European Vacation Placements: Reports 2012

Below are reports on the Summer Placements provided by students who participated in the scheme in 2012.

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ETI, Zurich, Switzerland

**Report 1**

1. **General**
   Placement Location: **ETH Zürich, Switzerland**
   Arrival and Departure Dates: 4th July, 31st August
   No. of working days spent at Institution: 40

2. **Financial**
   Cost and method of return travel from the UK (£): **£119.45**
   Total cost of daily travel to and from Institution (£): **£75.24**
   Total cost of accommodation (say if provided free): **£699.60**
   Value of Armourers & Brasiers/Alcan bursary: **£700**
   Total received from College: **£1000 for research, language course and travel outside Switzerland.**
   Total received from Institution (£): **£792**

3. **Accommodation**
   Accommodation address: **Meierwiesenstrasse 62, Nr. 22/1. Stock, 8064 Zurich, Switzerland**
   Type of Accommodation: **WOKO, a student housing company**
   Distance from Institution: **20-25 minutes by tram and bus**
   Quality of accommodation on a scale of 1 (low) to 10 (high): 8
   Quality of facilities on a scale of 1 (low) to 10 (high): 8
   Convenience of location on a scale of 1 (low) to 10 (high): 8

4. **Research Project**
   Title of Research Project: **Investigation of localised surface plasmon resonance of Au nanocylinders**
   Written Report submitted to host institution: **Yes**
   Experimental Techniques used: **Scanning electron microscope, optical setup**
   Interest level of project on a scale of 1 (low) to 10 (high): 6
   Quality of support provided on a scale of 1 (low) to 10 (high): 8
   Interaction with other researchers on a scale of 1 (low) to 10 (high): 8

**Report 2**

1. **General**
   Placement Location: **ETH Zürich**
   Arrival and Departure Dates: 1st July – 31st August
   No. of working days spent at Institution: 34

2. **Financial**
   Cost and method of return travel from the UK (£): **British airways Heathrow-Zürich/Zürich-City, total cost £168.75**
   Total cost of daily travel to and from Institution (£): **2 x month travel pass, 57CHF each**
   Total cost of accommodation (say if provided free): **£668.46**
   Value of Armourers & Brasiers/Alcan bursary: **£660**
   Total received from College: **£**
   Total received from Institution (£): **962.50CHF**

3. **Accommodation**
   Accommodation address: **Meierwiesenstrasse 62, 8064 Zürich**
Type of Accommodation: Student halls
Distance from Institution: 20 minutes on public transport
Quality of accommodation on a scale of 1 (low) to 10 (high): 8
Quality of facilities on a scale of 1 (low) to 10 (high): 8
Convenience of location on a scale of 1 (low) to 10 (high): 8

4. Research Project
Title of Research Project: Strain-induced multiferroicity in SrMnO$_3$
Written Report submitted to host institution: Yes
Experimental Techniques used: Class 4 laser optical setups and measurements, use of associated software, building components for the optical setup
Interest level of project on a scale of 1 (low) to 10 (high): 8
Quality of support provided on a scale of 1 (low) to 10 (high): 9
Interaction with other researchers on a scale of 1 (low) to 10 (high): 9

Report 3
1. General
Placement Location: ETH Zurich, Switzerland
Arrival and Departure Dates: 27th June – 20th August
No. of working days spent at Institution: 49

2. Financial
Cost and method of return travel from the UK (£): Swiss International Airlines AG, £180, Birmingham to Zurich
Total cost of daily travel to and from Institution (£): ZVV Zone 10 Monthly Travel Pass, 2 x 57CHF ≈ £75
Total cost of accommodation (say if provided free): 2 x 530CHF ≈ £701
Value of Armourers & Brasiers/Alcan bursary: £760
Total received from College: £500 (Travel Grant, req. application)
Total received from Institution (£): 970CHF ≈ £640 (for 7 weeks)

3. Accommodation
Accommodation address: Meierwiesenstrasse 62, Room 306, 8064 Zürich, Switzerland
Type of Accommodation: International Student House, small individual rooms, large common room, large shared kitchen & several shared bathrooms
Distance from Institution: 2.2km, 25 min walk or 15 min by bus
Quality of accommodation on a scale of 1 (low) to 10 (high): 8
Quality of facilities on a scale of 1 (low) to 10 (high): 7
Convenience of location on a scale of 1 (low) to 10 (high): 10

