

European Vacation Placements: Reports 2016

Below are reports on the Summer Placements provided by students who participated in the scheme in 2016.

ETH, Zurich, Switzerland	2
<i>Report 1</i>	2
<i>Report 2</i>	2
<i>Report 3</i>	3
EPFL, Lausanne, Switzerland	4
<i>Report 1</i>	4
<i>Report 2</i>	5
EMPA, Thun, Switzerland.....	6
PSI, Villigen, Switzerland.....	7
University of Erlangen, Germany	8
<i>Report 1</i>	8
<i>Report 2</i>	9
University of Goettingen, Germany	10
TUHH, Hamburg, Germany	11
<i>Report 1</i>	11
<i>Report 2</i>	12
MagIC, HZG-Geesthacht, Germany	12
Rolls-Royce Deutschland, Germany	12
Linde AG, Germany.....	13
Max-Planck Institut für Eisenforschung, Düsseldorf, Germany.....	14
<i>Report 1</i>	14
<i>Report 2</i>	15
ESI, Leoben, Austria	16
<i>Report 1</i>	16
<i>Report 2</i>	16
University of Technology, Vienna, Austria	18

ETH, Zurich, Switzerland

Report 1

1. General		
Placement Location	ETH Zurich	
Arrival and Departure Dates	02/07/16 – 31/08/16	
No. of working days spent at Institution	40	
2. Financial		
Cost and method of return travel from the UK (£)	£135 (plane)	
Total cost of daily travel to and from Institution	£100	
Total cost of accommodation (say if provided free)	£855	
Value of Armourers & Brasiers bursary	£1050	
Total received from College	£0	
Total received from Institution	£860	
3. Accommodation		
Accommodation address	Meierwiesenstrasse 62, 8064 Zürich	
Type of Accommodation	Student house	
Distance from Institution	15 minutes 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)	5
Convenience of location	on a scale of 1 (low) to 10 (high)	8
4. Research Project		
Title of Research Project	3D Printed Glass Microfluidic Devices	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	3D printing; optical microscopy; scanning electron microscopy; thermal gravimetric analysis; dilatometry; rheometry.	
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)	10
Interaction with other researchers	on a scale of 1 (low) to 10(high)	10

Report 2

1. General	
Placement Location	ETH Zurich
Arrival and Departure Dates	Arrival: 05/07/2018 Departure: 26/08/2016

No. of working days spent at Institution	38 days	
2. Financial		
Cost and method of return travel from the UK (£)	Flights-from Dublin Airport, €318 (approx. £266)	
Total cost of daily travel to and from Institution	Bought monthly bus ticket for 62 CHF (approx. £48)	
Total cost of accommodation (say if provided free)	1090 CHF (approx. £845)	
Value of Armourers & Brasiers bursary	£950	
Total received from College	£200	
Total received from Institution	£850	
3. Accommodation		
Accommodation address	Meierwiesenstrasse 62, 8064 Zürich	
Type of Accommodation	Student Accommodation	
Distance from Institution	Approx. 2.5 km	
Quality of accommodation	on a scale of 1 (low) to 10 (high)	6
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)	7
4. Research Project		
Title of Research Project	Polymerisation of Benzyl Chloride Using Friedel-Crafts Catalysts	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Polymer synthesis, GPC, TGA, DSC, Various NMR Techniques, Analysis	
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)	10
Interaction with other researchers	on a scale of 1 (low) to 10(high)	8

Report 3

1. General		
Placement Location	ETH Zurich	
Arrival and Departure Dates	25/07/16 – 19/06/16	
No. of working days spent at Institution	39	
2. Financial		
Cost and method of return travel from the UK (£)	Flight to Zurich - £191.82, return from Prague - £169.28; £361.10 in total	

Total cost of daily travel to and from Institution	122 CHF (~£100)	
Total cost of accommodation (say if provided free)	1092 CHF (~£870)	
Value of Armourers & Brasiers bursary	£1050	
Total received from College	£200	
Total received from Institution	1100CHF (~£870)	
3. Accommodation		
Accommodation address	Freilagerstrasse 90, 8047 Zurich	
Type of Accommodation	Shared Apartment	
Distance from Institution	5km	
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	Novel magnetic materials: production of single-phase CaNi₅ and magnetic characterisation of cerium-substituted SmCo alloys	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Metallography, Optical Microscopy, Scanning Electron Microscopy, Energy-Dispersive X-ray Spectroscopy, Magnetometry, Arc Melting, Induction Melting	
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)	7

EPFL, Lausanne, Switzerland

Report 1

1. General	
Placement Location	Lausanne, EPFL
Arrival and Departure Dates	10/7/2016-31/8/2016
No. of working days spent at Institution	37
2. Financial	
Cost and method of return travel from the UK (£)	Flights from Finland, cost about £250 for the return.

