

## OXFORD UNIVERSITY DEPARTMENT OF MATERIALS

**DMAC 11** Minutes of Academic Committee held on 2 May 2002 at 11.15am  
in Room 20.19, ETB Building

**Present** GDWS (Chair), AC, MJC, PRW, RIT, APS (from 1.00 p.m.), CFH,  
Chair of JCCG Susannah Speller, Chair of JCCU Georgia Hodge.

1. **Apologies:** JMS

2. The **minutes of DMAC 10** were agreed, after the insertion of the word '*some*' before the words *junior demonstrators* on line 12 of page 3.

3. **Schools Liaison matters.**

Martin Carr spoke to the meeting with particular reference to (i) and (ii) below

(i) Summer School for Chemistry teachers. A provisional programme for the Teacher-in service Summer School (7-10 July) was tabled. This is being arranged jointly with the Royal Society for Chemistry. Accommodation is at St. Anne's. PRW suggested that the St. Anne's Lecture Theatre be used for the opening lecture.

The 'Hands on' element of events was discussed, and MJC tabled a paper setting out his ideas for developing this. He suggested that 'hands on' experiments should be based on real situations, such as failure analysis. Industry should be involved, with the use of real case scenarios. There was a need for staff in the Department to supply actual case study material. Concern was expressed that insufficient material of that kind was currently available, and that it would take considerable effort to collect. After discussion, it was proposed that the 'hands on' activities for this course should be more closely aligned to our existing practicals, and to topics that could easily be reproduced in the classroom. Suggestions were:

- Bubble raft
- Stretching Polymers
- Nanoparticles
- Potty Putty
- Slip Casting
- Mass spectrometer experiment (GH)
- Polarization experiment (GH)

(ii) Headstart Course (9<sup>th</sup> July) MJC explained that this was joint with the Dept. of Engineering and involved one group of 12 sixth form students for 3 hours in the morning, and another group of 12 for the same length of time in the afternoon (Tuesday 9th July). There were various suggestions for this. PRW said he believed we should aim for hi-tech exciting things. Atom Probe and nanoparticles were cited. MJC confirmed that he was thinking of more than one item for this event, possibly three for each session.

After discussion, the suggestion was for a mini talk, mini tour, and an experiment on say, nanoparticles. GDWS said there was an urgent need to find out what the Engineers are doing on their days.

**Action MJC to contact Andrew Cave.**

(iii) Support for the Institute of Physics AS level module on 'Designer Materials'

This is now taught in the second half of the first term in the 6th form, and GDWS said that there was agreement in principle between all Materials Departments throughout the country to hold an Open House/Open Day to enable teachers and students to come and see first hand the things they were learning about in school. This would require a mini presentation in Materials Science.

(iv) Science and Engineering Ambassadors Scheme

GDWS explained that we will need to nominate some people for this. Positive vetting will be carried out by the Government agency running this, because it involves work with children. **Action: GDWS, MJC.**

(v) MJC's Team Design Project. AC emphasized that the requirement for this is to produce a 'design' project, rather than a working piece of apparatus.

**4. Matters outstanding from DMAC10 minutes**

The following were listed here -

- Prelims legislation
- Lecture list – General scheme has been completed
- Course handbook – MM
- Grouping of Option courses.
- GDWS is seeing JMS on Monday (6 May) regarding the thermodynamics lectures during his sabbatical in MT. It was felt we must explore our own ability to provide these lectures, before sending our students out to other departments. APS has provided lecture list loads.

**5. JCCU Matters**

It was agreed to change the regular date of the JCCU meeting to Tuesday of second week, instead of third week of term and to hold the first DMAC meeting on the Monday of 3<sup>rd</sup> week.

Collections

The concept of Departmental Collections had been well received by undergraduates. However, some initial problems had arisen. It is essential to prepare the collection paper in liaison with tutorial fellows.

Engineering and Society

Details of the current regulations have been included with the papers for the JCCU meeting in 3<sup>rd</sup> week. It is necessary to circulate details of the Safety Case Study to 2<sup>nd</sup> Year MSOM students without delay.

**Action GDWS**

Entrepreneurship Course: Business plan

GH asked if it would be possible to give feedback to students on the Business Plan ahead of general examination results. GDWS replied, and was generally supported, that he was in favour of this, especially after all the effort on the part of the students. He believed that it could be deemed to be part of coursework and as such could be communicated to students as soon as possible after the event. However, it would be necessary to check the position with the examiners (and possibly with the Proctors) before proceeding further. He would pursue this matter.

