**Description of Research Project/Internship**

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<tr>
<th><strong>Sponsor:</strong></th>
<th>Princeton Environmental Institute</th>
</tr>
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<tbody>
<tr>
<td><strong>Position number:</strong></td>
<td>C1MYE</td>
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<tr>
<td><strong>Organization/research group name:</strong></td>
<td>Myneni Group</td>
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<tr>
<td><strong>Project title:</strong></td>
<td>Production of Organobromine Compounds in Coastal Systems from Sea level Rise</td>
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**Project Summary:**

Sea levels are rising at an alarming rate because of rises in global temperature. Rises in sea level leads to flooding of coastal systems by sea water, which in turn brings the reactive soil organic matter in contact with high levels of halogens in seawater. Our studies have shown that soil organic matter can react with seawater and produce brominated organic compounds, which when released into the atmosphere can lead to stratospheric ozone depletion. In this study we hope to continue these studies and collect soil and sediment samples from the coasts of New Jersey and South Carolina, and examine the rates of production of these brominated compounds and identify the specific molecules that are formed.

**Role and responsibilities:**

The students will conduct field studies for collecting soil and sediment samples, and laboratory studies for the formation of brominated compounds. In addition, students will learn how to prepare samples for mass-spec, and in interpreting the obtained datasets.

**Website (if available):**

**Faculty sponsor/host (name/department):** Satish Myneni/Department of Geosciences

**Email contact:** smyneni@princeton.edu

**Location of internship:** Guyot Hall

- **Note:** If this internship is located in a country that appears on the U.S. Department of State Travel Warning List, final candidates will be instructed to request and receive University approval to travel to that country before participation in the internship program is confirmed.

**Weekly stipend:** $500

| **Number of internships available:** | 2 |
| **Total number of weeks:** | 8+ |

**Proposed start date (mm/dd/yyyy):** 06/01/2016

**Proposed end date (mm/dd/yyyy):**

- **Note:** The funding awarded for this position is for full-time work, 35 hours per week minimum, for a period of no less than 8 contiguous weeks.
**INTERNSHIP SUPERVISOR**
Name and title: Satish C. B. Myneni
Email: smyneni@princeton.edu
Phone: 609-258-5848

**EXPERIENCE REQUIRED**
Academic background: Good chemistry background. Background in organic chemistry is ideal.

Technical skills: Laboratory experience with making solutions and ability to conduct spectroscopy studies

Language fluency: -

**OTHER**
Prerequisites / training: Chemistry laboratory experience is necessary

Physical demands: Equipment requirements: The students will work with natural materials.

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<th>Visa(s) required?</th>
<th>Yes</th>
<th>No</th>
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<td>Immunizations required?</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>Research permit/pass required?</td>
<td>Yes</td>
<td>No</td>
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Additional internship information:

Priority application deadline: January 8, 2016
- Applications received after the priority deadline will be reviewed on a rolling basis.
- Untilled positions will remain open until March 23, 2016.