

R. G. Waruna Jinadasa, Ph.D

(US Permanent resident)

446 Beach Ave, Unit 2, Mamaroneck, NY, 10543

warunamail@gmail.com

SUMMARY

A highly motivated synthetic organic chemist, combining excellent academic credentials with 10+ years of research experience in material and analytical chemistry.

EDUCATION

Doctor of Philosophy in Organic Chemistry, GPA 4.0 (December 2013)

Louisiana State University, Baton Rouge, LA 70803

Bachelors of Science (Hons.) in Chemistry, GPA 3.4 (August 2006)

University of Colombo, Sri Lanka

PROFESSIONAL SKILLS

Instrument/ Analysis skills

- 10+ years of experience in methodology development and multistep synthesis
- 9+ years of experience in UV/Vis and Fluorescence spectroscopy, NMR spectroscopy (1D NMR (1H, 13C) and 2D NMR), Mass spectrometry (MALDI, ESI), FTIR, GPC, XRD
- 12+ years of experience in chromatography: Thin layer Chromatography, HPLC, Flash Chromatography, Preparative and Gel Permeation Chromatography
- Experienced in purification techniques: Extraction, Chromatography, Recrystallization
- 3+ years of experience in Schlenk techniques (inert atmosphere reactions)
- 2+ years of experience in design and synthesis of 2D polymers, covalent organic framework (COF) and metal organic framework (MOF).
- 3+ years of experience in dye-sensitized solar cell (DSSC) performance measurements and characterization using current-voltage curve, IPCE (Incident photon to current efficiency) and electrochemical impedance spectroscopy.
- 5+ years of experience in computational calculations (DFT)

R &D skills and Accomplishments

- Charles E. Coates Scholar Research Grant Recipient (2011 & 2012). Competitive research award (\$ 10,000) selected out of all graduate students in department of chemical engineering, chemistry, and physics base on excellent academic performance
- Design and synthesis of potentially more efficient photosensitizers than the currently available in the market for photodynamic therapy (PDT)
- Development of innovative synthetic routes and processes to obtain novel photosensitizers for PDT and DSSC
- Introduction of novel class of benzoporphyrin based dyes to the field of DSSC
- Optimization of reaction conditions to obtain compounds in multi gram scale
- Development of instrumental screens to characterize the polymeric materials.
- Proven team leader, manage multiple tasks simultaneously and meet the deadlines
- Excellent communication, presentation skills, writing skills, and troubleshooting skills
- Mentored and supervised undergraduate and graduate students
- Proficient with Microsoft Office, Gaussian, Avogadro, Chemdraw, Scifinder, EndNote, TopSpin, MestreC, MestReNova, Prism, Origin, Quatzy

R. G. Waruna Jinadasa, Ph.D

(US Permanent resident)

446 Beach Ave, Unit 2, Mamaroneck, NY, 10543

warunamail@gmail.com

PROFESSIONAL EXPERIENCE

I. Research Experience

- (a) Postdoctoral Research Associate** (2016-present): University of North Texas, Denton, TX
- (b) Postdoctoral Research Fellow** (2014 - 2016): Miami University, Oxford, OH
- (c) Graduate Research Assistant** (2008 - 2013): Louisiana State University, Baton Rouge, LA
- (d) Undergraduate Research** (2005-2006): University of Colombo, Sri Lanka
- (e) Vocational Training Research** (2006) Paints and General Industries (Export) Ltd, Supercritical Fluid Extraction Plant, Sri Lanka

II. Teaching Experience

- (a) Graduate Teaching Assistant** (2008-2009, Louisiana State University, Baton Rouge, LA)
- (b) Teaching Assistant** (2006-2008, University of Colombo, Sri Lanka)

AWARDS

Graduate Research/Teaching Assistantship	2008-2013
LSU Graduate School Enhancement Award	2008-2012
Coates Travel Award	2010
Charles E. Coates Research Award	2011 & 2012

SELECTED PROCEEDINGS OF CONFERENCES AND SYMPOSIA

- 1) **R. G. W. Jinadasa**, X. Hu, K. M. Smith, "Design, Syntheses and Characterization of Novel Chlorin Photosensitizers for Photodynamic Therapy," poster presentation, 6th International Conference on Porphyrins and Phthalocyanines, San Ana Pueblo, NM, July 2010.
- 2) **R. G. W. Jinadasa**, X. Hu, K. M. Smith, "Design, Syntheses and Characterization of Novel Chlorin Photosensitizers for Photodynamic Therapy," mini-organic symposium, Louisiana State University, Baton Rouge, LA, June 2011.
- 3) **R. G. W. Jinadasa**, H. Wang, "Design and synthesis of new π -extended porphyrins for solar energy conversion," poster presentation, 248th ACS National Meeting, San Francisco, CA, August 2014.
- 4) **R. G. W. Jinadasa**, Hong Wang, Bihong Li and Lei Kerr, "Dye Sensitized Solar Cell Based on Dicarboxylic Acid Substituted Benzoporphyrin and the Effect of π -Linkers Towards Their Photovoltaic Performances," **Invited talk**, 229th ECS Meeting, San Diego, CA, May 2016.
- 5) K. M. Smith, **R. G. W. Jinadasa**, X. Hu, M. G. H. Vicente, "Syntheses and Intracellular Localization of Chlorin-e6 Amino Acid Conjugates," 7th International Conference on Porphyrins and Phthalocyanines, Jeju, Korea, July 2012.
- 6) Hong Wang, **R. G. W. Jinadasa**, Alex Matus, Shouzhong Zou, Lei Kerr "Push-Pull π -Extended porphyrins for Solar Energy Conversion," 229th ECS Meeting, Chicago, IL, May 2015.
- 7) Hong Wang, **R. G. W. Jinadasa**, Yuanyuan Fang, Siddhartha Kumar, Karl M. Kadish, Yi Hu, "Functionalizing P-Extended Porphyrins," 229th ECS Meeting, San Diego, CA, May 2016.
- 8) Y. Hu, **R. G. Waruna Jinadasa**, Hong Wang, "Synthesis of Oligomeric Benzoporphyrins Via Imidation" poster presentation, 231st ECS Meeting, New Orleans, LA, May 2017.

