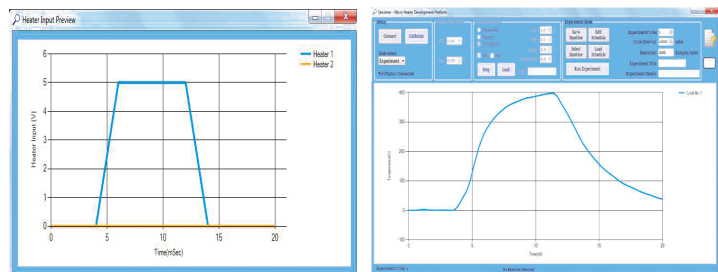
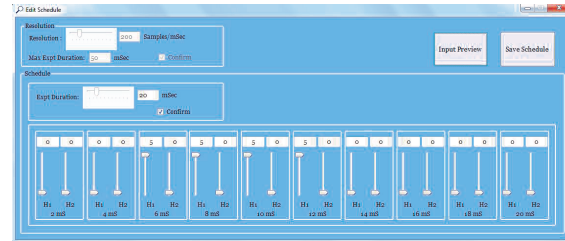


Sensimer: To perform Experiments with MEMS Heaters

- A desk-top experimentation and research platform to drive, control and monitor Microheaters, and to record and analyze their thermal response.
- It comprises a Microheater and associated electronics, Software to define Electrical Excitation and to observe the corresponding response of the Microheater.



Sensimer: Working

- The Microheater is given an **electrical excitation** in the form of standard input signals like sine, square, triangular, etc. or user-defined inputs
- This excitation causes the heater to **ramp up** to several tens and hundreds of degrees with a characteristic **thermal profile** that depends on the type of input
- The thermal profile can be seen as a graph of **Temperature v/s Time**
- The rise and fall times to different input signals can be analyzed
- Each PCB comes with 2 Microheaters to enable carrying out **differential measurements**
- Experiments can be performed to study the effect of addition of **thermal mass** on the thermal response of the Microheater.

Sensimer: For Research/Projects/Product Development

Sensimer can be used to carry out various nano-scale heating, thermal monitoring, thermal cycling & gas sensing experiments, etc. It can also take temperature v/s time schedule as an input to execute pre-defined thermal cycles like the ones used in PCR.

With our MEMS Lab Products, you can:

- **Undertake Research Projects:** Perform experiments with our MEMS sensors, characterize them and report your findings in Publications
- **Product Development:** Use our sensors for various MEMS-BioMEMS sensing. Build your prototype around our system and electronics
- Conduct a full-fledged course on MEMS Fabrication and Devices/Smart Systems
- **Start exploring the world of MEMS and Nanotechnology based Sensing Systems**