



**Department of Physics**  
**Faculty of Science / University of Peradeniya**



**Dr. B.S. Dassanayake**

*B.Sc. (Perad.), Ph.D. (Western Michigan, USA)*

**Senior Lecturer**

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**Higher Education Qualifications**

🎓 **PhD**

Western Michigan University - USA  
(2011)

🎓 **BSc**

University of Peradeniya - Sri Lanka  
(2004)

## Awards, Scholarships, Memberships & Fellowships



NSF Research Award for the Best Research Work in Basic Sciences - 2018



President's Award for Scientific Publications, Sri Lanka (2013)



George E. Bradley Award for exceptional performance in all aspects of graduate work in Physics, Western Michigan University, Kalamazoo, Michigan, USA (2011)



All University Graduate Research and Creative Scholars Award, Western Michigan University, Kalamazoo, Michigan, USA (2011)



Leo R. Parpart scholarship for outstanding research, Western Michigan University, Kalamazoo, Michigan, USA (2011)



Gwen Frostic Scholarship for outstanding research, Western Michigan University, Kalamazoo, Michigan, USA (2010)










Jacob DeWitt Award for Outstanding Teaching, Western Michigan University, Kalamazoo, Michigan, USA (2010)

## Positions Held

-  Deputy Project Director of Prototype Manufacturing of Solar Panels (Ministry of Science and Technology)- (2017 -)
-  Head of the Department of Environmental and Industrial Sciences- (2020 - todate)
-  Coordinator of the Applied Sciences Program (Faculty of Science)- (2019 - 2020)
-  Coordinator: MSc in Physics, Postgraduate Institute of Science, University of Peradeniya- (2014 - 2019)
-  Member: Board of Study in Physics, Postgraduate Institute of Science, University of Peradeniya- (2014 - 2019)
-  Member: Physical Education and Sports Advisory Committee, University of Peradeniya- (2016 - 2019)




## My Teachings

-  PH240: Introduction to Solid State Physics
-  PH323: Electromagnetic Waves and Communication
-  PH374: Experimental Techniques and Material Characterization
-  PH375: Introductory Nanoscience
-  PH383: Advanced Physics Laboratory I
-  PH384: Advanced Physics Laboratory II
-  PH457: Advanced Nanoscience


## Research Interests (Research Fields/ Projects)

Thin Films, CdS/CdTe Solar Cells, Nano Synthesis

## Ongoing Research and Projects

-  **Science technology and research educational training program with facilities for prototype manufacturing solar panels (Funded by Ministry of Science and Technology, Sri Lanka 2017)**
-  **Synthesis of colloidal quantum dots for Infra-red photo detection and solar cells (Funded by National Science Foundation, Sri Lanka 2017)**
-  **Phyto-fabrication of Silver Nanoparticles using Bryophytes (Funded by University of Peradeniya, Sri Lanka 2016)**

## Key Publications

 Semicon. Sci. Technol. - (2017)

A study on the enhancement of optoelectronic properties of CdS thin films: seed-assisted fabrication,

 Carbohydrate Polymers - (2020)

Synthesis of cellulose microcrystals (CMC)/nylon 6,10 composite by incorporating CMC isolated from Pandanus ceylanicus

## Conferences



Nothing to show under this subheading !!!

## My Publications

Please goto the website.

<https://sci.pdn.ac.lk/physics/staff/Buddhika-Dassanayake>