**Action GDWS**

Future of Entrepreneurship course for 2003

There was some doubt as to whether this new and exciting addition to the course could be continued for next year. This was due to problems of its support by the Saïd Business School. The feeling of the Committee was that if at all possible we should maintain this aspect of the course, particularly after all the hard work put into its introduction, and the students' enthusiasm for it. The following was decided.

1. There should be negotiations with the Business Schools towards their continuation of the Entrepreneurship Course.

2. If (1) is unsuccessful, Paul Bradstock of the Oxford Trust be approached to see if the course could be implemented through the Trust. The Department would be expected to provide secretarial and administrative input. PB to identify areas of need, and provide the teaching element. Careful consideration should be given to not increasing the workload on academic staff.
3. If (1) and (2) are unsuccessful, We will have to revert to the position before introduction of the Entrepreneurship Course, and modify the examination regulations accordingly.

**Action GDWS**

Election of JCCU representative to the E(MEM) Standing Committee.

It is necessary for this appointment to be made at the JCCU meeting on 7 May, ahead of the general JCCU elections in Michaelmas term. This was to fit in with the meetings of the E(MEM) Standing Committee. Penny Evans is the retiring representative from the JCCU, and warm appreciation was recorded to her for her attendance at meetings and involvement with all EMEM matters concerned.

**Action GH to JCCU**

## **6. JCCG Matters**

### Junior Demonstrating and associated matters

SS reported on the discussion on Junior Demonstrators and the TAB situation, which was contained in the JCCG minutes of 23<sup>rd</sup> April, to hand. It was emphasised by the Academic Committee, that Junior Demonstrators should be present in the lab. throughout the time that their practical was running, and should not retreat to their offices, as this made contact with students unnecessarily difficult.

### End of year questionnaires

SS said that the format for the end of year questionnaire had been approved by the JCCG. This would be put in hand and results would be available to provide feedback for next year.

**Action SS/AC**

### Holder Building Parties: Disruption to EM Users, evenings and weekends

The increasing number of parties being held in the Holder Building Common Room, and the consequent disruption to users of the electron microscopes should be brought forward for action appropriately.

**Action AC to contact RMP and DJHC**

### Writing skills lecture

It may not be apparent that GADB's writing skills course is available for all, not just for those with non-English speaking backgrounds. For the future, it was agreed that this should be made clear to all students; to include Part IIs. It is to be put in the Lecture List, and should be incorporated into the schedule of skills training provided to our students.

**Action MM and GADB**

## **7. E(MEM) Matters**

GDWS said he has a meeting scheduled with Judith Heyer on Monday (6 May), to discuss future arrangements for the teaching of economics to EMEM students.

## **8. EMS Matters**

APS reported that he had attended the EMS meeting. The present 4<sup>th</sup> year students had all chosen the 'structural engineering' option (the opposite to what had happened on one previous occasion).

## **9. Preparation of Programme Specifications for MS and MEM**

GDWS referred to the template for this, and said he now understood that the requirement for submission by the end of 4<sup>th</sup> week (this term) was a paper exercise this year ahead of the Governmental requirement for the year 2003. It was difficult to see how this could be accomplished

and he asked for the feeling of the committee. In general it was felt that we may not be in a position to do so at this time, but GDWS said he would try to see how this could be achieved.

**10. Lecture list for 2002-2003.**

Item deferred to next meeting.

**11. Team Design Projects**

The lack of projects offered, with supervision, was reported. So far the undermentioned have put forward projects.

Martin Carr, Peter Northover, Jan Czernuszka. Because of the number of 2<sup>nd</sup> year students involved, all three courses, we need at least 4 projects, and preferably 5 to give some element of selection.

GDWS expressed his strong concern at the lack of people willing to assist with this essential task.

**Action GDWS to DC meeting**

**12. Language Option**

DMAC 11.6 The new *Modern language – German* course, offered by the Language Centre from Michaelmas term 2002 was greeted with enthusiasm. It was agreed that

1. We should continue with the existing language option arrangements, at least in the short term.
2. Offer German as a supplementary subject course.
3. Explore the possibility of using the German course as a template for a similarly based French course.
4. Change the remission arrangements from practicals to an engineering in society requirement.

**Action GDWS/GADB/APS**

**13. Research degrees by part time study.**

The document DMAC 11.7 was tabled.

**14. Option courses 2002 - 2**

Item deferred to next meeting.

At 2.15pm the meeting adjourned. It was agreed that it be re-convened at 12.30pm on Friday 10<sup>th</sup> May at the same venue, with lunch provided. The main items to be discussed will be the lecture list for next year, the grouping of option courses, team design projects, and the future mode of operation of DMAC.

DMAC 11