



# CO<sub>2</sub> PRESSURE CHAMBER

## TEAM UNDER PRESSURE



### Overview

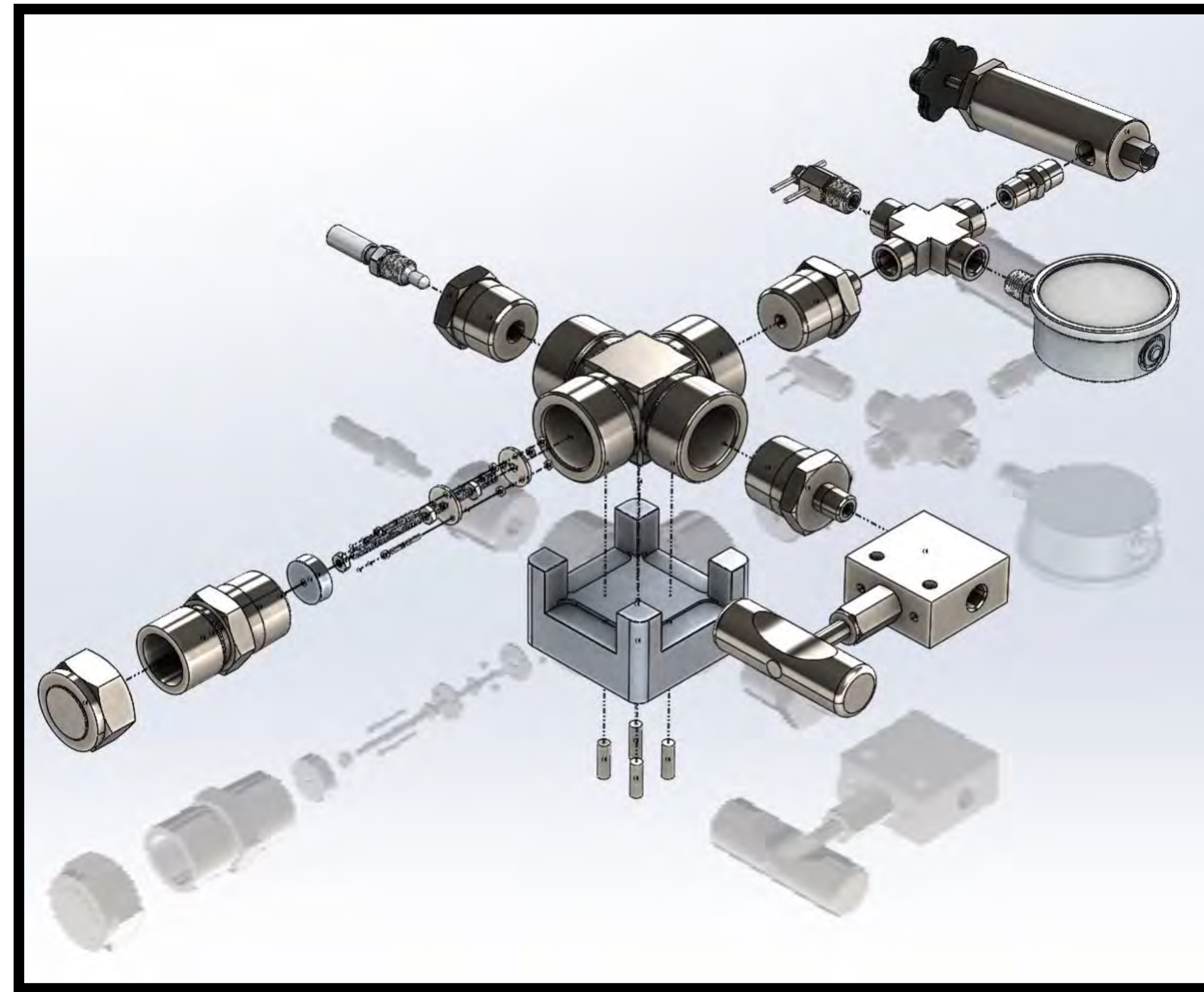
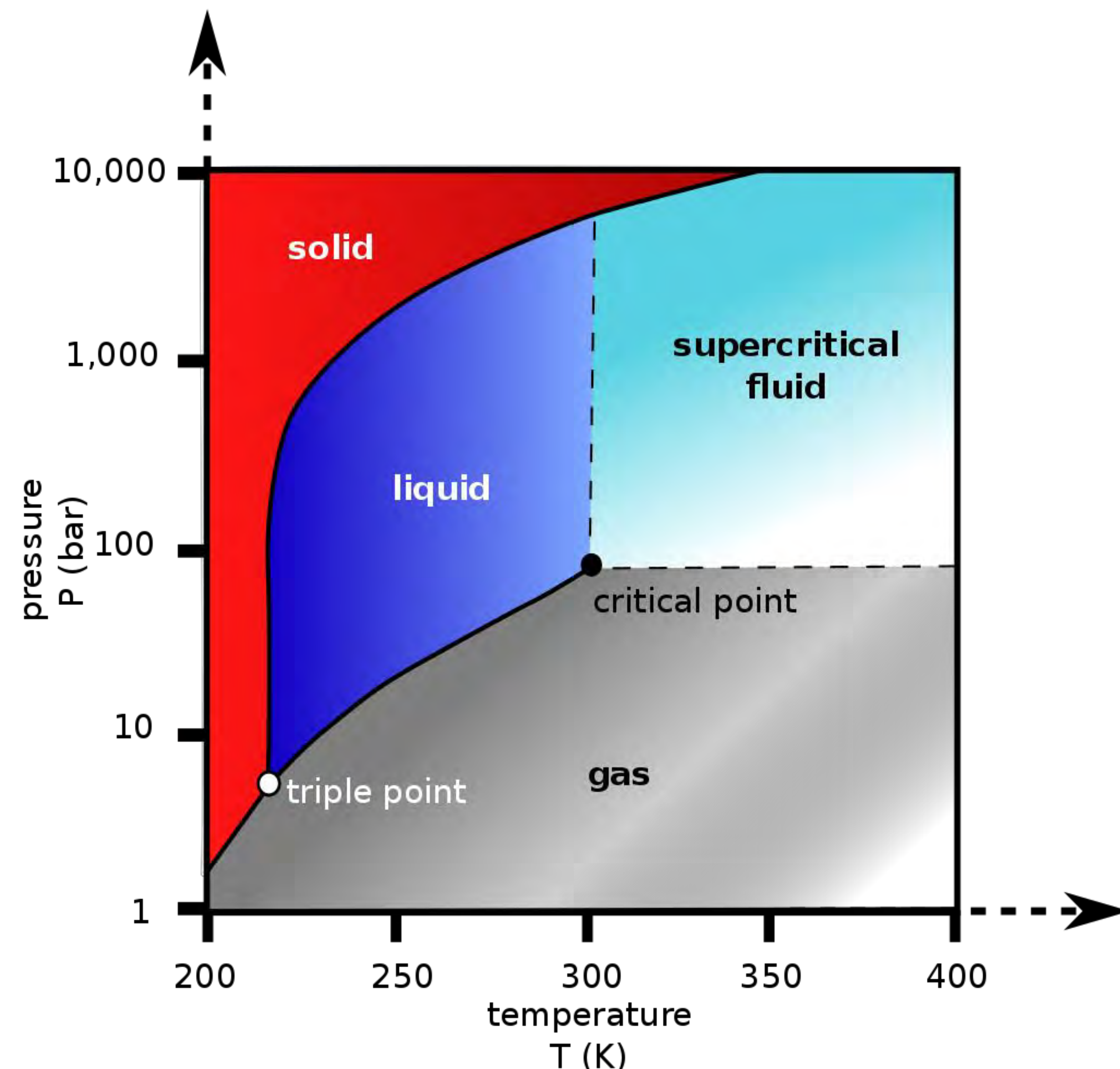
Carbon dioxide (CO<sub>2</sub>) emissions are a major contributor to global climate change. In 2019, global CO<sub>2</sub> emissions totaled 36.8 billion tons. To reduce atmospheric CO<sub>2</sub>, conversion of CO<sub>2</sub> to a solid carbonate is a promising solution.

