

# Gunn Diode Oscillator Minutes

David Headland

2004-04-30 10:00

## Attendance

- Fourth year students:
  - JM Higginbotham.
  - R Wan.
  - DP Headland.
  - MP Gaskill.
  - AJ Nelms.
  - RE Irwin.

## Approvals

- The minutes from the last meeting were approved.

## e2v meeting

- Minutes from the e2v meeting were distributed.
- An overview of the progress of the meeting was given.
- A suggestion was made to remove the second harmonic waveguide from the oscillator as the waveguide extensions will do the same job. This is only applicable for the testing, as waveguide extensions are no used in production.

---

## Power supply

- The PSU is not currently thoroughly tested.
- The S/H doesn't like negative inputs.
- Positive inputs will be given to the S/H and unity gain inverting amplifiers will be used after the S/H devices.
- The PSU is required for multiple device oscillator testing.
- Testing should start as soon as the PSU is complete.
- The situation will be reviewed on Thursday.

## Project demonstration

- A high-level outline was created, distributed and discussed.
- The equipment list was discussed and modified.
- Deadline for the epilogue sections was set to mid day on 4 June 2004.

## Poster

- The general layout has been completed.
- No content is currently in place. This will be added soon.
- Remember to include the supervisors' names on the poster.
- It was suggested that R Sloan's poster layout is used.

## Simulation

- The model of the Gunn diode has been received from e2v.
- The backshort has been modelled.
- These will be included in the simulation section of the epilogue.

---

## Possible paper

- R Sloan congratulated the group.
- He suggested that WS Truscott and himself could write a paper on the project.
- This could increase the marks for the group.
- We should suggest this to WS Truscott.

## Team working competition

- We are through to the final four in the “UMIST academic” category.
- We have been invited to a meal where the winners will be announced:
  - Staff building at Manchester University.
  - Be there 17:00 for 17:30.
  - Meet outside Kro Bar at 16:50.
- The dress code is smart/casual.
- A buffet will be provided after the presentation of awards.
- The event is expect to end around 22:30.
- This issue should be raised again on Thursday.
- Reminder
- A referendum will be held on the UMIST/Manchester merger next Wednesday.
- Please **vote!**

---

## Proposed actions

DP Headland      Re-format the e2v minutes and put on the web site.  
RE Irwin          Invite WS Truscott and R Sloan to the awards evening.  
JM Higginbotham   Continue simulations.  
AJN, RW          Test and complete changes to the PSU.  
RE Irwin          Continue work on the poster.  
MP Gaskill        Continue work on the demonstration.

## Next meeting

Time      Thursday 6 May 2004, 10:00.

Place      D2c coffee room.

Meeting adjourned, 13:12.