

MINIDU MANORANJANA PUNYA SRI KODIKARA

mmps19910618@gmail.com

0094-711911201 (cell)

Lecturer (Probationary), Department of Physical Science, Faculty of Applied Science,
Trincomalee Campus, EUSL, Trincomalee, Sri Lanka



Education

B.Sc – Physics (GPA = 3.59/4.00)

April 2016

University of Jaffna, Sri Lanka

M.Sc – Physics of Material

July 2019 – Present

University of Peradeniya, Sri Lanka

Teaching Experience

Assistant Lecturer / Laboratory Demonstrator (April 2016 – April 2018)

Department of Physics, University of Jaffna, Sri Lanka

- Teaching ‘*Electromagnetism*’ and ‘*Electronics*’ to Physics major students
- Tutorial discussion for ‘*Statistical Physics*’, ‘*Thermal Physics*’ and ‘*Laser Physics*’
- Laboratory teaching for freshman, sophomore and junior classes
- Grading laboratory reports and mid-term exams for General-Physics and College-Physics courses

Assistant Lecturer (April 2018 – August 2019)

Department of Physical Science, Faculty of Applied Science, Trincomalee Campus, Eastern University.

- Teaching and tutorial discussion for ‘ Analogue Electronics, Elementary Quantum Mechanics, Solid State Physics, Waves and Vibration, Physical Technics for Industry, Statistical Physics and Linear Integrated Circuit To Physical Science Students.
- Laboratory in charge for sophomore
- Preparing End of Course Examination paper for freshman, sophomore and Junior classes
- Grating mid-term exam, End of Course Exam and laboratory report for Physical Science Students

Lecturer (Probationary) (August 2019 – present)

Department of Physical Science, Faculty of Applied Science, Trincomalee Campus, Eastern University

- Teaching and tutorial discussion for ‘ Classical Mechanic, Elementary Quantum Mechanics, Solid State Physics, Waves and Vibration, Physical Technics for Industry, Statistical Physics and Introduction to Cosmology and Astronomy To Physical Science Students.
- Laboratory in charge for sophomore
- Preparing End of Course Examination paper for freshman, sophomore and Junior classes
- Grating mid-term exam, End of Course Exam and laboratory report for Physical Science Students

Research Experience

Senior Project (April 2015 - April 2016)

Department of Physics, University of Jaffna, Sri Lanka

- Worked collaboratively with Norwegian University of Applied Sciences to enhance the performance of nanoporous TiO₂ solar cells using CdS and P3HT co-sensitizers
- Fabricated TiO₂ hybrid polymer solar cells with interface modifiers and measured their efficiencies
- Studied CdS deposition in hybrid solar cells by 'Chemical bath deposition' method and performed UV-Visible and I-V characterizations
- Mentored undergraduate seniors for performing their senior projects on solar cells

Experience with Experimental Apparatus

- **UV-Visible Spectrophotometer:** Jenway 6800 model UV-Vis with a resolution of 2 nm
- **Thermal Evaporator:** Edwards E306A thermal evaporator with AUTO 306 vacuum coater
- **Solar Simulator:** Science-Tech Solar Simulator with AM 1.5G filter
- **Pulsed Laser:** Ultra CFR Nd:YAG Laser (540 nm and 30 μJ)
- **Spin Coater:** Spin Coater - Laurell Technologies Corporation (Model WS-400B-6NPP/LITE)

Publication

Thanihaichelvan, M.; **Kodikara, M.M.P.S.**; Ravirajan, P.; Velauthapillai, D. Enhanced Performance of Nanoporous Titanium Dioxide Solar Cells Using Cadmium Sulfide and Poly (3-hexylthiophene) Co-Sensitizers. *Polymers* **2017**, *9*, 467

Scholarships and Awards

'Ramalingam Veerasingham Memorial Prize - 2016' for the best performance in core-physics courses (Quantum Mechanics, Electrodynamics, Statistical Mechanics and Classical Mechanics), University of Jaffna, Sri Lanka

Scores on TOEFL Test

Reading	16
Listening	23
Speaking	22
Writing	17
Total	78
Quantitative reasoning	152
Verbal reasoning	130
Analytical writing	2.0

Scores on GRE General Test

Computer Skills

Labview, Matlab, Origin and MS Office (Word, Excel, Power Point and Access)

Professional Societies

Member, Physics Society, University of Jaffna, Sri Lanka

(May 2014 – present)

Coordinator, Career Guidance Program, Department of Physical Science

(September 2019 – present)