

Gyllian C. Porteous

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EDUCATION

University of Windsor, Windsor ON

Graduate Studies in Chemistry and Biochemistry

2012-2013

- Coursework: Surface Chemistry and Analysis, Chemistry of Liquid Crystals, and Supramolecular Chemistry
- President of the Graduate Chemistry Club presiding over fundraising and organization of social events

University of Windsor, Windsor ON

B. Arts. Sc. Honors with Major Concentration in Chemistry and Minor Concentration in Classical Studies

2008-2012

- Graduated “with Great Distinction”
- Honors Thesis: “Electroless and Immersion Metallization of Elastomeric Substrates” – awarded Best Chemistry Research Project
- On President’s Honor Roll and Dean’s List
- Co-president of the Arts and Science Association presiding over charity fundraising, and mentoring of B.A.S. students

CONSERVATION EXPERIENCE

Detroit Institute of Art, Detroit MI

Conservation Volunteer

2013

- Polished 18th and 19th century silverware using alumina slurries
- Hours experience: 9 hours

Institute for Aegean Prehistory Study Center for East Crete, Pachia Ammos, Crete

Conservation Volunteer

2013

- Consolidated and reassembled Bronze Age ceramics
 - Applied and painted plaster gap-fills
 - Cleaned metal objects in preparation for consolidation
 - Stabilized Bronze Age kiln floor using mortars and reinstalled in situ
 - Packaged ceramics for long term storage
 - Participated in a mosaics conservation class at the University of Athens
 - Hours experience: 256 hours
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RESEARCH EXPERIENCE

University of Windsor, Windsor ON

Research Assistant in Computational Chemistry

2014

- Contributing to computational study of enzymatic mechanisms

Research Assistant in Materials Chemistry

2009-2013

- Led 3 research projects in the area of stretchable and flexible electronics
- Supervised undergraduate researchers and trained new students on laboratory procedures
- Contributed to the development of a stretchable light-emitting electrochemical device

RESEARCH SKILLS

- Scanning Electron Microscopy (SEM)
- Atomic Force Microscopy (AFM)
- Contact Angle Goniometry (CA)
- UV-Vis Spectroscopy and Fluorometry
- Optical Microscopy
- Gas Chromatography Mass Spectroscopy (GC-MS)
- High Performance Liquid Chromatography (HPLC)
- Nuclear Magnetic Resonance (NMR) Spectroscopy
- Infrared (IR) Spectroscopy
- Gravimetric and Volumetric Analysis
- Soft Lithography
- Surface Modification via Self Assembly Monolayer deposition

ARCHAEOLOGICAL EXPERIENCE

University of Windsor, Windsor ON

Practicum in Classical Archaeology

2009

- Spent 16 days excavating in Mytilene, Greece
- Developed skills in processing finds (e.g. triangulation)

ARTISTIC EXPERIENCE

University of Windsor, Windsor ON

Studio Practice and Ideas: Image

2014

- Learning basic principles of composition and design, light and pigment-based colour theory, as these apply to painting, photo-based processes, and print production
- 12-week credit course

Studio Practice and Ideas: Drawing **2014**

- Learning a variety of drawing processes, materials and concepts in a studio environment
- 12-week credit course

Pewabic Pottery, Detroit MI

Wheel-Throwing **2014**

- Learning to wedge, center, pull-up and form on the potter's wheel, including a focus on glazing and firing techniques
- 42 class hours

Toledo Museum of Art, Toledo OH

Introduction to Glassblowing **2014**

- Learning the basics of glass gathering and blowing
- 8 class hours

Introduction to Flameworking **2014**

- Learning the basics of using a torch for glass working
- 8 class hours

Julia Conlon's Art Studio, Windsor ON

Watercolour and Drawing **2003-2008**

- Mastered medium of watercolours through guided application

TEACHING EXPERIENCE

University of Windsor, Windsor ON

Graduate Assistant – Analytical, Instrumental, and Physical Chemistry **2012-2014**

- Supervised 2nd year Physical Chemistry and 3rd year Analytical and Instrumental Chemistry undergraduate students in laboratory setting
- Demonstrated techniques and procedures
- Responsible for students' understanding of experiment theory
- Marked lab reports and exams

Teaching Assistant – Introduction to Greek Civilization **2011**

- Assisted in the grading of exams
- Advised students on methods of preparing for evaluation

PUBLICATIONS

Filiatrault, H.L., **Porteous, G.C.**, Carmichael, R.S., Davidson, G.J.E., and Carmichael, T.B. (2012) Stretchable Light-Emitting Electrochemical Cells Using an Elastomeric Emissive Material. *Advanced Materials*. 24: 2673-2678. (Undergraduate Work) (Featured on the cover).

AWARDS AND SCHOLARSHIPS

- Ontario Graduate Scholarship (OGS), Provincial, University of Windsor **2013**
 - National Sciences and Engineering Research Council Canadian Graduate Scholarship (NSERC CGS M), Federal, University of Windsor
 - NSERC Undergraduate Student Research Award (USRA), Federal, University of Windsor **2012**
 - Denis Tuck Memorial Award, Institutional, University of Windsor **2012**
 - Awarded to the best Chemistry undergraduate thesis for 2012
 - NSERC USRA, Federal, University of Windsor **2011**
 - NSERC USRA, Federal, University of Windsor **2010**
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SKILLS

- Bilingual – English/French
- Creative problem-solving
- Enjoy teaching and giving oral presentations
- Critical writing
- Organized