

10. Flow Fouling Setup

- Purpose: To study in detail how scale happens during flow.
- By combining the data from pressure sensor and view port, we will have a more comprehensive understanding of scaling.
- Large view port to observe in-situ growth of scale.
- 12 sample slots for large test and control group.
- Three way valve to direct flow to sample glass tube.
- Pressure sensor at front and back of glass tube to monitor pressure drop.
- Could also add temperature, pH and other sensors to have a more comprehensive understanding of scaling.
- Open loop scaling test, by combining NaHCO_3 and CaCl_2 , we create CaCO_3 precipitation with in test chamber and glass tube.
- Imaging: DSLR camera with time-lapse.

