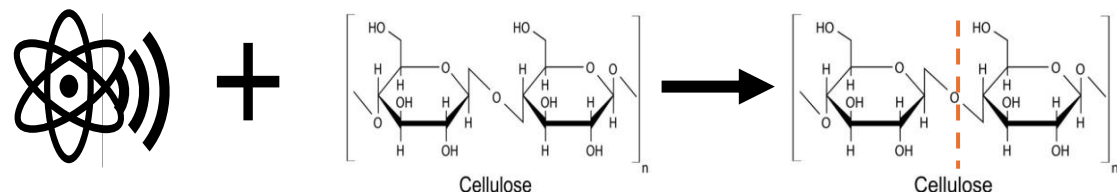
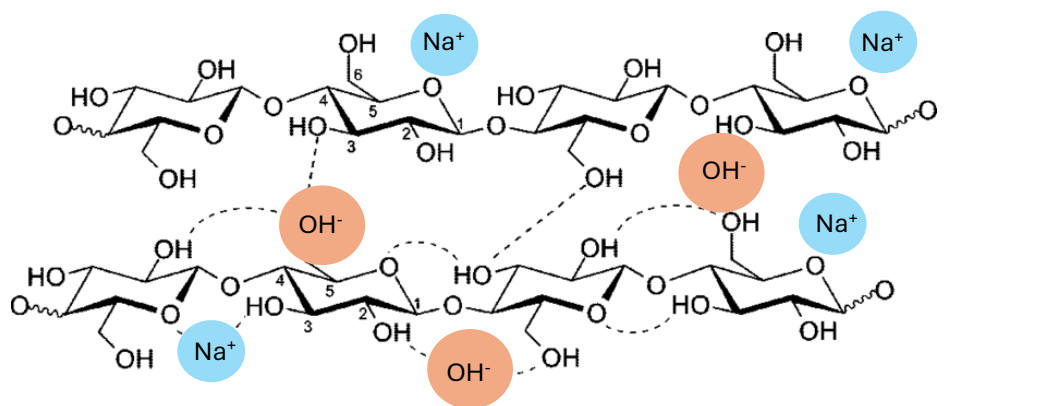


Purpose

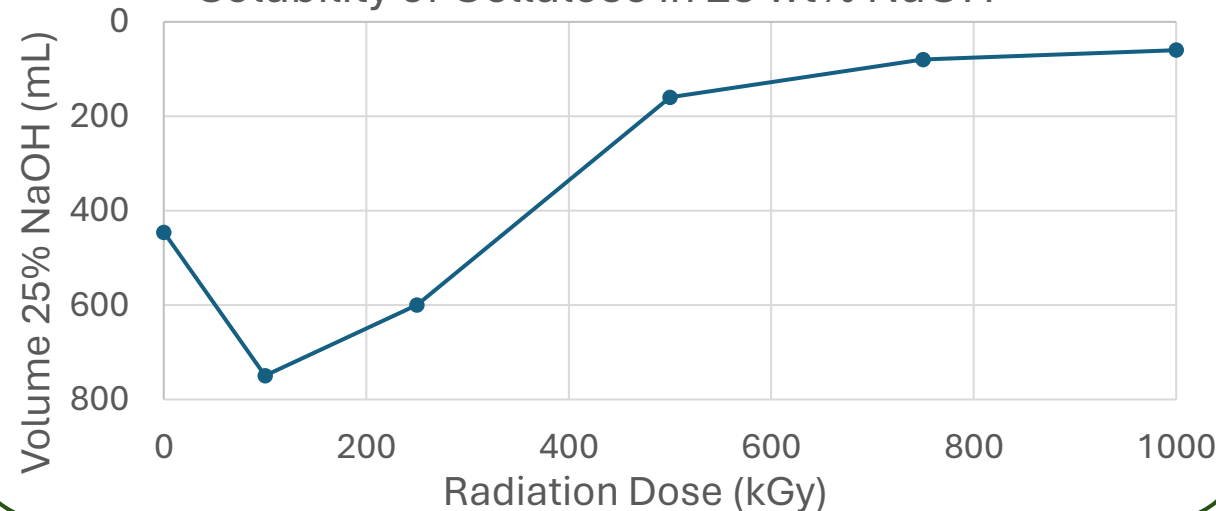
- Cellulose has limited industrial uses because of its low solubility
- Ionic liquids have been used but are not good for the environment
- NaOH works in a similar method to disrupt hydrogen bonds
- Gamma irradiation will degrade cellulose



Results



Solubility of Cellulose in 25 wt% NaOH



Future Work

- Examine how radiation affects solubility at lower doses
- How radiation dose affects crystallinity of soluble cellulose