# ADIKARI MUDIYANSELAGE CHATHURANGANIE SENEVIRATHNE

TEL: +1 802 310 3541

25 Winooski Falls Way, Suite 106, 305-2, Winooski, VT, 05404, USA

chathusenevi@gmail.com

# Professional Summary

Committed postdoctoral fellow with two and a half years of experience using cutting-edge technology to generate and share important information with the industrial community. Networked with elite research teams from University of Vermont, Kyushu University, Queensland University, and the International Institute for Carbon Neutral Energy Research institutions to develop and improve research protocols for the OLEDs, organic semiconductor laser, and perovskite solar cell fields. Conducted complicated research with integrity and great attention to detail.

# Personal Information

Date of Birth: 12/01/1987

Nationality: Sri Lankan

Gender: Female

Marital status: Single

# Skills

Thin film fabrication
Thin film characterization
Use of ellipsometer
SEM
XRD

OLED fabrication

Organic laser diode fabrication

Vacuum evaporation
Use of profilometer
E-beam lithography

XPS

**ToF-SIMS analysis** 

Perovskite solar cell fabrication

# **Work History**

**POSTDOCTORAL RESEARCH ASSOCIATE,** 01/01/2025- Current **University of Vermont, Vermont, USA.** 

Metal-dielectric organic laser diode fabrication and characterization

**POSTDOCTORAL RESEARCH ASSOCIATE**, 11/01/2022 – 11/30/2024 **I2CNER (WPI)**, Kyushu University, Fukuoka, Japan.

Fabrication of perovskite solar cells, solar cells characterization, and stability measurement

**OLED DEVICE ENGINEER AND VISITING ASSISTANT PROFESSOR**, 10/2021 - 10/2022 **KOALA Tech Inc., Fukuoka, Japan.** 

Fabricated organic semiconductor thin films and characterized via profilometer and ellipsometer.

Fabricated OLEDs via vacuum evaporation and characterized the device.

Fabricated organic laser diodes and characterized the devices.

Conducted ASE measurement for organic laser materials.

Designed different distributed feedback resonator structures via E-beam lithography.

Conducted transient absorption measurement.

Analyzed and documented test results to comply with industry standards.

#### **Education**

#### Ph. D.: Applied Chemistry

### Graduate School of Engineering, Kyushu University - Fukuoka, Japan, 2018-2021

*Thesis Title*: Development of materials and device architectures aimed for high-performance continuous-wave organic semiconductor lasers.

Supervisor: Prof. Chihaya Adachi

Co-supervisors: Prof. Toshinori Matsushima, Prof. Atula S.D. Sandanayaka

#### M. Phil.: Chemical Sciences

#### Postgraduate Institute of Science, University of Peradeniya - Kandy, Sri Lanka, 2012-2016

*Thesis Title*: A study of the performance of cobalt phenanthroline-based liquid and gel electrolytes in dye-sensitized solar cells.

*Supervisors*: Prof. O.A.Illeperuma, Dr. V.A.Senevirathne, Prof. R.M.G. Rajapakse, Prof. H.M.N. Bandara

#### **B.Sc.: Physical Sciences**

#### Faculty of Science, University of Peradeniya - Kandy, Sri Lanka, 2008-2011

*Subjects*: Chemistry, Physics, Mathematics 3.1/4.0 GPA

#### **Publications**

### **Book Chapter: Solution-Processed Organic Light-emitting Devices**

<u>Book Chapter-Solution-processable organic lasers and their prospects</u>
Chathuranganie A. M. Senevirathne, Atula S. D. Sandanayaka, and Chihaya Adachi
Woodhead Publishing, DOI:10.1016/B978-0-323-95146-3.00015-X

Peer-reviewed journal articles: Please see the Google Scholar link below <a href="https://scholar.google.com/citations?hl=en&user=Hu73088AAAAJ&view\_op=list\_works&sortby=pubdate">https://scholar.google.com/citations?hl=en&user=Hu73088AAAAJ&view\_op=list\_works&sortby=pubdate</a>

#### **Awards**

- Presidential award for the top cited Sri Lankan scientific publications published in year 2018.
- Best presenter of student seminar of International Graduate Course on Chemistry for Molecular Systems, Kyushu University, 2019 and 2020.

# Membership

• Japanese Society of Applied Physics (JSAP) - 2018 to present

# Disclaimer

I hereby declare that the above particulars furnished by me are true and correct to the best of my knowledge.

A. M. Chathuranganie Senevirathne