

## **Week 1**

### **Tasks Completed:**

- Conducted literature review on CO<sub>2</sub> solubility in DESs.
- Identified key physicochemical features relevant for modeling.
- Collected and compiled dataset from multiple references.

### **Challenges Faced:**

- Heterogeneous formatting across data sources required extensive manual cleaning.

### **Tasks Planned for Next Week:**

- Finalize dataset structure and remove inconsistencies.
- Begin initial data exploration and visualization.
- Identify preliminary modeling strategies.