### Functional Purpose

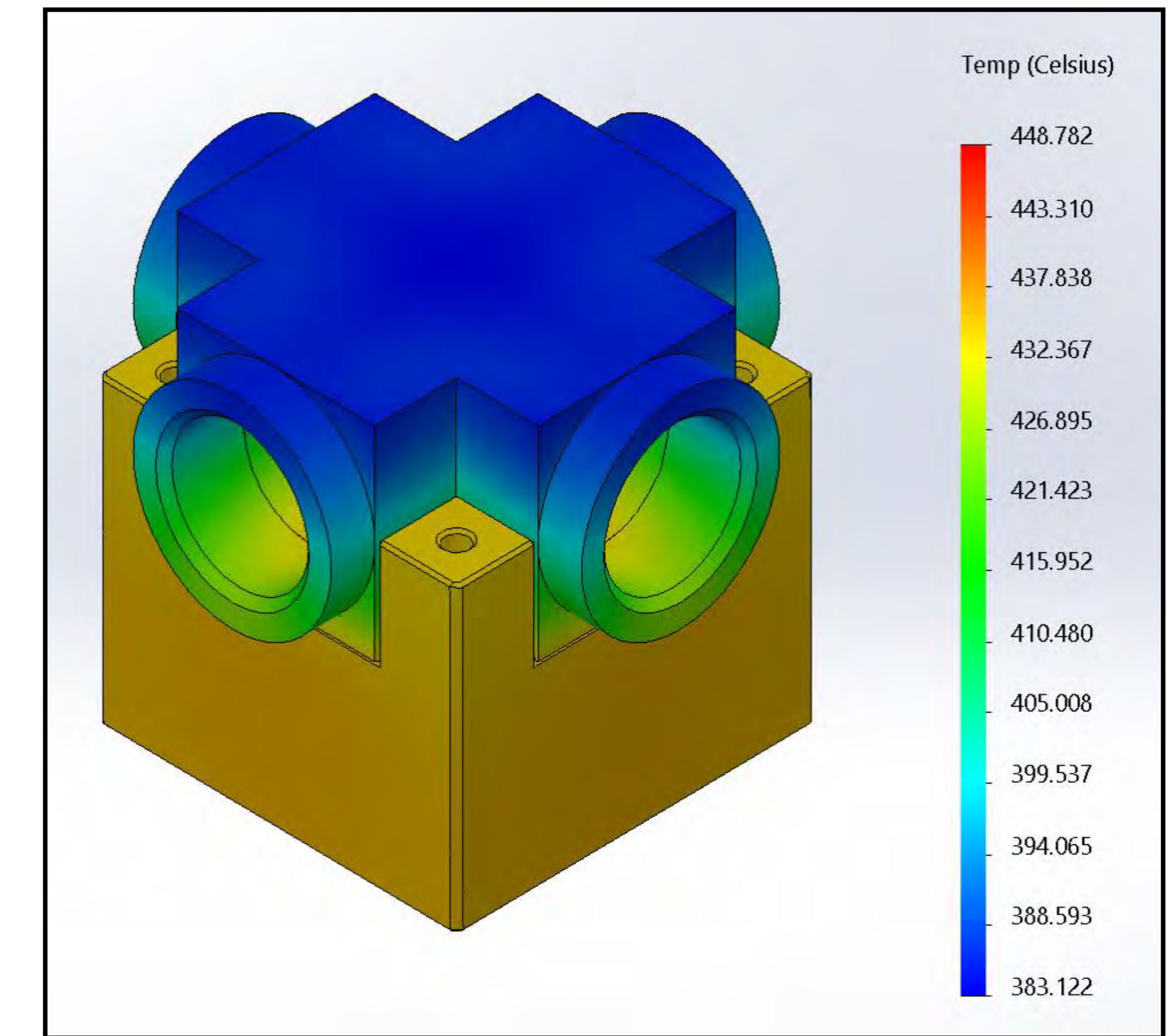
- Aid in researching methods of decreasing atmospheric levels of CO<sub>2</sub>
- Replicate the supercritical conditions of CO<sub>2</sub> carbonation