4. Research Project
Title of Research Project: Ionic Liquid-Mediated Nanolubrication
Written Report submitted to host institution: Brief technical report outlining methods, problems and results. Presentation of results given at Offsite Group Meeting
Experimental Techniques used: AFM imaging (Veeco Dimension 3000), Liquid cell AFM/LFM (MFP3DSTM, Asylum Research), Colloid Gluing & Manipulation, Plasma Cleaning, UV/Ozone Cleaning, solvent washing
Interest level of project on a scale of 1 (low) to 10 (high): 10
Quality of support provided on a scale of 1 (low) to 10 (high): 10
Interaction with other researchers on a scale of 1 (low) to 10 (high): 10
Report 4

1. General
Placement Location: ETH Zurich
Arrival and Departure Dates: Arrived 1st July, departed 27th August 2012
No. of working days spent at Institution: 43

2. Financial
Cost and method of return travel from the UK (£): Swiss airlines return flight: £227.37
Total cost of daily travel to and from Institution (£): 2 monthly passes: £75.50
Total cost of accommodation (say if provided free): 2 months’ rent: £701.98 (1060 CHF)
Value of Armourers & Brasiers/Alcan bursary: £760.00
Total received from College: £148.00
Total received from Institution (£): £757.58 (1000 CHF)

3. Accommodation
Accommodation address: Meierwiesenstrasse 62, Altstetten, Zurich 8064, Switzerland
Type of Accommodation: Student accommodation block of rooms
Distance from Institution: 20 minutes on the bus
Quality of accommodation on a scale of 1 (low) to 10 (high): 8
Quality of facilities on a scale of 1 (low) to 10 (high): 7
Convenience of location on a scale of 1 (low) to 10 (high): 7

4. Research Project
Title of Research Project: Electroless deposition of metallic copper on fibres
Written Report submitted to host institution: Electroless deposition of metallic copper on fibres
Experimental Techniques used: Reflux, XRD measurements, sputtering, taking SEM images, using the centrifuge, using the glove box
Interest level of project on a scale of 1 (low) to 10 (high): 7
Quality of support provided on a scale of 1 (low) to 10 (high): 9
Interaction with other researchers on a scale of 1 (low) to 10 (high): 9

Report 5

1. General
Placement Location: ETH Zurich, Switzerland
Arrival and Departure Dates: 01/07/2012 – 25/08/2012
No. of working days spent at Institution: 40

2. Financial
Cost and method of return travel from the UK (£): Return flight from Luton: £184.98
Total cost of daily travel to and from Institution (£): Monthly travel pass (X2): 114 CHF = £75.10
Total cost of accommodation (say if provided free): 1000 CHF = £658.81
Value of Armourers & Brasiers/Alcan bursary: £760
Total received from College: £250
Total received from Institution (£): 1107 CHF = £729.30

3. Accommodation
Accommodation address: 62 Meierwiesenstrasse, 8064, Zurich, Switzerland
Type of Accommodation: Student Hostel/ Halls
Distance from Institution: 10-15 mins by bus
Quality of accommodation on a scale of 1 (low) to 10 (high): 8
Quality of facilities on a scale of 1 (low) to 10 (high): 6 – kitchen got messy on Sunday evenings, only one large kitchen for everyone to use. 
Convenience of location on a scale of 1 (low) to 10 (high): 10

4. Research Project
Title of Research Project: Strain rate sensitivity & microstructure of thin film Al based alloys on a flexible polymer substrate
Written Report submitted to host institution: Yes
Experimental Techniques used: Tensile testing, SEM, AFM, TEM, Optical microscopy, Sputtering
Interest level of project on a scale of 1 (low) to 10 (high): 9
Quality of support provided on a scale of 1 (low) to 10 (high): 10 – had a very good supervisor
Interaction with other researchers on a scale of 1 (low) to 10 (high): 10

Report 6
1. General
Placement Location: ETH Zurich, Switzerland
Arrival and Departure Dates: 1/7/12 – 31/8/12
No. of working days spent at Institution: 33

