.1, pp. 19-26, June 2010.

- 6. George James T, Saji Joseph, and Vincent Mathew, "Structural Optimization Of Si Channel Thickness in Sub 25 nm Depleted DG- MOSFETs," Beselius Reseacher, vol.1, no.2, pp. 178-186, June 2010.
- George James T, Saji Joseph and Vincent Mathew, "Simulation of Short Channel Eects in Double-Gate MOSFETs for Nanoscale De- sign," International Conference on Synthesis, Characterization, Con- solidation and Modeling of Nanomaterials (ICON 2010),"Coimbatore, 5-6 March 2010.
- George James T, Saji Joseph and Vincent Mathew, "Reduction of Short Channel Eects in Nanoscale MOSFETs with High- Di- electrics," International Conference on Nanomaterials: Synthesis, Characterization and Application (ICN)," MG University, 27-29 April 2010.
- 9. George James T, Saji Joseph and Vincent Mathew, "The Inuence of Metal Gate Work Function on Short Channel Eects in Atomic layer Doped DG MOSFETs," Journal of Electron Devices, Vol. 8, pp. 310-319, 2010.
- 10. Saji Joseph, T. George James and Vincent Mathew, "Threshold Voltage Control through Layer Doping of Double Gate MOSFETs", Journal of Semiconductor Technology and Science, vol.10, No.3, pp. 240-250, September, 2010.
- T. George James, Saji Joseph, and Vincent Mathew, "Inuence of Channel Layer Doping on Nano Double Gate MOSFETs", Proc. International Conference on Nanomaterials & Nanotechnology (NANO-2010), Coimbatore, India, Macmillan Publication (ISBN 023-033-193-9:9 780230 331938) ,13 - 16, December 2010.
- T. George James, Saji Joseph, and Vincent Mathew, "Transport Characteris- tics and Subthreshold Behavior of High-Dielectric Double Gate MOSFETs with Parallel Connected Gates", Journal of Electron Devices, vol.16, pp. 1363-1369, December, 2012.

#### 6 Teaching Experience:

Total Teaching Experi-	26 years
ence (as on $27-1-2020$ )	

#### Teaching Methodology

Interactive methods for teaching are adopted. For eg. disscussion, Question-anwser, power point presentaions methods are used.

Laboratory Experiment: Guiding students to Overall devlopment of skill, accuracy and understanding subjects are improvised by computer simulations.

Evaluation Methods : Continous evaluation method adopted

Preparation of resource material : Preparation of question bank, Preparation of teaching plan as per syllabus, preparation of teaching notes for newly introduced topics from journals, books and internet.

Remedial Teaching / Students Counselling: Special coaching assistance given to academically backward students.

## 7 Involment of Academic activities

Coordinated the starting, course design and curriculum offering of a Add on Course in Electronic equipment maintenance in the Dept of Physics, Nirmala College, Muvattupuzha

Coordinated the course design and curriculum offering of a Add on Course in ROBOTICS and AI association with dcs robotics, ekm in the Dept of Physics, Nirmala College, Muvatupuzha 2020

coordinated GANDHI GLOAL SOLAR YATRA 2019 and HANDS-ON training for solar led lamp assembling given to around 700 students near by schools, Muvatupuzha in the physics department laboratory.

Signature of the Faculty

Dr George James T (Signature of HOD)