

# **Dr. S.A.D.T. Subasinghe**

Senior Lecturer GII

## **PROFILE**

A senior Lecturer in the Department of Chemical and Process Engineering (DCPE), University of Moratuwa. Teaches Renewable Energy, Chemical Kinetics and Petroleum refining subjects for undergraduates and Introduction to Chemical Engineering and Sustainable Process Design for postgraduate in DCPE. Supervises 4 postgraduate research students and has been granted with 1 NSF and 3 SRC grants in capacity of principal investigator and co-investigator. Maintains 4 and 3 as h and i10 indexes respectively with 144 citations. Has published 10 SCI and Scopus indexed journal papers and conference paper.

## **EXPERIENCE**

### **Senior Lecturer (Permanent basis) — 2018 Jan - Present**

Teaching, coordinating and administration of Undergraduate and Postgraduate programs in DCPE.

### **Senior Treasurer of the Buddhist Society, University of Moratuwa — 2019 - Present**

Providing guidance to undergraduates on buddhist society activities.

### **Career Guidance Coordinator of the Department of Chemical and Process Engineering — 2018 Jan - Present**

Coordinating career opportunities for final year students and just passed out students. Further work closely with career guidance unit of the university to coordinate the department on their initiatives and programs.

### **Industrial Training Coordinator — 2018-2019**

Worked closely with industrial training division of the university to handle industrial training program of 14 and 15 batches.

### **Visiting Lecturer at Institute of Chemistry, Ceylon — 2019 - Present**

Teaching fundamentals of Chemical and Process Engineering (Drying section)

### **Visiting Lecturer at University of Sri Jayewardenapura — 2018-2019**

Teaching Petroleum Chemistry to BSc in Chemistry students.

### **Senior Lecturer (Contract basis) — 2017 July - 2018 Jan**

Teaching, coordinating and administration of Undergraduate and Postgraduate programs in DCPE.

### **Postgraduate Scholar — 2011 - 2017 July**

Worked in a catalyst laboratory supervised by Prof. Lu Xiuyang and Associate Professor Wei Zuojun; learned and got hands on experiences in characterisation of advanced catalysts materials

**Graduate Instructor, Department of Chemical and Process Engineering,  
University of Moratuwa — 2010 - 2011**

Conducted laboratory demonstrations for undergraduate program.

**Production Engineer, MAS Holdings, Biyagama EPZ — 2008-2010**

Involved in LEAN manufacturing practices, obtained Yellow Belt in LEAN manufacturing,

## **EDUCATION**

Zhejiang University, Hangzhou, PR China — PhD in Chemical Engineering and Technology, 2014-2017

Zhejiang University, Hangzhou, PR China — MSc in Biochemical Engineering, 2011-2014

University of Moratuwa, Katubedda, Sri Lanka — BSc in Chemical and Process Engineering, 2004-2008

## **CONSULTANCY AND NATIONAL/INSTITUTIONAL CONTRIBUTION**

- Acting Co-Chair of Chemical and Process Engineering track at Moratuwa Engineering Research Conference (MERCon), Moratuwa, 2019
- Co-Chair of Chemical and Process Engineering track at Moratuwa Engineering Research Conference (MERCon), Moratuwa, 2020
- Training workshop on introducing responsible care codes by Lanka Responsible Care Council – Sri Lanka (14th – 15th March 2019)
- National Level Capacity Building Workshop on Green Chemistry (7<sup>th</sup> – 12<sup>th</sup> January 2019) – Organized by National Cleaner Production Center, Sri Lanka and United Nations Industrial Development Organization (UNIDO)
- Session 4 Chair - IESL YMS Conference 2020 (Online conference, due to Covid-19 pandemic)
- Participant at International Conference on Resource Efficiency and Circular Economy Training for person certification bodies – NIBM Colombo 28-30<sup>th</sup> January 2020. (Invited by NCPC)
- Training to Prepare for IESL Accreditation – 27<sup>th</sup> January 2020, Organized by IESL Hilton Colombo Residences, Colombo 02

- Resource person at Consultant Development in Chemicals Management and safety programme 2020, 9-11<sup>th</sup> September 2020, Colombo, Organized by National Cleaner Production Center, Sri Lanka
- Resource person at the Stakeholder Meeting Workshop - Curriculum Revision Bachelor of Department of Biosystems Technology, Faculty of Technological Studies, Uva Wellassa University of Sri Lanka
- Resource person at Curriculum Revision workshops, Diploma in Chemical and Process Technology NVQ Level 5 & 6, Curriculum Development Unit. University of Vocational Technology (On-going program)
- Productivity enhancement of fertilizer production process at the Peliyagoda plant

## **RESEARCH AND PUBLICATIONS**

My research focus is on advanced catalytic materials, renewable energy and microfluidics. I have 9 SCI indexed journal publications and 1 conference publication (accepted). I am presently maintaining 4 and 3 as H and i10 indexes with 144 citations.

### **Ongoing Research List**

- Production of biodiesel from waste cooking oil using heterogeneous catalysts. -SRC funded
- Enhanced Separation of Heterogeneous Carbon Microspheres for Supercapacitor Electrodes - SRC funded & Collaboration with East China University of Science and Technology
- Optimization of Bio-chemical Conversion of Rice Straw to 5-hydroxymethylfurfural. - NSF funded

### **Publication List**

- Novel dehydration of carbohydrates to 5-hydroxymethylfurfural catalyzed by Ir and Au chlorides in ionic liquids -Journal of the Taiwan Institute of Chemical Engineers
- Entrainer-intensified vacuum reactive distillation process for the separation of 5-hydroxymethylfurfural from the dehydration of carbohydrates catalyzed by a metal salt-ionic Liquids - Green Chemistry
- Determination and removal of malondialdehyde and other 2-thiobarbituric acid reactive substances in waste cooking oil - Journal of Food Engineering
- Ligand-controlled fabrication of core-shell PdNi bimetallic nanoparticles as a highly efficient hydrogenation catalyst - Catalysis Communications

- Novel Pd-BTP/SiO<sub>2</sub> as an Effective Heterogeneous Catalyst for Heck Reactions - Chemical Engineering Communications
- Conversion of rice straw into 5-hydroxymethylfurfural: review and comparative process evaluation - Biomass Conversion and Biorefinery
- Recent Advances in Microfluidics-Based Chromatography—A Mini Review -Separations
- Thermodynamic Barrier for Nanoparticle Penetration into Nanotubes - Langmuir
- Synthesis of sulfonated graphene oxide solid acid catalyst and its catalytic activity evaluation - Industrial Catalysis

Department of Chemical and Process Engineering, Faculty of Engineering, University of Moratuwa, Bandaranayaka Road, Katubedda, 10400, Sri Lanka  
+94777864835, [thusharas@uom.lk](mailto:thusharas@uom.lk), @subezju, [www.thusharasubasinghe.com](http://www.thusharasubasinghe.com)