2. Financial
Cost and method of return travel from the UK (£): British Airways Flights from/to Heathrow Terminal 5 £236.65
Total cost of daily travel to and from Institution (£): I bought two monthly Zone 10 travel passes, which include buses, trains, trams and boats costing £38 each. Both the accommodation and Science City were in zone 10, so this covered the tram and bus to work.
Total cost of accommodation (say if provided free): £700
Value of Armourers & Brasiers/Alcan bursary: £760
Total received from College: none
Total received from Institution (£): £690

3. Accommodation
Accommodation address: Meierwiesenstrasse 62, Zurich, CH-8064
Type of Accommodation: Student Halls of Residence
Distance from Institution: ~2km (15 minutes by bus/tram)
Quality of accommodation on a scale of 1 (low) to 10 (high): 7
Quality of facilities on a scale of 1 (low) to 10 (high): 7
Convenience of location on a scale of 1 (low) to 10 (high): 9

4. Research Project
Title of Research Project: The Impact of Oxygen Content on the Mechanical Properties of Metallic Glass Vit-105
Written Report submitted to host institution: The Impact of Oxygen Content on the Mechanical Properties of Metallic Glass Vit-105
Experimental Techniques used: Inductive arc melting; mini arc and big arc, tilt casting, suction casting, saw cutting, grinding, polishing, XRD, SEM, oxygen content testing, compression testing
Interest level of project on a scale of 1 (low) to 10 (high): 8
Quality of support provided on a scale of 1 (low) to 10 (high): 9
Interaction with other researchers on a scale of 1 (low) to 10 (high): 4
EMPA, Thun, Switzerland

1. General
Placement Location: **Thun, Switzerland**
Arrival and Departure Dates: **30th June 2012 - 29th Sept 2012**
No. of working days spent at Institution: **65**

2. Financial
Cost and method of return travel from the UK (£): **203 By flight (Easyjet)**
Total cost of daily travel to and from Institution (£): **£1.6**
Total cost of accommodation (say if provided free): **£1160**
Value of Armourers & Brasiers/Alcan bursary: **0**
Total received from College: **0**
Total received from Institution (£): **£1060 (After tax)**

3. Accommodation
Accommodation address: 1 Göttibachweg, Thun, Switzerland  CH3600
Type of Accommodation: **Flat**
Distance from Institution: **23 minutes (walking plus taking bus)**
Quality of accommodation on a scale of 1 (low) to 10 (high): **8**
Quality of facilities on a scale of 1 (low) to 10 (high): **7**
Convenience of location on a scale of 1 (low) to 10 (high): **9**

4. Research Project
Title of Research Project: **Electrochemical Deposition of Aluminum-doped Zinc Oxide Compact Films and Nano-Patterning on Zinc Oxide by Natural Lithography**
Written Report submitted to host institution: **Yes**
Experimental Techniques used: **Electrochemical deposition**
Interest level of project on a scale of 1 (low) to 10 (high): **7**
Quality of support provided on a scale of 1 (low) to 10 (high): **9**
Interaction with other researchers on a scale of 1 (low) to 10 (high): **7**

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PSI, Villigen, Switzerland

1. General
Placement Location: **Paul Scherrer Institute, Switzerland**
Arrival and Departure Dates: **16/7/12 – 28/9/12**
No. of working days spent at Institution: **40 (8 weeks with one week of annual leave)**

2. Financial
Cost and method of return travel from the UK (£): **Flights to and from Zurich - £200**
Total cost of daily travel to and from Institution (£): **Free (walk)**
Total cost of accommodation (say if provided free): **£13 a night**
Value of Armourers & Brasiers/Alcan bursary: **0**
Total received from College: **0**
Total received from Institution (£): **£3000 (after local tax deduction)**

3. Accommodation
Accommodation address: **Guesthouse, Paul Scherrer Institute, Villigen, Switzerland.**
Type of Accommodation: **Shared room with one other person — all the summer students are accommodated in the guest house**
Distance from Institution: **200 m**
Quality of accommodation: on a scale of 1 (low) to 10 (high): 9
Quality of facilities: on a scale of 1 (low) to 10 (high): 9
Convenience of location: on a scale of 1 (low) to 10 (high): 7

4. **Research Project**
Title of Research Project: **Analysing atomistic simulations on the deformation of nanocrystalline metals**
Written Report submitted to host institution: **Yes**
Experimental Techniques used: **N/A**
Interest level of project: on a scale of 1 (low) to 10 (high): 8
Quality of support provided: on a scale of 1 (low) to 10 (high): 7
Interaction with other researchers: on a scale of 1 (low) to 10 (high): 9