Total cost of daily travel to and from Institution	£0	
Total cost of accommodation (say if provided free)	Provided free	
Value of Armourers & Brasiers bursary	£675	
Total received from College	£400	
Total received from Institution	£0	
3. Accommodation		
Accommodation address	Atrium E712 Route Louis Favre 4 1024 Ecublens Lausanne	
Type of Accommodation	Student housing	
Distance from Institution	500m	
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)	10
4. Research Project		
Title of Research Project	Investigation into the fracture toughness of silicon particles in aluminium-silicon alloys in comparison to single crystal silicon.	
Written Report submitted to host institution	Yes, waiting for final feedback	
Experimental Techniques used:	Primarily nanoindentation. Small uses SPM imaging. SEM used, but not alone as I didn't have permission to use it on my own.	
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)	8

Report 2

1. General		
Placement Location	École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland	
Arrival and Departure Dates	09/07/2016, 03/09/2016	
No. of working days spent at Institution	40	
2. Financial		
Cost and method of return travel from the UK (£)	Flight Luton↔Geneva £147, train Geneva↔Lausanne £19	
Total cost of daily travel to and from Institution	Free	

Total cost of accommodation (say if provided free)	Provided for free (805CHF per month)	
Value of Armourers & Brasiers bursary	£470	
Total received from College	£300	
Total received from Institution	£464 (600CHF)	
3. Accommodation		
Accommodation address	Route Cantonale 39A, 1025 St Sulpice	
Type of Accommodation	Studio apartment	
Distance from Institution	5 minute walk	
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	The hydrophobicity of mixed thiol-ligand SAMs on Au(111) surfaces and Au nanoparticle monolayers including physisorbed fibronectin hydrophobicity dependence on surface SAM composition.	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	AFM, sessile drop contact angle measurements, wilhelmy plate, langumir-blodgett trough	
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)	7
Interaction with other researchers	on a scale of 1 (low) to 10(high)	8

EMPA, Thun, Switzerland

1. General	
Placement Location	EMPA Thun, Switzerland
Arrival and Departure Dates	2/7/16 – 11/9/16
No. of working days spent at Institution	50 (10 weeks)
2. Financial	
Cost and method of return travel from the UK (£)	Flight from Gatwick to Basel Mulhouse Freiburg – £88.98 return Bus from Basel Mulhouse Freiburg to Basel SSB – 4.40 CHF (£3.30) each way Train from Basel SSB to Thun – 100CHF (£80) return Bus to accommodation – 3 CHF (£2.40) each way Total - £180.78

Total cost of daily travel to and from Institution	Free – borrowed a bike from my supervisor	
Total cost of accommodation (say if provided free)	Provided free	
Value of Armourers & Brasiers bursary	£0 – no bursary given	
Total received from College	£200	
Total received from Institution	750 CHF per month before deduction	
3. Accommodation		
Accommodation address	Elsterweg 15a, 3603 Thun	
Type of Accommodation	Shared apartment with EMPA employee	
Distance from Institution	700m	
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)	8
Convenience of location	on a scale of 1 (low) to 10 (high)	10
4. Research Project		
Title of Research Project	Interfacial Adhesion Investigation of Combinatorial Ternary FCC Alloy Adhesion Layers using Nanoindentation	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Nano-indentation, Digital Holographic Microscopy (DHM), SEM, XRD	
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

PSI, Villigen, Switzerland

1. General	
Placement Location	PSI
Arrival and Departure Dates	4/7-13/9
No. of working days spent at Institution	50 including 5 days holiday
2. Financial	
Cost and method of return travel from the UK (£)	BA flights, £160 return
Total cost of daily travel to and from Institution	Free
Total cost of accommodation (say if provided free)	1400 CHF