R. G. Waruna Jinadasa, Ph.D

(US Permanent resident)

446 Beach Ave, Unit 2, Mamaroneck, NY, 10543

warunamail@gmail.com

LIST OF PUBLICATIONS

- 1) **R. G. W. Jinadasa**, X. Hu, M. G. H. Vicente, K. M. Smith, "Syntheses and Cellular Investigations of 17³-, 15²- and 13¹- Amino Acid Derivatives of Chlorin e₆," *J. Med. Chem.* **2011**, 54(21), pp 7464-7476
- 2) H. Chen, **R. G. W. Jinadasa**, L. Jiao, F. R. Fronczek, A. L. Nguyen, K. M. Smith, "Chlorin e₆ 13¹:15²-Anhydride: A Key Intermediate in Conjugation Reactions of Chlorin e₆," *Eur. J. Org. Chem.* **2015**, 17, pp 3661-3665
- 3) **R. G. W. Jinadasa**, Y. Fang, Y. Deng, R. Deshpande, X. Jiang, K. M. Kadish, H. Wang, "Unsymmetrically Functionalized Benzoporphyrins," *RSC. Adv.* **2015**, 5(64), pp 51489-51492
- 4) **R. G. W. Jinadasa**, Y. Fang, S. Kumar, A. J. Osinski, X. Jiang, C. J. Ziegler, K. M. Kadish, H. Wang, " β -Functionalized Push-Pull Opp-Dibenzoporphyrins," *J. Org. Chem.* **2015**, 80(24), pp 12076-12087
- 5) **R. G. W. Jinadasa**, Z. Zhou, M. G. H. Vicente, K. M. Smith, "Syntheses and Cellular Investigations of Di(aspartate) and Aspartate-lysine Chlorin e₆ Conjugates," *Org. Biomol. Chem.* **2016**, 14, pp 1049-1064 "Hot Paper"
- 6) H. Wang, **R. G. W. Jinadasa**, S. Kumar, Push-Pull Porphyrins: Synthesis, Properties and Applications, In: Handbook of Porphyrin Science, Singapore, World Scientific Publishing Company, **2016** Sep; pp 105-200. "Invited Book Chapter"
- 7) B. Schmitz, B. Li, **R. G. W. Jinadasa**, S. B. Lalvani, L. L. Kerr, H. Wang, "Benzoporphyrins bearing pyridine or pyridine-N-oxide anchoring groups as sensitizers for dye-sensitized solar cell," *J. Porphyrins Phthalocyanines.* **2016**, 20, pp 542. "Invited Article"
- 8) **R. G. W. Jinadasa**, B. Li, B. Schmitz, S. Kumar, Y. Hu, H. Wang, "Monobenzoporphyrins as Sensitizers for Dye Sensitized Solar Cells: Observation of Significant Spacer-Group Effect," *ChemSusChem.* **2016**, 9(14), pp 2239-2249.
- 9) H. Chen, S. W. Humble, **R. G. W. Jinadasa**, Z. Zhou, A. L. Nguyen, M. G. H. Vicente, K. M. Smith, "Syntheses and PDT activity of new mono- and di-conjugated derivatives of chlorin e₆," *J. Porphyrins Phthalocyanines.*, **2017**, 21, pp 355-363. "Invited Article"
- 10) **R. G. W. Jinadasa**, M. B. Thomas, Y. Hu, F. D'Souza, H. Wang, "Investigation of the push-pull effects on β -functionalized benzoporphyrins bearing ethynylphenyl bridge," *Phys. Chem. Chem. Phys.*, **2017**, 19, pp 13182-13188.
- 11) Y. Hu, M. B. Thomas, **R. G. W. Jinadasa**, H. Wang, F. D'Souza, "Competitive energy and electron transfer in β -functionalized free-base porphyrin zinc porphyrin dimer axially coordinated to C60", *Chem. Eur. J.*, **2017**, Accepted. "Inside Cover Page"
- 12) Y. Hu, S. Yellappa, M. B. Thomas, **R. G. W. Jinadasa**, A. Matus, M. Shulman, F. D'Souza, Hong Wang, " β -Functionalized push-pull opp-dibenzoporphyrins as sensitizers for dye-sensitized solar cells", *Chem. Asian J.*, **2017**, Accepted.
- 13) S. Kumar, X. Jiang, S. Qian, **R. G. W. Jinadasa**, K. Kadish, H. Wang, " β -Functionalized trans-A2B2 push-pull tetrabenzoporphyrins", *Org. Lett.*, **2017**, Submitted.
- 14) M. B. Thomas, **R. G. W. Jinadasa**, Y. Hu, B. Schmitz. H. Wang and F. D'Souza " β -functionalized zinc porphyrin coordinated to C₆₀ donor-acceptor conjugates", *Can. J. Chem.*, **2017**, Submitted. "Special Issue for Gordon Research Conference"