Extra: Titration Quenching procedure

Scenario 1: Withdraw samples containing iodine regularly.

Scenario 2: Withdraw samples containing X (other than iodine) regularly. The concentration of X can be determined by **adding** excess acidified KI forming iodine. **Indirect method of sampling.** Another **reagent** must be added.

Order of steps:

**Even before you start the experiment**

1. **Fill** a **dry** **50.00 cm3 burette** with Na2S2O3.

**(Kinetics procedure)**

1. **Before X mins** from the start time, **pipette** 10.0 cm3 of the reaction mixture into a dry 250 cm3 conical flask.
2. **Important! Record the initial burette reading.**
3. **At X mins**, **quench** the withdrawn sample by adding **100 cm3 of cold water/any other quenching reagent**. **Record** the **exact time of quenching**.
4. (In scenario 2 only) Using a **dry** **10 cm3 measuring cylinder**, measure and transfer **10 cm3 of KI** (excess volume of KI) into the conical flask.
5. **Immediately titrate** the solution in the conical flask with FA2 until the solution changes from **brown** to **light yellow** **with continuous swirling**.
6. **Add** 10 drops of starch indicator into the conical flask.

1. **Without delay add** FA2 **dropwise** until the solution turns from **blue-black** to colourless **with continuous swirling**.
2. **Important! Record the final burette reading.**
3. **Before X mins** (list all values of X), repeat steps A to B to carry out the **titration** of each quenched sample.

General comments

Record the initial and final burette reading, do not miss this out because it’s needed in calculating your titre value.

Take note of the indicator if you need to use it, and the colour change at endpoint.