**Aldol Condensation: Synthesis of Chalcones**

**Data Presentation**

* Theoretical Yield: 0.60675g
* Product Yield: 0.5003g
* % yield: 82.46%
* Melting Point: 101-104C

**Conclusion**

The Chalcone that was created was #16. It was synthesized from acetophenone and 4-chlorobenzaldehyde. The literature melting point of the compound tends to be between 101-103C, which is extremely close to the melting point acquired experimentally, 101-104C. Thus, confirming that this compound is pure, with possibly a very slight impurity. The impurity could be a result of not being completely dried when the melting point test took place, and also explaining the high % yield. Although a small amount of the compound was lost as it was being transferred from the mortar, due to the powder being stuck on the mortar and not coming out through the use of the spatula, it couldn’t be touched by the human hands either, thus I let it be expecting a low percent yield.