

## **LISE R. MONTEFIORE**

D S Weaver Labs 157, North Carolina State University, Raleigh, NC 27695  
Phone: 405-402-9425, Email: lrmontef@ncsu.edu

### **EDUCATION**

#### **Doctor of Philosophy**

Biological and Agricultural Engineering, North Carolina State University, Raleigh, NC  
August 2017 to Present  
Expected Graduation Date: 2020

#### **Doctor of Philosophy**

Biosystems and Agricultural Engineering, Oklahoma State University, Stillwater, OK  
August 2016 to June 2017  
Topic: Additives in bioretention and phosphorous removal by fly-ash

#### **Master of Science**

Water Science Engineering, Polytech Montpellier, France  
2012 to 2014\* and 2015 to 2016  
3<sup>rd</sup> through 5<sup>th</sup> years of a 5-year engineering qualification in Water Science and Technology  
Graduation: September 2016  
Primary Topics:

- Mathematics
- Computer Science
- Chemical engineering/chemistry
- Hydraulics/hydrology
- Microbiology/ecology/hydrobiology
- Drink and waste water treatment
- Human and social sciences,
- Modern languages (English, Spanish)

*\*Gap year from 2014 to 2015 to gain research experience at Oklahoma State University*

#### **Undergraduate Studies**

Lycée Jacques, Prévert, France  
2009 to 2012

Preparatory classes in B.C.P.S.T. (biology, chemistry, physic and geology with mathematics),  
Three years of preparatory classes required for placement in professional engineering school.

## **SKILLS**

### **Software experience**

- Microsoft Office Suite (Word, Excel, Power Point)
- GIS (MapInfo and ArcGIS with 3D Analyst)
- TELEMAC-2D with Bluekenue and Fudaa.prepro extensions
- Minitab
- Chem Transport

### **Languages**

- Fluent in French, English
- Proficient in Spanish (written)

## **EXPERIENCE**

### **Provost Graduate Research Fellow**

Biological and Agricultural Engineering, North Carolina State University  
August 2017 to present

### **Graduate Research Assistant**

Biosystems and Agricultural Engineering, Oklahoma State University  
August 2016 to Present

- Conducted literature review of different additives for stormwater filters
- Studied impact of fly ash pellets design on phosphorous removal utilizing columns experiments
- Preparing experimental data for a phosphorus transport model
- Conducted infiltration tests on pervious concrete

### **Water Resources Engineering Intern**

Suez Consulting (previously SAFEGE), Le Lamentin, Martinique, France  
France February 2016 to July 2016

- Environmental risk assessments (e.g. flood, earthquakes, tsunami, pollutants) for former gas station location
- Hydraulic monitoring of a fish passage
- Conducted an impact study for the expansion of a municipal water treatment plant
- 2-D Hydraulic modelling of the Mana River closed to an existing bridge using the software TELEMAC-2D
- Evaluate construction alternatives for a water reservoir and distribution systems
- LIDAR analysis using ArcGIS and MapInfo

### **Water Research Intern**

HydroSciences, Montpellier, Montpellier, France

November 2016 to January 2016

- Participated in a study examining solute transport in a complex geometric medium
- Conducted a comprehensive literature review
- Constructed of the experimental set-up
- Conducted data collection and analyzed the results
- Produced a final report of the findings

### **Visiting Research Scholar**

Biosystems and Agricultural Engineering, Oklahoma State University

September 2014 to March 2015

- “*Long term infiltration and cleaning methods for pervious concrete*”.
- Conducted a comprehensive literature review
- Performed infiltration tests on pervious concrete
- Completed particle size distribution analyses of clogging particles
- Produced a report and presented the results to department faculty and students

### **Flood Action and Prevention Plan Engineering Intern**

Internship at EGIS (previously BCEOM), Montpellier, France

June 2014 to August 2014

- Wrote report segments necessary for the labelling of the Flood Plan, Prevention, and
- Actions Program for the watershed of Ouveze River
- Conducted data collection of field and created maps of affected regions with MapInfo
- Interaction with the affected stakeholders (e.g. national agencies, municipalities, regions)
- Prepared presentations for the affected stakeholders, including collectivities, departments, regions, and national environmental agencies
- Participated in a cost-benefit analysis study

### **CONFERENCES**

- **Water Conference & Research Symposium**, Norman, OK

October, 2017

Poster Presentation: *Solute Transport in a Complex Geometry Medium*

- **Oklahoma Clean Lakes and Watersheds Association**, Stillwater, OK

April, 2017

Planned Poster Presentation Plan: *Fly-Ash Pellets Design for Phosphorus Removal in Stormwater Filters*

## **OTHER EXPERIENCES**

- Tutor, Paris/Montpellier, France  
April 2015 to January 2016
  - 10 high school students
  - Mathematics, physics, chemistry, and biology
- Invasive plant species removal volunteer, Lez River, Montpellier, France  
September 2012, September 2013, September 2015
- Organized Urban Design for Stormwater Runoff Management Conference, Polytech  
Montpellier, Montpellier, France  
17 February 2016