

Ami - The Chemist's Amanuensis

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Scenario: *Somewhere in the bowels of the chemistry building, Jane enters her laboratory*

Jane: **"Hello Ami!"**

Ami: **"Good morning Jane"**

Jane: **"What's the reaction on the left?"**

(Ami displays the details of the reaction)

Jane: **"I want to make an observation"**

Ami: **"I'm all ears"**

Jane: **"Green, effervescing, no precipitate"**

Ami: **"Thank you"**

(Ami adds the observation to the display)



What might life be like in a chemistry laboratory if the surroundings were more aware of what's going on?



Are there ways to help the chemist to access information, prepare their experiments, collect their data, and write up their observations?

Brainstorm:

- Easier data collection
- More automated
- Video monitoring

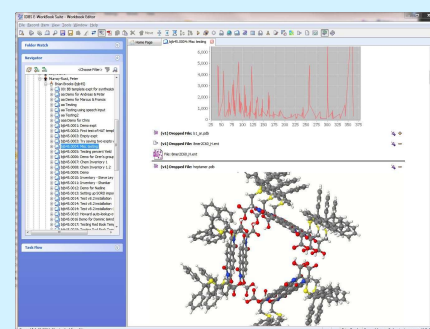
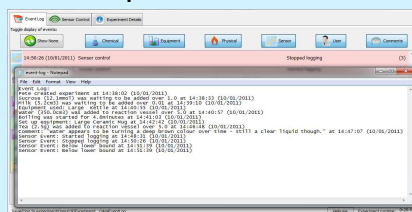
Example use-cases:

- I was away - when did it go brown & sticky!?
- That's not what I expected! I wonder if I remembered to add the magic ingredient?
- Did the temperature vary much during the reaction?

Ami Control Window

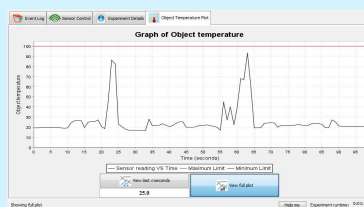


Event log and chart of experiment activities



Results sent to
Electronic LabNotebook

Arduino infrared temperature sensor



Stop-Video timelapse reaction monitoring



Motion/proximity-triggered
video monitor of fume cupboard

