



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



**Prof. Pubudu Samarasekara**

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## About Me

I conducted my research work of semiconductor particles doped with salts under supervision of professor K. Tennakone from 1986 to 1988. Then I got involved in research of magnetic thin film preparation and characterization in CUNY in USA from 1990 to 1995 for my Ph. D. From 1995 to 1996, I continued my Ph. D research in MARTECH in FSU in USA. Thereafter, I returned to University of Ruhuna as a senior lecturer and got involved in research of preparation and characterization of semiconductor films. Meantime, I initiated a research on theoretical study of magnetic thin films. Then I joined University of Peradeniya in 2008, and conducted research in theoretical Physics and spin coated semiconductor thin films. I have supervised several M. Sc. M. Phil and Ph. D degrees.

I have taught all kind of undergraduate level Physics courses and some graduate level courses in universities in past 31 years. I had some Post doc research experiences in the department of mechanical, industrial, manufacturing engineering department in the University of Toledo in 2007.

## Higher Education Qualifications



**PhD**

City University of New York (CUNY)  
(1996)



**BSc**

University of Kelaniya  
(1985)

## Awards, Scholarships, Memberships & Fellowships



I was rewarded by presidential awards in 2001, 2002, 2003, 2006, 2007 and 2009 for my research articles published in these years



Marquis Who's Who in Asia-2007



Marquis Who's who world-2008

## Positions Held



Probationary lecturer in Ruhunu University- (1986 to 1989)



Teaching and research assistant in Queens college- (1990 to 1995)



Senior lecturer in Ruhunu University- (1996 to 2008)



Senior lecturer in University of Peradeniya - (2009 to 2013)







Professor in Physics in University Peradeniya- (since 2013)



Senior Professor- (since 21/10/2021)



## My Teachings

-  AS463: Energy; Sources, use and conservation
-  PH373: Computational Physics
-  PH380: General Physics Laboratory III
-  PH422: Magnetic materials

## Research Interests (Research Fields/ Projects)

Condensed matter theoretical and experimental Physics

## Ongoing Research and Projects

-  **Theoretical research on magnetic thin films**
-  **Synthesis of thin films semiconductors such as CuO, ZnO, CdS,-----etc using spin coating. Optical, electrical and structural characterization of thin films.**

## Key Publications



J. Appl. Phys. - (1996)

"Variable texture NiOFe<sub>2</sub>O<sub>3</sub> ferrite films prepared by pulsed laser deposition"



J. Phys. Condens. Matter - (2006)

"Sputtered Copper Oxide (CuO) thin films for Gas Sensor Devices"

## Conferences



### PGIS Research Congress

**HELD AT :** University of Peradeniya, SL - (2016)

**TOPIC :** "*Study of non-oriented ultra thin ferromagnetic films*"



### APS March meeting 2016

- (2016)

**TOPIC :** "*Micro-structure of iron in Petroselinum crispum and its dependence with the chemical nature of the soil*"



### iPURSE

**HELD AT :** University of Peradeniya - (2015)

**TOPIC :** "*Characterization of sol-gel spin coated nanocrystalline cadmium sulphide thin films*"



### SPIE Photonics west 2015

- (2015)

**TOPIC :** "*Characterization of nano-sized iron particle layers spin coated on glass substrate*"



### Nanoscience, Multidisciplinary Conference

**HELD AT :** NewYork - (2015)

**TOPIC :** "*Characterization of Iron Nano Particles using Synchrotron X-rays*"

## My Publications

Please goto the website.

<https://sci.pdn.ac.lk/physics/staff/Pubudu-Samarasekara>