Department of Physics
Faculty of Science / University of Peradeniya



Prof. Pubudu Samarasekara

B.Sc. (KLN), Ph.D. (CUNY, USA)

Senior Professor in Physics

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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)

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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

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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)

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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.**

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Key Publications

J. Appl. Phys. - (1996)

“Variable texture NiOFe2O3 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

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