

---

## **OXIDATION OF D-GLUCOSE AND D-MANNOSE (POSTER)**

Katelyn Duncan, University of Great Falls, Great Falls

Grace Ibsen, University of Great Falls, Great Falls

Chrissie Carpenter, Chemistry Department, University of Great Falls, Great Falls

The study of monosaccharides has been around and researched since the 1800's. In this experiment, D-glucose will undergo benchtop oxidation using nitric acid and heat to produce gluconic acid and glucaric acid. The same oxidation process will then be done using D-mannose. The resulting aldonic and aldaric acids of each compound will then be compared to determine if stereochemistry effects the ease at which an aldohexose can be oxidized at C-1 and C-6.