**University of Erlangen, Germany**

**Report 1**

1. **General**
Placement Location: **Erlangen, Germany**
Arrival and Departure Dates: **23/07/12, 14/09/12**
No. of working days spent at Institution: **35**

2. **Financial**
Cost and method of return travel from the UK (£): **Plane. £150**
Total cost of daily travel to and from Institution (£): **£ 0 (bicycle provided)**
Total cost of accommodation (say if provided free): **Arranged and provided free**
Value of Armourers & Brasiers/Alcan bursary: **£ 750**
Total received from College: **£ 150**
Total received from Institution (£): **£ 0**

3. **Accommodation**
Accommodation address: **Hallerstrasse 17, Erlangen-Buckenhof**
Type of Accommodation: **Room in a shared house**
Distance from Institution: **3 miles**
Quality of accommodation: on a scale of 1 (low) to 10 (high): 7
Quality of facilities: on a scale of 1 (low) to 10 (high): 4
Convenience of location: on a scale of 1 (low) to 10 (high): 6

4. **Research Project**
Title of Research Project: **The effect of ruthenium on the solubility of rhenium in the matrix of Nickel based superalloys.**
Written Report submitted to host institution: **Yes**
Experimental Techniques used: **Use of the furnace, cutting, mounting, grinding, polishing, etching, light microscopy, SEM, image analysis (imagej)**
Interest level of project: on a scale of 1 (low) to 10 (high): 8
Quality of support provided: on a scale of 1 (low) to 10 (high): 8
Interaction with other researchers: on a scale of 1 (low) to 10 (high): 6
Report 2
1. General
Placement Location: Erlangen, Germany
Arrival and Departure Dates: 2nd July – 4th September
No. of working days spent at Institution: 42

2. Financial
Cost and method of return travel from the UK (£): KLM Airlines (£200), and approx. £25 to and from airport
Total cost of daily travel to and from Institution (£): £92.60
Total cost of accommodation (say if provided free): Provided free by the university
Value of Armourers & Brasiers/Alcan bursary: £750
Total received from College: £200
Total received from Institution (£): Accommodation Costs

3. Accommodation
Accommodation address: Straßberg 27, Büchenbach, Erlangen, Nuremberg, Germany
Type of Accommodation: Shared house
Distance from Institution: 6 miles
Quality of accommodation: on a scale of 1 (low) to 10 (high): 8
Quality of facilities: on a scale of 1 (low) to 10 (high): 9
Convenience of location: on a scale of 1 (low) to 10 (high): 7

4. Research Project
Title of Research Project: Fracture Toughness and NiAl
Written Report submitted to host institution: Yes
Experimental Techniques used: SEM, Optical Microscopy, Finite Element Modelling, Digital Image Correlation, Mechanical Testing stage with strain gauge systems
Interest level of project: on a scale of 1 (low) to 10 (high): 9
Quality of support provided : on a scale of 1 (low) to 10 (high): 8
Interaction with other researchers: on a scale of 1 (low) to 10 (high): 9

University of Goettingen, Germany

Report 1
1. General
Placement Location: Goettingen, Germany
Arrival and Departure Dates: August 13th – September 27th
No. of working days spent at Institution: 30 plus 5 at group seminar

2. Financial
Cost and method of return travel from the UK (£): There: Train, Ferry and Train: £112
Return: Train and Eurostar: £110, Used an Interrail Pass which I also used for other summer travels.
Total cost of daily travel to and from Institution (£): Free (bicycle)
Total cost of accommodation (say if provided free): Free
Value of Armourers & Brasiers/Alcan bursary: £750
Total received from College: None (did not apply)
Total received from Institution (£): £0
3. Accommodation
Accommodation address: Kreuzbergring 44, Göttingen
Type of Accommodation: Student dormitory
Distance from Institution: 2.4 km, with a very nice cycle path
Quality of accommodation: on a scale of 1 (low) to 10 (high): 8
Quality of facilities: on a scale of 1 (low) to 10 (high): 8
Convenience of location: on a scale of 1 (low) to 10 (high): 9

