

# Gunn Diode Oscillator Minutes

David Headland

2004-04-22 10:00

## Attendance

- Fourth year students:
  - JM Higginbotham.
  - R Wan.
  - DP Headland.
  - MP Gaskill.
  - AJ Nelms.
  - RE Irwin.
- UMIST staff:
  - WS Truscott (11:30).

## Approvals

- The minutes from the last meeting were approved.

## Power supply

- The control PCB is now complete.
- Some components are in place, others need to be added.
- PSU needs testing, which will be started tomorrow.
- The expectation is that the PSU will work.

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## Manufacturing

- e2v have found that the power combining system is tricky to set up.
- Part of the team has been invited to Lincoln to perform tests and set the multiple device oscillator up correctly.
- P Norton will be asked for suitable times.

## Testing

- Those going to e2v should take our own graphs and ask for e2v's analysis to compare with our own.
- Compare two and three diode combining efficiency.

## Simulation

- A model similar to e2v's will be required for further progress.
- Their current model works in a planar circuit.
- K Newsome said that he would send the model of the diode.
- We should mail him to check the current status of this.
- Could use this model as extra work beyond our original specifications.

## Future tasks

- Tasks still to perform for the project were discussed.
- The following list was created, along with finish times:
  1. Combine PSU and control hardware (23 April).
  2. Test PSU system (30 April).
  3. Test multiple device oscillator (7 May).
  4. Simulations (7 May).

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5. Poster (4 June).
  6. Demonstration preparation (8 June).
  7. Self appraisal (10 June).

## Proposed actions

JM Higginbotham	Mail K Newsome for the diode model.
MP Gaskill	Mail e2v to arrange a visit next week.
MPG, REI	Start on the poster and demonstration preparation.
AJ Nelms	Prepare for the e2v visit.
R Wan	Order components to finish the PSU.
RW, AJN	Test the PSU.

## Next meeting

Time      Thursday 29 April 2004, 10:00.

Place      D2c coffee room.

Meeting adjourned, 11:58.