



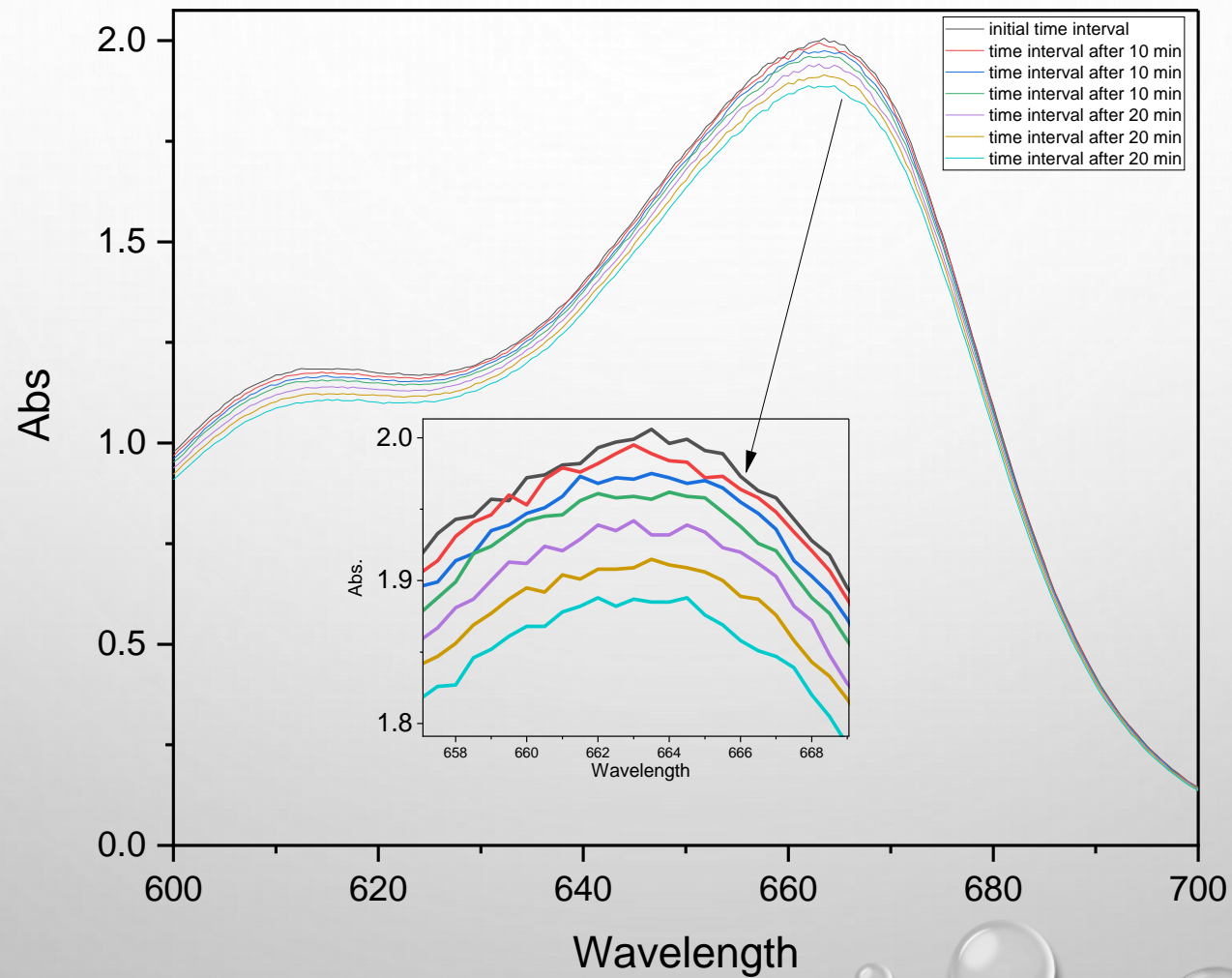
4/19/2021 Measurements for MB Degradation

- Seven total trials were conducted with MB solution concentration level of 10.012 mg/L and TiO₂ 50nm thin film.
- The first four trials were separated with a time interval of 10 mins while the remaining trials were separated with a time interval of 20 mins.
- The measurements were done with both the Ocean Optic instrument as well as Shimadzu.
- The distance from the lamp to the cuvette which contains the MB solution and the TiO₂ thin film was about 4 inches.
- For each trial, the temperature and the power meter of the lamp was measured.