Value of Armourers & Brasiers bursary	0	
Total received from College	0	
Total received from Institution	~5000 CHF	
3. Accommodation		
Accommodation address	PSI Guesthouse, Villigen	
Type of Accommodation	Guesthouse, sharing room with other trainee	
Distance from Institution	~0.2 miles	
Quality of accommodation	on a scale of 1 (low) to 10 (high)	6
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)	10 for work, 3 for anything else
4. Research Project		
Title of Research Project	Dislocation nucleation at the $\Sigma 5(310)[001]$ symmetric tilt grain boundary in aluminium subjected to equibiaxial loading	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Molecular Dynamics	
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)	5

University of Erlangen, Germany

Report 1

1. General	
Placement Location	Erlangen Nuremberg
Arrival and Departure Dates	1st July - 31st August
No. of working days spent at Institution	40
2. Financial	
Cost and method of return travel from the UK (£)	Trains Melton Mowbray - Stanstead - £60 Flights Stanstead-Nuremberg - £134 Trains Nuremberg-Erlangen - £8 Total £202 (including return)
Total cost of daily travel to and from Institution	£0 (provided with a free bike)
Total cost of accommodation (say if provided free)	£0 (provided free)
Value of Armourers & Brasiers bursary	£760
Total received from College	£0

Total received from Institution	£0	
3. Accommodation		
Accommodation address	Lazarettstraße 8, 91054 Erlangen	
Type of Accommodation	Studio apartment	
Distance from Institution	4.1 km	
Quality of accommodation	on a scale of 1 (low) to 10 (high)	4
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)	7
<p>The accommodation was at the opposite side of town to the department, but Erlangen is small and I was given a bike to use. The room was okay but didn't have a desk or chair and the tenant left the place unclean. One set of window blinds didn't work, the bed sheet was ripped/stained, most of the shelves/wardrobes had cardboard taped over them (I think for the tenant's storage) and everything was a bit grimey/dirty. I spent my first weekend cleaning everything and buying new stuff for the room, and after that it was nice. There was also a problematic neighbour. The department in Erlangen was made aware of these issues and offered help.</p>		
4. Research Project		
Title of Research Project	Mechanical and microstructural characterization of coated cobalt-based superalloys	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Sample preparation, optical microscopy, SEM, EDX, EBSD, Nanoindentation. I did sample prep, microscopy and nanoindentation independently.	
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)	10
Interaction with other researchers	on a scale of 1 (low) to 10(high)	8

Report 2

1. General	
Placement Location	FAU Erlangen-Nuernberg University
Arrival and Departure Dates	21-06-16 to 13-08-16
No. of working days spent at Institution	38
2. Financial	
Cost and method of return travel from the UK (£)	Airplane, 800£, (Flight back to Beijing included)
Total cost of daily travel to and from Institution	70£
Total cost of accommodation (say if provided free)	Provided free
Value of Armourers & Brasiers bursary	760£
Total received from College	600£
Total received from Institution	0£

3. Accommodation		
Accommodation address	Paul-Gossen-Str. 97 91052 Erlangen	
Type of Accommodation	Student Apartment	
Distance from Institution	2 kilometers	
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)	10
Convenience of location	on a scale of 1 (low) to 10 (high)	9
4. Research Project		
Title of Research Project	Solid solution hardeners in nickel-based super alloy	
Written Report submitted to host institution	Effects of solid solution hardeners on gamma-prime phase fractions and simulations of phases in nickel-based superalloy	
Experimental Techniques used:	SEM, Metallography preparation, CALPHAD simulation	
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)	5

University of Goettingen, Germany

1. General		
Placement Location	Gottingen, Germany	
Arrival and Departure Dates	02/08/2016 – 26/09/2016	
No. of working days spent at Institution	38	
2. Financial		
Cost and method of return travel from the UK (£)	Plane/Train - £321.21 in total	
Total cost of daily travel to and from Institution	Zero	
Total cost of accommodation (say if provided free)	Provided free (paid for by institute)	
Value of Armourers & Brasiers bursary	£650 plus £100 on completion of reports	
Total received from College	Application for travel grant submitted	
Total received from Institution	Payment for accommodation	
3. Accommodation		
Accommodation address	36a Gutenbergstrasse, 37075 Gottingen, Germany	
Type of Accommodation	Student dorm	
Distance from Institution	2km	
Quality of accommodation	on a scale of 1 (low) to 10 (high)	6
Quality of facilities	on a scale of 1 (low) to 10 (high)	6

Convenience of location	on a scale of 1 (low) to 10 (high)	9
4. Research Project		
Title of Research Project	N/A	
Written Report submitted to host institution	Physical and Magnetic Properties of Metallic Glasses (presentation)	
Experimental Techniques used:	X-Ray Diffraction, Vibrating Sample Magnetometer, Dynamic Mechanical Analyser, Differential Scanning Calorimetry, Magneto-optic Kerr Effect, MATLAB	
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

