# Gunn Diode Oscillator Minutes

#### Mick Gaskill

#### 2004-01-26 12:30

### Attendance

- Fourth year students:
  - AJ Nelms
  - R Wan.
  - JM Higginbotham.
  - MP Gaskill.

# **Apologies**

- RE Irwin.
- DP Headland.

## **UMIST Staff**

- WS Truscott
- R Sloan

# Approvals

• The minutes from the previous meeting were approved.

#### Old business

- Interim report discussed briefly with Dr.Truscott some minor problems in report will give feedback before presentation will be marking with Dr. Sloan on Wednesday.
- Ray from the workshop on D-Floor has started machining the first oscillator.
- No progress from e2v, known.

#### **New Business**

- (a) Discussion of progress against time plan, R.Wan has said this must change and is detailed in the interim report.
  - Possible areas for development is the power supply unit AJ Nelms suggested a possible design (1.5 A 0-8 V) but still requires four separate controls. R Wan can provide a solution for this later.
  - JM Higginbotham has been provided with the information for calculating the radial line transformer.
- (b) Discuss approach to presentation each person will have five minutes to discuss their area of expertise.
  - Presentation similar to e2v presentation.
  - Questioned whether we still require the Gunn model from e2v.
  - Flow of the presentation will be of a top-down approach design, simulate, build, test.
  - It was stressed not to go into much detail, as time is limited.
  - Slides should be prepared in Word then its easier to copy and paste into PowerPoint.

### Proposed actions

JM Higginbotham Calculate the size of the radial line transformer/slides simulating.

AJ Nelms Prepare slides on testing.

R Wan Prepare slides on introduction.

MP Gaskill Prepare slides on building.

RE Irwin Have information ready for waveguide.

DP Headland Have information ready for power combining/2nd har-

monics.

# Next meeting

Time Wednesday 28 January 2004, 10:00.

Place D floor coffee room.

Meeting adjourned, 14:00.