4. Research Project
Title of Research Project: The Change of Glass Transition Temperature with Heating Rate
Written Report submitted to host institution: Presentation given at full lab meeting and submitted.
Continued analysis and detailed report still underway.
Experimental Techniques used: Ultra-rapid capacitive heating, differential scanning calorimetry
Interest level of project: on a scale of 1 (low) to 10 (high): 9
Quality of support provided: on a scale of 1 (low) to 10 (high): 9
Interaction with other researchers: on a scale of 1 (low) to 10 (high): 8

Report 2
1. General
Placement Location: Goettingen - Germany
Arrival and Departure Dates: 13th August – 29th September 2012
No. of working days spent at Institution: 30 in the department and 5 at the institute seminar

2. Financial
Cost and method of return travel from the UK (£): Flights (London to Hamburg): £75
(Hamburg to London): 142 Euros (~£113)
Trains (Hamburg to Göttingen return): 76 Euros (~£60)
£27 Göttingen – Frankfurt (train), £105 Frankfurt – Cambridge (flight to Heathrow and bus to Cambridge);
Total cost of daily travel to and from Institution (£): Nil, bike provided by Institute
Total cost of accommodation (say if provided free): Provided by Institute
Value of Armourers & Brasiers/Alcan bursary: £ 750
Total received from College: £300
Total received from Institution (£): Nil

3. Accommodation
Accommodation address: Kreuzbergring 44, Göttingen, Germany
Type of Accommodation: University-owned Student Halls
Distance from Institution: 15 minute bike ride or 25 minute walk
Quality of accommodation: on a scale of 1 (low) to 10 (high): 9
Quality of facilities: on a scale of 1 (low) to 10 (high): 9
Convenience of location: on a scale of 1 (low) to 10 (high): 9 (half-way between department and city centre)

4. Research Project
Title of Research Project: Investigation of Oxide Thin Films deposited using MAD techiques
Written Report submitted to host institution: By email to Professor Samwer
Experimental Techniques used: MAD deposition, Ellipsometry, STM, AFM, XRD, PPMS
Interest level of project: on a scale of 1 (low) to 10 (high): 7
Quality of support provided: on a scale of 1 (low) to 10 (high): 8
Interaction with other researchers: on a scale of 1 (low) to 10 (high): 9

TUHH, Hamburg, Germany

**Report 1**

1. **General**
   Placement Location: **TUHH, Hamburg, Germany**
   Arrival and Departure Dates: **1st July to 28th August**
   No. of working days spent at Institution: **39**

2. **Financial**
   Cost and method of return travel from the UK (£): **£110 Flight**
   Total cost of daily travel to and from Institution (£): **£0 Walked**
   Total cost of accommodation (say if provided free): **€700, €600 provided by the institute**
   Value of Armourers & Brasiers/Alcan bursary: **£750**
   Total received from College: **£0**
   Total received from Institution (£): **€600 for accommodation**

3. **Accommodation**
   Accommodation address: **Northern Institute of Technology Management, Kasernenstrasse 12, D-21073 Hamburg**
   Type of Accommodation: **Student halls with ensuite**
   Distance from Institution: **300m**
   Quality of accommodation: on a scale of 1 (low) to 10 (high): **8**
   Quality of facilities: on a scale of 1 (low) to 10 (high): **7**
   Convenience of location: on a scale of 1 (low) to 10 (high): **10**

4. **Research Project**
   Title of Research Project: **Fabrication and mechanical characterization of SiO2-PMMA composites using silanes as coupling agents**
   Written Report submitted to host institution: **Yes**
   Experimental Techniques used: **Planetary Ball Mill, Centrifuge, Uniaxial press, Automated circular saw, Thermogravitational analysis, Nanoindentation, four point bend**
   Interest level of project: on a scale of 1 (low) to 10 (high): **6**
   Quality of support provided: on a scale of 1 (low) to 10 (high): **8**
   Interaction with other researchers: on a scale of 1 (low) to 10 (high): **5**

**Report 2**

1. **General**
   Address: **TUHH, Hamburg-Harburg, Germany**
   Arrival and Departure Dates: **1st July-31st Aug**
   No. of working days spent at the Institution: **45**