### Specifications

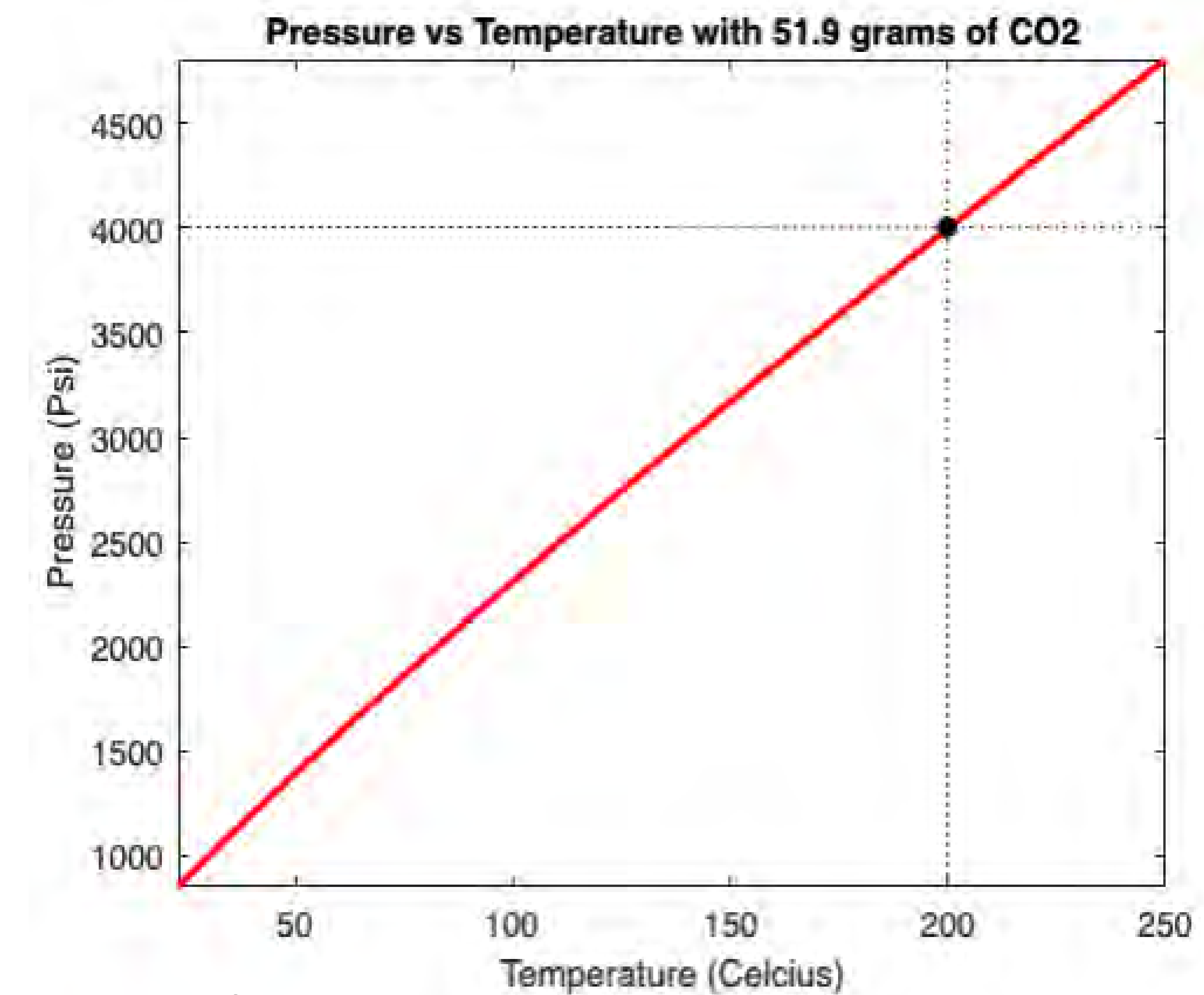
- Pressure = 4000 psi
- Temperature = 200° C
- Pressure is achieved using a CO<sub>2</sub> tank and dry ice



### Heat Transfer



### CO<sub>2</sub> Temperature / Pressure Relationship



\*Specific to the set volume of the chamber

### The Team

*From left to right:*  
 Darcy Wuhrmann  
 Haley Pipkin  
 Sophia Dowell  
 Kalina Malech

