# **Biographical Sketch**

#### Ananda S. Amarasekara

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### (a) PROFESSIONAL PREPARATION

Institution	Location	Major/Area	Degree	Year
University of Colombo	Colombo, Sri Lanka	Chemistry	B. Sc.	1979
City University of New York, USA	New York, USA	Chemistry	Ph.D.	1985
Bar-Ilan University	Ramat gan, Israel	Chemistry	Post Doc	1986-87

### (b) APPOINTMENTS

Head - Department of Chemistry and Physics (since 9/2021), Professor of Chemistry – (Since 9/2013), Prairie View A&M University

Associate Professor, Department of Chemistry, 9/2009 - 8/2013, Prairie View A&M University Assistant Professor, Department of Chemistry, 8/2003 – 8/2009, Prairie View A&M University

# (c) PRODUCTS/PUBLICATIONS

(Career total > 150 peer reviewed journal publications, h = 35, i10 = 78, i = 4700 citations)

# **Selected Publications**

- 1. The co-catalyst effects of Mn(II), Zn(II) and Cr(III) chlorides on acidic ionic liquid catalyzed synthesis of value added products from cellulose in aqueous ethanol. Ananda S. Amarasekara, Bernard Wiredu and Moriam A. Animashaun. *Current Catalysis*, **2023.** DOI: 10.2174/2211544712666230322092202
- 2. Oxidation of Glucose to Glycolic Acid Using Oxygen and Pyrolyzed Spent Li-Ion Battery Electrode Material as Catalyst. Ananda S. Amarasekara, Hashini N. K. Herath, Tony L. Grady, Cristian D. Gutierrez Reyes. *Applied Catalysis A: General*, **2023**, <u>648</u>, 18920. <a href="https://doi.org/10.1016/j.apcata.2022.118920">https://doi.org/10.1016/j.apcata.2022.118920</a>
- 3. Factors Affecting Sustainable Energy Technology Adoption Policies of 50 States and District of Columbia in the United States. Samantha Roberts, Tristan Roland, Ananda S. Amarasekara. *Clean Technologies and Environmental Policy*, **202**2, doi.org/10.1007/s10098-022-02404-z
- 4. Spent Li-ion Battery Electrode Material with Lithium Nickel Manganese Cobalt Oxide as a Reusable <u>Catalyst for</u> Oxidation of Biofurans, Ananda S. Amarasekara, Sofia K. Pinzon, Tommy Rockward, Hashini N. K. Herath. *ACS Sustainable Chemistry and Engineering*, **2022**, *10*(38), 12642–12650. DOI:10.1021/acssuschemeng.2c03346
- 5. Sulfonic acid group functionalized Brönsted acidic ionic liquid catalyzed depolymerization of *poly*(ethylene terephthalate) in water. Ananda S. Amarasekara, Jay A. Gonzalez, Victor C. Nwankwo. *Journal of Ionic Liquids*, **2022**, *2*(*1*), 100021 . DOI: 10.1016/j.jil.2022.100021

- The Effect of Dicarboxylic Acid Catalyst Structure on Hydrolysis of Cellulose Model Compound D-Cellobiose in Water. Harshica Fernando, Ananda S. Amarasekara. Current Organocatalysis, 2022.9(2), 163-171. DOI: 10.2174/2213337208666211129090444
- 7. Interactions of Cellulose Model Compound D-Cellobiose with Selected Metal Chlorides in Water: Identification of Chelating Oxygen Atoms. Harshica Fernando, Ananda S. Amarasekara. *European Journal of Organic Chemistry*, **2021**, (*35*): 4968-4973. https://doi.org/10.1002/ejoc.202100972
- 8. Pyrolysis Route for the Conversion of Bacterial Cellulose to Graphene Oxide. Ananda S. Amarasekara, Deping Wang. *ACS Sustainable Chemistry and Engineering*, **2021**, *9*(*1*), 113-119. doi.org/10.1021/acssuschemeng.0c05400
- 9. Vanillin based polymers: V. *poly*(hydrovanilloin urethane) Ananda S. Amarasekara, Rocio Garcia Obregon, *Polymers from Renewable Resources*, **2021**, *12*(2), 35-45, doi: 10.1177/2041247921989898
- 10. Catalytic upgrading of biomass derived furans. Fang Deng, Ananda S. Amarasekara. *Industrial Crops and Products*, **2021**, *159*, 113055,
- 11. Iron based Catalysts in Biomass Processing. <u>Hongbo Du</u>, Fang Deng, Raghava R. Kommalapati, Ananda S. Amarasekara. *Renewable and Sustainable Energy Reviews*, **2021**, *134*, 110292. <a href="https://doi.org/10.1016/j.rser.2020.110292">https://doi.org/10.1016/j.rser.2020.110292</a>
- 12. Iron(0) Catalyzed Hydrothermal Liquefaction of Switchgrass: The Effects of Co-Catalysts and Reductive Conditions. Ananda S. Amarasekara and Fang Deng. *BioEnergy Research*, **2020**, *13*, 1171-1179. https://doi.org/10.1007/s12155-020-10140-9
- 13. Biocatalytic reduction of 5-hydroxymethylfurfural to 2,5-furandimethanol using coconut (*Cocos nucifera L.*) water. Ananda S. Amarasekara\*, Cristian D. Gutierrez Reyes and Rocio Garcia Obregon, *Biocatalysis and Agricultural Biotechnology*, **2020**, *24*, 101551. https://doi.org/10.1016/j.bcab.2020.101551
- 14. A Comparison of Kombucha SCOBY Bacterial Cellulose Purification Methods. Ananda S. Amarasekara\*, Deping Wang and Tony L. Grady, *SN Applied Science*, **2020**, *2*(2), 240. doi.org/10.1007/s42452-020-1982-2
- 15. Pd/C Catalyzed room-temperature, atmospheric pressure hydrogenation of furanic bio-oils from acidic ionic liquid catalyzed liquefaction of biomass in acetone. Ananda S. Amarasekara, Cristian D. G. Reyes, *Fuel Processing Technology*, **2020**, 200, 10320.

# (d) SYNERGISTIC ACTIVITIES

- 1. **Program Coordinator** American Chemical Society supported Summer Educational Experience for the Economically Disadvantaged (SEED) program at Prairie View A&M University. Under this program 22 students from local high schools were given the opportunity to participate in research at Prairie View A&M University research laboratories.
- 2. **Mentor -** 3 postdoctoral researchers, 32 graduate and > 70 undergraduate research students
- 3. Associate Editor and Editorial board member of the journals:

  Associate Editor: Bio Energy Research; Editorial board member: Journal of Biomass to Biofuel,
  Current Catalysis and Open Catalysis Journal.
- 4. Selected Professional Activities:
  - Judge- Prairie View A&M University Annual Research Symposium. 2010, 2011, 2012. Committee member Institutional Bio Safety Committee, 2009-2012. Chair- Faculty Search Committee 2011, 2012.
  - Graduate Advisor, Department of Chemistry, Prairie View A&M University, Since 2009
- Author. (a). Book: "Handbook of Cellulosic Ethanol" Wiley-Scrivener Publishers, Salem, MA, USA, Dec. 2013, [ISBN-13: 978-1118233009]
   (b). Book Chapter: "5-Hydroxymethylfurfural Based Polymers"
  - In: Renewable Polymers Synthesis, Processing, and Technology. Edited by Vikas Mittal. Wiley -Scrivener Publishers, Salem, MA, USA 2011, [ISBN-13: 978-0470938775]