2. **Financial**
   Cost and method of return travel from the UK (£): **150, Easyjet**
   Total cost of daily travel to and from Institution (£): **50**
   Total cost of accommodation (say if provided free): **free**
   Value of Armourers & Brasiers/Alcan bursary: **£750**
   Total received from College: **£250**
   Total received from Institution (£): **0**
3. Accommodation

Accommodation address: Eigenheimweg 12, 21077 Hamburg
Type of Accommodation: Family house with my own bedroom
Distance from Institution (km): 30 minutes walk or 10 minutes by bus
Quality of accommodation: on scale of 1 (low) to 10 (high): 10
Quality of facilities/social environment: on scale of 1 (low) to 10 (high): 10
Convenience of location: on scale of 1 (low) to 10 (high): 6

4. Research project

Title of Research Project: Thermal, electrical and mechanical properties of vertically-aligned multiwalled carbon nanotube forest wetted in epoxy
Written Report submitted to Institute? Yes
Experimental Techniques used: CVD; SEM, DSC, DMTA, TGA
Interest level of project: on scale of 1 (low) to 10 (high): 8
Quality of support provided: on scale of 1 (low) to 10 (high): 8
Interaction with other researchers: on scale of 1 (low) to 10 (high): 10

Rolls-Royce Deutschland, Germany

1. General

Placement Location: Rolls-Royce Deutschland, Dahlewitz, nr. Berlin, Germany
Arrival and Departure Dates: 16th July – 22nd September
No. of working days spent at Institution: 65

2. Financial

Cost and method of return travel from the UK (£): 241, by plane (I live in Romania and tickets to Berlin are more expensive for some reason). (From the UK it would have been roughly 121.)
Total cost of daily travel to and from Institution (£): 144 (over the whole period)
Total cost of accommodation (say if provided free): 636
Value of Armourers & Brasiers/Alcan bursary: nil
Total received from College: nil
Total received from Institution (£): 1591

3. Accommodation

Accommodation address: Kaiserkorso 2, Etage 3, bei Zacharias Fisches, Berlin
Type of Accommodation: Room in a flat
Distance from Institution: 1 hour with S-Bahn and bike
Quality of accommodation: on a scale of 1 (low) to 10 (high): 10
Quality of facilities: on a scale of 1 (low) to 10 (high): 8
Convenience of location: on a scale of 1 (low) to 10 (high): 8

4. Research project

Title of Research Project: Report on component lifing methods and parameters
Written Report submitted to Institute? Yes
Experimental Techniques used: Finite Element Analysis
Interest level of project: on scale of 1 (low) to 10 (high): 10
Quality of support provided: on scale of 1 (low) to 10 (high): 9
Interaction with other researchers: on scale of 1 (low) to 10 (high): 10
Linde AG, Germany

1. General
Placement Location: Linde AG, Unterschleissheim, near Munich, Germany
Arrival and Departure Dates: 27/06/2012 – 31/08/2012
No. of working days spent at Institution: 48

2. Financial
Cost and method of return travel from the UK (£): £280 return flights
Total cost of daily travel to and from Institution (£): £130 in total, €60 per month (student discount)
Total cost of accommodation (say if provided free): £660 in total, €300 per month
Value of Armourers & Brasiers/Alcan bursary: £450
Total received from College: £430
Total received from Institution (£): £1305, €700 per month

3. Accommodation
Accommodation address: Oberschleissheim and Josephaplatz
Type of Accommodation: self find student accommodation
Distance from Institution: 40 min by public transport
Quality of accommodation: on a scale of 1 (low) to 10 (high): 9
Quality of facilities: on a scale of 1 (low) to 10 (high): 7
Convenience of location: on a scale of 1 (low) to 10 (high): 7

4. Research project
Title of Research Project: Porous surface of stainless steel
Written Report submitted to Institute? Yes
Experimental Techniques used: Optical microscope, SEM
Interest level of project: on scale of 1 (low) to 10 (high): 5
Quality of support provided: on scale of 1 (low) to 10 (high): 7
Interaction with other researchers: on scale of 1 (low) to 10 (high): 6

ESI, Leoben, Austria

Report 1

1. General
Placement Location: ESI, Leoben
Arrival and Departure Dates: 22nd June - 19th August
No. of working days spent at Institution: 37

