My ECCA award was granted to collaboration with Professor Ryan Fortenberry from the University of Mississippi. Due to scheduling constraints, in January 2025, I met Professor Fortenberry in Chile at the IV Chilean Astrochemistry Summer School where we both served as lecturers. While there, we worked closely on one of the proposed projects: using Professor Fortenberry's high-level quantum chemical method to benchmark a small, PAH-like molecule, the first calculation of its kind. We used his access to the Mississippi supercomputer facility which houses the Fortenberry group's proprietary code suite. This in-person collaboration allowed me to learn the methodology and techniques, and I have continued this work in the month since returning. We will be continuing this specific project as well as working on another project related to the computation of the spectroscopic properties of substituted PAHs when I visit him at the University of Mississippi March 17-21, 2025.