For my Certificate Capstone in Science, Technology, and Society (STS), I wrote a research paper on “Climate Policy and Actor Networks: Interactive Climate Simulators – A Missing Actant.” I first came across the object of my analysis, the Climate Rapid Overview And Decision Support (C-ROADS) simulator, as an undergraduate researcher at the Department of Atmospheric and Oceanic Science. With the guidance of Dr. Mendelsohn, I analyzed the creation and use of such a simulator from an STS perspective, rather than a physical science perspective.

First, I had to choose an appropriate analytical tool. After meeting and discussing with my advisor Dr. Mendelsohn, I found the Actor Network Theory (ANT) to be most appropriate in the analysis of C-ROADS’ role in climate policymaking. I began collecting articles and books that explain and apply ANT. I first did a catalog search and found several sources at McKeldin and Engineering and Physical Sciences Libraries. After browsing through the stacks for related sources, I used the JSTOR database to find STS literature that had applied ANT to analyze environmental policy. The availability of both libraries, as well as academic journal databases, made it easy to conduct an initial literature review.

After learning about ANT and its applications, I researched the context of climate policymaking. I went to the Thurgood Marshall Law Library in Baltimore, because I wanted to add an American legal perspective to my overview of the history of climate change politics. There I found a book on U.S. Law and Climate Change in the
Environmental Law stacks. As a University System of Maryland student, I was able to check the book out and add a quality source to my paper.

As I began to analyze C-ROADS’ role in climate policymaking, I was curious about the current awareness of such a technology and wanted to find out whether it has been mentioned in congressional meetings. I made use of Judy Markowitz's research guide for ENSP 330, which I had bookmarked and used since I took Introduction to Environmental Law. I searched for C-ROADS in LexisNexis Congressional, LexisNexis Academic, as well as other databases under the “News/Sources” such as Greenwire. Although I was unsuccessful in finding many mentions of C-ROADS in these databases, the lack of information highlighted the simulator’s lack of awareness and usage.

Meeting with Dr. Mendelsohn regularly was an important part of my research process. She helped me manage my writing by breaking down the paper into smaller, more manageable essays, which later formed the larger document. This staged writing approach was very helpful in writing the 35-page academic paper. I did not find writing the paper intimidating as a result. She also gave me advice on good research practices. I often neglected to include citations in making my essay outlines, which made it difficult to distinguish my personal contributions from other people’s ideas. By adhering to the “cite as I write” habit, I was able to turn my outlines into prose in a much more professional and cohesive manner. My previous approach required me to go back and cite after I had turned my outline into prose, where I run a higher risk of academic dishonesty, as I may accidentally regard someone else’s intellectual contribution as my own.

Most of the sources used in this project were social and historical analyses of climate change. I wished to compose an interdisciplinary investigation and refrained from
including too many political analyses of climate negotiation. I selected sources based on their relevance and analytical rigor in sociology, history, politics and philosophy. Since C-ROADS had not been widely discussed in books or academic articles, I had to use a few sources from public search engines and the C-ROADS website itself. I verified the credibility of such sources by a simple search for the authors’ affiliations.

From this research experience, I learned useful research management skills such as staged writing and “cite as I write.” I am also more confident to make use of the array of online and on-site resources available to me. As I aim for a career in academic research, these skills in finding, using, and presenting sources will be useful in writing high-quality professional papers. Moreover, I will not be intimidated by longer interdisciplinary research projects, and instead be excited about them.