2. Financial
Cost and method of return travel from the UK (£): Air (British Airways), £150, London Heathrow to Vienna Airport
Total cost of daily travel to and from Institution (£): Bus (A monthly bus pass was 40 euros, and a weekly bus pass was 12 euros)
Total cost of accommodation (say if provided free): 317 euros for two months
Value of Armourers & Brasiers/Alcan bursary: Nil
Total received from College: Nil
Total received from Institution (£): £1550 (2700 euros for two months in the contract, but they deducted the difference between ‘two months’ and ‘eight weeks’, the local taxation, and compulsory health insurance)
3. **Accommodation**
Accommodation address: ÖH Studentenheim, Kerpelystraße 129, 8700 Donawitz
Type of Accommodation: Single room with shared kitchen (among ~10) and bathroom (among 5)
Distance from Institution: **3km. 40min walk or 15min by bus.**
Quality of accommodation: on a scale of 1 (low) to 10 (high): **7**
Quality of facilities: on a scale of 1 (low) to 10 (high): **7**
Convenience of location: on a scale of 1 (low) to 10 (high): **6**

4. **Research Project**
Title of Research Project: **Recovery of PET Substrates**
Written Report submitted to host institution: Yes, **Time Dependent Mechanical Behaviour of PET Substrates**
Interest level of project: on a scale of 1 (low) to 10(high): **10**
Quality of support provided: on a scale of 1 (low) to 10 (high): **10**
Interaction with other researchers: on a scale of 1 (low) to 10 (high): **9**

**Report 2**
1. **General**
Placement Location: ESI Leoben, Austria
Arrival and Departure Dates: **23/06/2012- 18/08/2012**
No. of working days spent at Institution: **35**

2. **Financial**
Cost and method of return travel from the UK (£): Flight to Graz (via Munich) with Lufthansa- **£180**
Total cost of daily travel to and from Institution (£): Free (walked)
Total cost of accommodation (say if provided free): **370 Euros (~£290)**
Value of Armourers & Brasiers/Alcan bursary: **none**
Total received from College: **£400**
Total received from Institution (£): **2009.30 Euro (£1550)**

3. **Accommodation**
Accommodation address: Kerpelystrasse 129/3/49, 8700 Leoben, Austria
Type of Accommodation: Student dormitory
Distance from Institution: **3.5 km**
Quality of accommodation: on a scale of 1 (low) to 10 (high): **7**
Quality of facilities: on a scale of 1 (low) to 10 (high): **7**
Convenience of location: on a scale of 1 (low) to 10 (high): **4**

4. **Research Project**
Title of Research Project: **Preparation and Characterisation of Microporous Copper**
Written Report submitted to host institution: Yes
Experimental Techniques used: Cutting tools- rotating blade and diamond wire; Vicker’s Hardness/ nanoindenter; SEM; Grinding tool; Sand blaster; HPT; Grain size classifier; Mixing tool; Oven; Optical microscope.
Interest level of project: on a scale of 1 (low) to 10(high): **8**
Quality of support provided: on a scale of 1 (low) to 10 (high): **8**
Interaction with other researchers: on a scale of 1 (low) to 10 (high): **7**
TU Vienna, Austria

1. General
Placement Location: Technical University, Vienna, Austria
Arrival and Departure Dates: 1 July - 30 August
No. of working days spent at Institution: 47

2. Financial
Cost and method of return travel from the UK (£): N/A
Total cost of daily travel to and from Institution (£): €50
Total cost of accommodation (say if provided free): Free
Value of Armourers & Brasiers/Alcan bursary: £530
Total received from College: £0
Total received from Institution (£): £300

3. Accommodation
Accommodation address: 83 Neustiftgasse 1070 Wien
Type of Accommodation: Student Halls
Distance from Institution: ~2km
Quality of accommodation: on a scale of 1 (low) to 10 (high): 7
Quality of facilities: on a scale of 1 (low) to 10 (high): 5
Convenience of location: on a scale of 1 (low) to 10 (high): 9-10

4. Research Project
Title of Research Project: Comparison of Thermomechanical Properties of Aluminium-Copper Alloys
Written Report submitted to host institution: Yes
Experimental Techniques used: Thermal treatments, compression tests/analysis, optical microscopy
Interest level of project: on a scale of 1 (low) to 10 (high): 6
Quality of support provided: on a scale of 1 (low) to 10 (high): 9
Interaction with other researchers: on a scale of 1 (low) to 10 (high): 7