

**Dr. MONISHA P J**  
Department of Physics  
St. Pius X College Rajapuram, Kallar-671532  
Email: [pjmonisha@gmail.com](mailto:pjmonisha@gmail.com)  
Phone No: 9400449258.



## CURRENT STATUS AND WORK EXPERIENCE

---

Working as a guest lecturer in St. Pius X College, Rajapuram from 1<sup>st</sup> June 2018 onwards.

### Research

- ☞ PhD from School of Physics, University of Hyderabad.
- ☞ Area of research: Condensed Matter Theory. (The polaronic effects on low-dimensional systems : Luttinger liquid, Hubbard ring, Quantum dots.)

### Teaching

- ☞ Worked as a guest lecturer in BCM college, Kottayam from 1<sup>st</sup> June 2017 to 31<sup>st</sup> March 2018.
- ☞ Worked as an assistant professor at Dr. Ambedkar Arts & Science College, Periya, Kasargod from 1<sup>st</sup> June 2016 to 31<sup>st</sup> March 2017.

## PUBLICATIONS

---

- ☞ **Monisha P.J**, S. Mukhopadhyay and A. Chatterjee, “Exact distribution function of a one-dimensional Frohlich-Toyozawa-Luttinger Liquid”, *Solid State Communications* **166**, 83-86 (2013).
- ☞ **Monisha P.J** and S. Mukhopadhyay, “The Pinning effect in a Gaussian quantum dot: A study using the Improved Wigner-Brillouin Perturbation theory”, *Physica B* **464**, 38–43 (2015).
- ☞ **Monisha P.J**, I.V. Sankar, S. Sil and A. Chatterjee, “Persistent Current in a correlated quantum ring with electron-phonon interaction in the presence of Rashba interaction and Aharonov-Bohm flux”, *Scientific Reports* **6**, 20056 (2016).
- ☞ I.V. Sankar, **Monisha P.J**, S. Sil and A. Chatterjee, “Persistent current and the existence of a metallic phase flanked by two insulating phases in a quantum ring with both electron–electron and electron–phonon interactions”, *Physica E* **73**, 175–180 (2015).

- ∞ **P.J Monisha**, Soma Mukhopadhyay and Ashok Chatterjee, “The momentum distribution function of a Luttinger liquid”, *AIP Conference Proceedings 1512*, 834(2013).
- ∞ **P.J Monisha** and Soma Mukhopadhyay “ The Pinning Effect in Quantum Dots ”, *AIP Conference Proceedings 1591*, 1135 (2014);
- ∞ **Monisha P.J**, I.V. Sankar, S. Sil and A. Chatterjee, “Effects of Spin-Orbit Interaction on Persistent Current in a Nano Ring”, *Materials Today: Proceedings 2*, 4495 – 4498 (2015).

## CONFERENCES

---

### Presentations

- ∞ Presented a paper in the ‘*International Conference on Nanotechnology-2019 Opportunities and Challenges*’ held at Mangalore (2019).
- ∞ Presented a paper in the ‘*National Seminar on Nanomaterials-Synthesis and Characterization*’ held at Edathala, Aluva (2018).
- ∞ Presented a paper in the ‘*National Seminar on Advances in Applied physics and Applications*’ held at Guruvayur, Kerala (2018).
- ∞ Presented a paper in the ‘*International conference on Nano Science and Engineering Applications-2014*’, held at JNTU Hyderabad (2014).
- ∞ Presented a paper in the ‘*58<sup>th</sup> DAE-Solid State Physics Symposium*’, held at Patiala (2013).
- ∞ Presented a paper in the ‘*57<sup>th</sup> DAE-Solid State Physics Symposium*’, held at IIT Mumbai (2012).
- ∞ Presented a paper in the ‘*National Conference on Frontiers in Physics*’, held at HCU, Hyderabad (2012).

### Participation

- ∞ Participated in ‘*Science Academies’ Lecture Workshop on Magnetism*’ held at Dept. of Physics, B.C.M College, Kottayam (2018).
- ∞ Participated in the two days ‘*National Seminar on Recent Trends in Alternate Energy-2017*’, held at Dept. of physics, Govt. College Kottayam (2017).
- ∞ Participated in the ‘*India-Singapore Joint Symposium-2010*’, held at HCU (2010).

## COMPUTER KNOWLEDGE

---

- ∞ Programming languages like FORTRAN, C, MATHEMATICA and MATLAB
- ∞ Softwares like MS-Office, ORIGIN and LINUX.

## EDUCATIONAL QUALIFICATIONS

---

- ∞ **Ph.D. Physics** [2016]: School of Physics, University of Hyderabad, India
- ∞ **M. Sc. Physics** [2007]: University Campus, Calicut University, Calicut, India  
*Class: First class (78%)*
- ∞ **B. Sc. Physics** [2005]: Providence College, Calicut University, Calicut, India  
*Class: First class (95%)*
- ∞ **Plus Two** [2002]: Board of Higher Secondary Education, Govt. of Kerala  
*Class: First Class (80%)*
- ∞ **S.S.L.C** [2000]: Board of public Examination, Govt. of Kerala  
*Class: First Class (91%)*

## PERSONAL INFORMATION

---

Name	:	Monisha P J
Husband's Name	:	Bibin P A
Date of Birth	:	11-04-1985
Sex	:	Female
Nationality	:	Indian
Languages known	:	English, Malayalam
Address for Communication	:	Puthusseril (H), Rajapuram (P.O), Kallar, Kasaragode-671532, Kerala, India.
Permanent Address	:	Pookumbel (H), Perickalloor (P.O) Pulpally, Wayanad, 673579, Kerala, India.

## DECLARATION

---

The Particulars given above are true to the best of my knowledge

Monisha P J