**Andrew Aggie**

979-122-1222 404 College St.

Aaggie4@tamu.edu Bryan, TX 77801

**EDUCATION**

**Texas A&M University**, College Station, Texas  
 *Doctor of Philosophy in Chemistry* May 20XX  
 (Dissertation: add when available), Committee Members optional  
 No GPR: 1st semester student

**University of North Texas,** Denton, TX  
 *Master of Science in Chemistry* May 20XX  
 Thesis: Synthesis of π-extended β-functionalized Benzoporphyrins as Sensitizers for Dye-Sensitized   
 Cumulative GPR: 3.5

**Swansea University,** Swansea, Wales UK   
 *Bachelor of Science in Chemistry* May 20XX  
 GPR- for international grades give ratio & rank 8.4/9 rank top 10%

**SKILLS**

**Computational**: Proficient in MATLAB, Igor, Microsoft Excel; Familiar with GraphPad Prism

**Instrumentation**: Proficient in:

*Liquid Chromatography*: Bioinert High Performance (Agilent)

*Mass Spectrometer*: Inductively Coupled Plasma (Perkin Elmer, Agilent), MALDI-TOF-TOF (Bruker Ultraflextreme)

*Nuclear Magnetic Resonance Spectrometer*: (Varian INOVA-500)

*UV-Vis Spectrophotometer*: (Hitatchi U-3310)

*Scanning Electron Microscope*: with Energy Dispersive X-ray Spectroscopy (JEOL IT100)

**Microbiology**: Proficient in Cell (E. coli, yeast) culture, Bacterial transformation

**Molecular skills**: Proficient in PCR, qPCR, RT-PCR, ELISA, DNA/RNA extraction, Familiar with Western blot

**Statistical**: Proficient in SPSS and R, Familiar with SAS  
**Languages:** Bilingual Mandarin Chinese and English

**PATENTS APPROVED**

Aggie, A. N., Field, K.Y. Synthesis of symmetric and asymmetric water-soluble porphyrin derivatives 20XX.. U.S. Patent No. WO 11111 A1

**PATENTS PENDING**

Andrew Aggie and Kyle Field, Temporary Stiffened Mesh Prostheses (*U.S. Patent Pending, Application No. 61/111 filed Jan. 10, 20XX*)

**PEER REVIEWED PUBLICATIONS PUBLISHED**

Reveille, D. J.; Agsmith, A. J.; **Aggie, A**.; Agsmith, N. S.; Aggieton, T. J.; *Flavone-Based Liquid Crystals: Synthesis and Properties. Liquid Crystals* 20XX, 44 (9), 1436–1449

**PEER REVIEWED PUBLICATIONS SUBMITTED**

Smithfield, K, and **Aggie, A.,** “Evaluating the Structural Complexity of Isomeric Bile Acids with Ion Mobility Spectrometry.” (Submitted March 20XX - *Chem. Sci.*)

**GRANTS**

**New Technologies and Advancements Grant,** College of Chemistry, TAMU  
*Author and Committee Chair*  Sep. 20XX  
Grant funding used for research into new technique for producing novel Polymers at Texas A&M University

**RESEARCH EXPERIENCE**

**Department of Chemistry,** Texas A&M UniversityOct. 20XX–Present

*Graduate Research Assistant,* Advisor: Prof. Aggie Lopez

Harnessing Aryne Chemistry for the Synthesis and Development of New Polymeric Materials

* + Synthesis of various heteroaryne precursors
  + Using aryne chemistry to develop new monomers for ring opening metathesis polymerization (ROMP)
  + Polymerization of heteroarynes for applications in helical polymers and nitrogendoped graphene nanoribbons

**Department of Chemistry**, University of North Texas Jan. 20XX–May. 20XX

*Graduate Research Assistant,* Advisor: Prof. Aggie Han

Synthesis of π-extended β-functionalized Benzoporphyrins as Sensitizers for Dye-Sensitized

* + Synthesis of monobenzoporphyrins as sensitizers for Dye-Sensitized Solar Cells
  + Synthesis of symmetrical opp-dibenzoporphyrins as unique linkers for metal and covalent organic frameworks (MOFs and COFs)
  + Presented results in a poster at American Chemistry Society Southwest regional meeting in Oct. 20XX

**CHEMISTRY SYNTHESIS EXPERIENCE**

**Central Midwest National Laboratory**, Richland, TX  
*Research Assistant, Chemistry Laboratory* May 20XX-Aug. 20XX

* Synthesized and characterized highly Lewis acidic cations supported by carborane-based weakly coordinating anions (WCAs) for C–F activation and olefin polymerization
* Developed improved halogenation procedures HCB11H11- anions
* Rational design of highly electron deficient trityl cations by means of installation of fluorine atoms
* Synthesized and characterized pincer-Rh complexes from bio-available ligand precursors
* Participated in UPI collaboration with the Dow Chemical Company
* Mentored four incoming graduate students in laboratory techniques and experimental design.

**PRESENTATIONS**

CONFERENCE PRESENTATIONS   
**Aggie A.**; Aggie, Y.; Aggieton, H. “Synthesis of π-Extended Monobenzoporphyrins as Sensitizers for Dye-Sensitized Solar Cells.” Presentation at the University of North Texas Chemistry REU, Aug. 20XX

POSTER PRESENTATIONS

**Aggie A.**; Agg, X.; Aggieton, J. “Synthesis of π-Extended Porphyrins as Sensitizers for DyeSensitized Solar Cells.” Poster presentation at the American Chemical Society Southwest Regional Meeting (SWRM), Oct. 20XX

**TEACHING EXPERIENCE**

**Department of Chemistry**, Texas A&M University  
*Teaching Coordinator*, *Analytical Polymer Techniques Laboratory* Jan. 20XX- present

* Train 4 Teaching Assistants in lab procedures and techniques
* Ensure consistency in instruction and grading
* Resolve grading disputes

*Teaching Assistant, Analytical Polymer Techniques Laboratory* Aug. 20XX- Dec. 20XX

* Facilitated laboratory sessions for ~70 students with lab equipment trainings and lab safety guidance
* Administered and graded laboratory exams for students
* Graded scantron-based lecture exams for ~280 students

**LEADERSHIP**

**Office of Graduate Studies,** University of North Texas  
*Graduate Senator* Aug. 20XX-Dec. 20XX

* Played a critical role in being a liaison between UNT students and its administration
* Assisted in events and programs for the UNT student body.

*Vice Chair of the Finance Committee* Aug. 20XX-Aug. 20XX

* Provided student organizations on campus with funds to perform events

*Budget Committee Member* Aug. 20XX-Aug. 20XX

* Created a $300,000 budget proposal for the 2017-2018 school year

**PROFESSIONAL SOCIETIES**

* + Organic Chemistry Division, Polymer Chemistry Division, Polymeric Materials Science & Engineering Division Phi Lambda Upsilon National Honorary Chemical Society Jul. 20XX-present
  + American Association for the Advancement of Science Sep. 20XX-present
  + American Chemical Society Oct. 20XX-present
  + Phi Theta Kappa Honor Society Jan. 20XX-present

**AWARDS**

TAMU Chemistry Dean’s Fellowship Aug. 20XX

UNT College of Science Graduate Commendation May 20XX

UNT Chemistry REU Affiliate May-Jul. 20XX