



## Department of Chemistry Faculty of Science / University of Peradeniya



### Prof. Manawadevi. Y. U. Ganehenege

*B.Sc. (Perad.), Ph.D. (Wayne State, USA)*

**Head of the Department / Professor in Inorganic Chemistry**

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### About Me

I feel strongly that a university lecturer must keep up with new developments in the field and be actively involved in ongoing research work in order to teach effectively at the university level. I always try my best to integrate my past research experiences into teaching. To keep up with the latest advances in Inorganic Chemistry, I read related scientific publications on a regular basis, review research manuscripts submitted to reputed journals, participate relevant international conferences held abroad whenever possible, actively engage in several research projects and familiarize myself with new laboratory techniques and methods. In my opinion, international academic links and research channels are crucial for upgrading educational, research and consulting assets as a value added commodity both nationally and internationally. I believe that one of the most important requirements of university education is the teacher-student relationship. I make special efforts to be available to my students at all times, as an informal mentor and an advisor, and to share my past experiences, attitudes, and values with them. I spend a substantial amount of time with the students for discussing their future career opportunities and sometimes their personal issues. Moreover, I believe this type of conduct encourages them to think about their own values, enhance their intellectual commitment and future plans.

Beyond my prime duties of teaching and research, as a university lecturer, I try my best to participate in cultural, social, recreational, national and religious activities anywhere in the society, whenever possible.

### Higher Education Qualifications

🎓 **PhD**

Wayne State University - Detroit, MI 48202  
USA  
(2000)

🎓 **BSc**

University of Peradeniya  
Sri Lanka  
(1992)

## Awards, Scholarships, Memberships & Fellowships



Presidential Awards for Scientific publications-2014



Endeavour Award 2011 to undertake Post Doctoral Research and Professional Development in Australia: Monash University & University of Melbourne, Australia



Thomas Rumble Fellowship for the Best Performance shown at the Proficiency Tests held for the Graduate Students admitted in Fall 1995. Department of Chemistry, Wayne State University, Detroit, MI 48202, USA



2000 Esther and Stanley Kirschner Graduate Award in Recognition of Outstanding Academic and Research Achievement in Graduate Inorganic Chemistry, Department of Chemistry, Wayne State University, Detroit, MI 48202, USA



Senior member of the Asia-Pacific Chemical, Biological and Environmental Engineering Society (APCBEES) from 2014



Reviewer for journals published by Royal Society of Chemistry and Elsevier Editorial System (EES) from 2014



Committee member of the Sri Lanka Association for the Advancement of Science , E-2 section for the year 2003-2004



Life member, Institute of Chemistry, Sri Lanka



Life member, Sri Lanka Association for the advancement of Science



Member of Royal Chemical Society (RCS)-2017



Member of the Australia Awards Alumni Network from 2011 to date

## Positions Held

-  Visiting Senior Lecturer, Open university, Matara Branch, Sri Lanka. - (2003-2005)
-  Post-Doctoral Fellow: School of Chemistry, Monash University, VIC 3800, Australia
-  Teaching & Research Assistant at Wayne State University, MI 48202, USA- (1995-2000)
-  Professor in Chemistry- (March 2015-to date)
-  Senior Lecturer (Grade I)- (August 2006-March 2015)
-  Senior Lecturer (Grade II)- (August 2000 - August 2006)
-  Research Chairperson/ Faculty of Science, University of Peradeniya- (November 2016 - to date)
-  Warden/Sangamitta Hall- (2008 - 2011)
-  Coordinator for the M.Sc. Degree in Industrial Chemistry /PGIS at University of Peradeniya, Sri Lanka- (2006 - 2014)
-  Secretary to the Board of Study in Chemical Science- (2013 to 2017)
-  Secretary to the Science teachers Association, University of Peradeniya,- (March 2013 to March 2014)
-  Visiting Senior Lecturer, Department of Pharmaceutical Chemistry, Allied Health Science, University of Peradeniya, Sri Lanka- (2010 - 2013)
-  Visiting Senior Lecturer, Institute of Chemistry, Sri Lanka- (2007 - 2009)

## My Teachings



Nothing to show under this subheading !!!

## Research Interests (Research Fields/ Projects)

Current research is mainly focused on the synthesis and structure modification of transition and lanthanide metal catalysts suitable for

- Utilization of environmental pollutants such as carbon dioxide and biomass byproducts for the production of bio-fuels and industrial chemicals
- Pharmaceutical applications

Utilization of bio-waste for industrial and laboratory applications, and analysis of water and soil for pollutants such as heavy metals and radioactive elements are the other research interests.

## Ongoing Research and Projects



**Utilization of Environmental pollutants and Biomass Byproducts for the production of Biofuels and Industrial Chemicals using Heterogeneous Nano Catalysts**



**Utilization of biomass byproducts to prepare specific industrial chemicals: Green**



**Chemistry of Transition Metal Complexes toward sustainability**



**Utilization of Industrial bio-waste to treat laboratory effluents**



**Application of MoFs as heterogeneous catalysts for the transesterification of high FFA containing oil: An efficient method for biodiesel production from non-edible biowastes**

## Key Publications



Fuel - (2017)

Metal modified graphene oxide composite catalyst for the production of biodiesel via pre-esterification of Calophyllum inophyllum oil.



Transition Metal Chemistry - (2014)

Synthesis, characterization, crystal structure, electrochemical properties and electrocatalytic activity of an unexpected nickel (II) Schiff base complex derived from bis (acetylacetonato) nickel (II), acetone and ethylenediamine

## Conferences



**ISACS - 2017**

**HELD AT :** UK - (April 10-13, 2017)

**TOPIC :** *Challenges in Inorganic Chemistry*

(conduct by Royal Chemical Society at University of Manchester)



**International Training Seminar on Climate and Climate Change**

**HELD AT :** Beijing, China - (June 3rd to 25th, 2008)

**TOPIC :** *CMATC*

(Organized by Beijing component of WMO Regional Training Center Nanjing)



**Postgraduate symposium on Inorganic Chemistry**

(Organized by Royal Australian Chemical Institute INC (RACI))

**HELD AT :** Monash University, Clayton, in Australia - (November 30th 2011)



**International Conference on Arts and Sciences (IJAS)-2012**

**HELD AT :** Piazza Della Calza, Florence, Italy - (June 19th to 22nd 2012)



**The international conference on New Directions in Teaching and Evaluation of Chemical Sciences at the Tertiary Level (sponsored by IUPAC, RSC, UGC and University of Kelaniya)**

**HELD AT :** Taj Samudra Hotel, Colombo - (March 11th to 12th 2006)



**UNESCO Regional Workshop on Environmental Chemistry**

**HELD AT :** Indian Institute of Chemical Technology; Hyderabad, India - (November 10th -15th 2003)

## My Publications

Please goto the website.

<https://sci.pdn.ac.lk/chemistry/staff/Manawadevi-Ganehenege>