The Monthly Progress Report

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Progress in 06-07/2022

Reaction Optimisation Workflow

1. Lab Integration work
2. Software design for the workflow control (debug and update)
3. Perform sub workflow loop involving Host console, Kuka3, Autosampler and LCMS to make the real analysis (water for now) based on the reaction optimisation workflow
4. Setup Chemspeed PC to join in the current wireless network
5. Setup the Raspberry Pi for LED station power control.
6. Driver design for Seeed Studio 4-Channel SPDT Relay (power control)
7. Control module design for LED station power control
8. Perform sub workflow loop involving Host console and LED station power control module
9. Robust test kuka3 works with Chemspeed, transferring vials and racks, including the position error (without auto door)

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Progress in 06-07/2022

Reaction Optimisation Workflow

In summary:

1. Perform and improve the whole workflow (including Kuka jobs, ChemS door control and LCMS autosampler control) without the optimiser.
   (So far, run the whole workflow more than 30 times, no error and fault)

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Plans for 08/2022

Reaction Optimisation Workflow

1. Make the water analysis with this workflow (this time would also involve the ChemS control and LCMS control).
2. Robust test for the whole workflow loop.
3. Software design for the workflow control (debug and update)
4. Lab Integration work

Current Challenges/Questions

1. The safety issue

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