Department of Chemistry
Faculty of Science / University of Peradeniya



Prof. A.D.L. Chandani Perera

B.Sc. (Perad.), M.Sc., Ph.D. (TIT, Japan)

Emeritus Professor

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Higher Education Qualifications

PhD	MSc	BSc
Tokyo Institute of Technology Japan (1990)	Tokyo Institute of Technology japan (1987)	University of Peradeniya Sri Lanka (1981)

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Awards, Scholarships, Memberships & Fellowships

- Member/Institute of Chemistry, Ceylon
- Member/SLAAS
- Member/Sri Lanka Association for the Advancement of Science
- Young Scientist Award (TWAS/NAERSA)
- The President’s Awards 2015
- National Academy of Science of Sri Lanka/Fellow

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Positions Held

- Head/Department of Chemistry- (2013 - 2015)
- Chairperson/Faculty Research Committee- (2007 - 2010)
- Chairperson/Board of Study in Science Education (PGIS)- (2007 - 2015)
- President/Alumni Association of University of Peradeniya (AAUP)- (2009 - 2011)

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My Teachings

- CH101: Principals of Chemistry I
- CH238: Physical Chemistry Laboratory I
- CH330: Advanced Physical Chemistry I
- CH331: Physical Chemistry II

Research Interests (Research Fields/ Projects)

Carbohydrate liquid crystals; Synthesis of carbohydrate liquid crystals for use as liquid crystals and surfactants and applications in drug delivery and in cosmetic industry.

Ferroelectric and Antiferroelectric liquid crystals; Study of new subphases in ferroelectric and Antiferroelectric liquid crystals.

Application of low-cost, naturally available waste material, coconut coir dust, for desalination applications, removal of hardness from natural hard water, removal of fluoride from water etc.

Chemical Education

Ongoing Research and Projects

- **Microemulsions and Pickering emulsions for drug delivery**
- **Lyotropic liquid crystals as permeation enhancers in transdermal drug delivery**
- **Subphases in ferroelectric and antiferroelectric liquid crystals**
- **Activated coconut coir for water purification**

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Key Publications

Jpn. J. Appl. Phys. - (1989)

Novel Phase Exhibiting the Tritable Switching

Liq. Crys. - (1999)

Effect of Alignment Layer on V-shaped Switching in a Chiral Smectic Liquid Crystal.

Conferences

Training Seminar on Nanotechnology and its Application

HELD AT : Institute of Chemistry - (2007)
TOPIC : *"Nanotechnology: Liquid crystals"*

National Conference on Advanced Materials for Emerging Technologies (NCAMET)

TOPIC : *"Development of materials for Smectic Liquid Crystal Displays"*

Science Scene (Noble Prize Winners), BMICH

HELD AT : Institute of Chemistry - (1999)
TOPIC : *Public Lecture on "Recent trends in liquid crystal display technology"*
Demonstrated Liquid Crystal Display in 3-days exhibition at Sri Lanka

My Publications

Please goto the website.

https://sci.pdn.ac.lk/chemistry/staff/Chandani-Perera

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