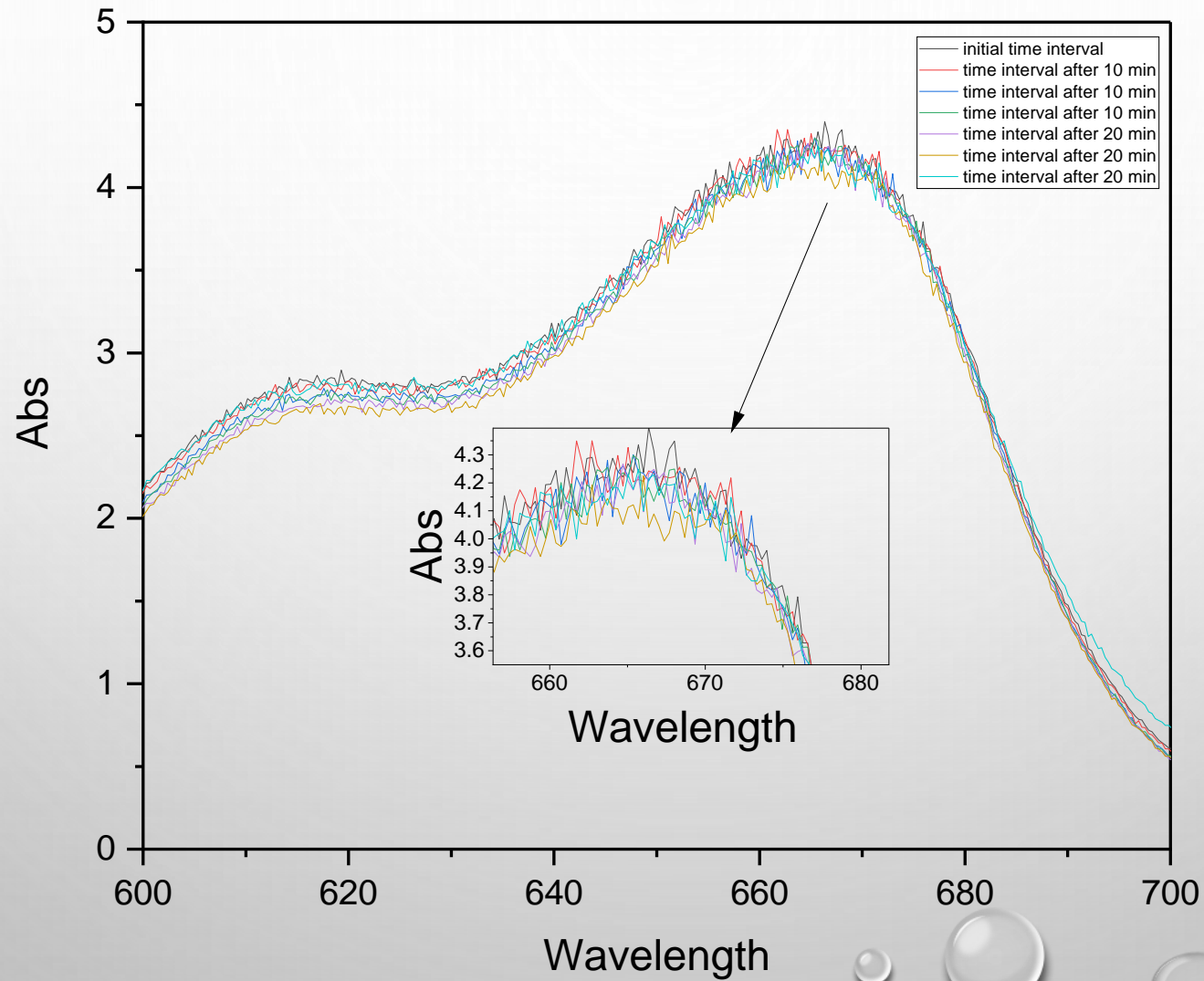
Time	Temperature (C)	Power (mW)
3:37	20.0	29.7
3:56	20.0	29.8
4:12	20.0	29.9
4:27	20.2	29.9
4:52	20.1	30.0
5:17	20.1	30.3
5:43	20.3	30.5

* The discrepancy between the time not corresponding to the 10 min interval was due to the actual process of performing the measurements which took about 5 – 8 min.

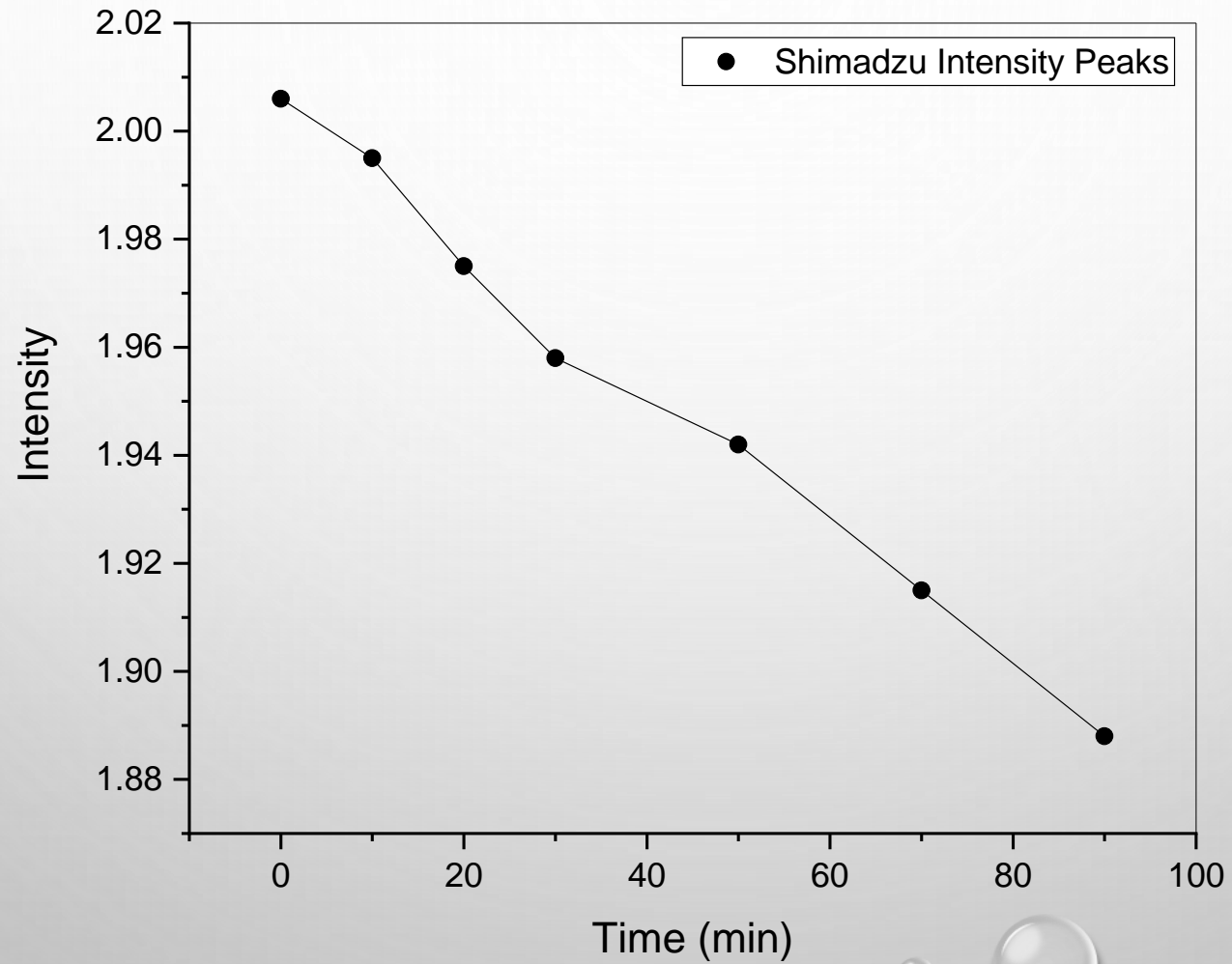
Shimadzu Absorption



Ocean Optics Absorption



Shimadzu Intensity Peaks



Ocean Optics Intensity Peaks