TUHH, Hamburg, Germany

Report 1

1. General		
Placement Location	TUHH, Germany	
Arrival and Departure Dates	01.07.16 – 31.08.16	
No. of working days spent at Institution	42	
2. Financial		
Cost and method of return travel from the UK (£)	Flights – £147.69	
Total cost of daily travel to and from Institution	None	
Total cost of accommodation (say if provided free)	800€	
Value of Armourers & Brasiers bursary	£795	
Total received from College	£250	
Total received from Institution	600€	
3. Accommodation		
Accommodation address	NIT, Kasernenstraße 12, 21073 Hamburg	
Type of Accommodation	Student apartment	
Distance from Institution	5 minute walk through campus	
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)	10

4. Research Project		
Title of Research Project	Breakdown measurements on TiO₂ bulk and layered samples of same total thickness	
Written Report submitted to host institution:	Yes, and chose to give additional presentation	
Experimental Techniques used:	Uniaxial press, cold isostatic press, sintering, plane grinding, high voltage application	
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
Interaction with other researchers	on a scale of 1 (low) to 10(high)	8

Report 2

Only one student was placed at TUHH this year.

MagIC, HZG-Geesthacht, Germany

No students were placed at MagIC this year

Rolls-Royce Deutschland, Germany

1. General	
Placement Location	Rolls-Royce Deutschland – Dahlewitz, Berlin
Arrival and Departure Dates	4th July – 9th September 2016
No. of working days spent at Institution	50
2. Financial	
Cost and method of return travel from the UK (£)	£115 – Ryanair (London Stansted – Berlin Schoenefeld return)
Total cost of daily travel to and from Institution	£180
Total cost of accommodation (say if provided free)	£1380
Value of Armourers & Brasiers bursary	£325
Total received from College	£225
Total received from Institution	Approx. £1750 (2000 euros)
3. Accommodation	
Accommodation address	116 Grazer Damm, Friedenau, 12157 Berlin

Type of Accommodation	Top-floor apartment	
Distance from Institution	40km	
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)	10
Convenience of location	on a scale of 1 (low) to 10 (high)	8
4. Research Project		
Title of Research Project	Biaxial loading of Allvac 718Plus cruciform specimens as a basis for lifetime prediction of turbine discs	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Finite Element Analysis, Non-linear optimization, Stress Transformations	
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
Interaction with other researchers	on a scale of 1 (low) to 10(high)	7

Linde AG, Germany

1. General		
Placement Location	Linde AG, near Munich, Germany	
Arrival and Departure Dates	09/07/16 – 18/09/16	
No. of working days spent at Institution	70	
2. Financial		
Cost and method of return travel from the UK (£)	£220 – Flights with Lufthansa Airlines	
Total cost of daily travel to and from Institution	€290	
Total cost of accommodation (say if provided free)	€2460	
Value of Armourers & Brasiers bursary	£600	
Total received from College	N/A	
Total received from Institution	€1600	
3. Accommodation		
Accommodation address	Augustenstrasse 94, Munich, Germany, 80798	
Type of Accommodation	Private – 1 bedroom apartment	
Distance from Institution	10 miles, 40 mins by public transport	
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	THE INFLUENCE OF SHIELDING GASES ON THE POROSITY OF ADDITIVELY MANUFACTURED AISi10Mg PARTS	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Metallographic specimen preparation, SEM, AM (Additive Manufacturing)	
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)	8

Max-Planck Institut für Eisenforschung, Düsseldorf, Germany

Report 1

1. General		
Placement Location	MPIE, Düsseldorf, Germany	
Arrival and Departure Dates	2/07/2016 – 31/08/2016	
No. of working days spent at Institution	42	
2. Financial		
Cost and method of return travel from the UK (£)	£137.48 airfare (Flybe)	
Total cost of daily travel to and from Institution	Nil – I walked 25mins	
Total cost of accommodation (say if provided free)	£674	
Value of Armourers & Brasiers bursary	£155	
Total received from College	£300	
Total received from Institution	£1316.88	
3. Accommodation		
Accommodation address	AugustasträÙe-30, Pempelfort, Düsseldorf,	
Type of Accommodation	Flatshare (known as a 'WG')	
Distance from Institution	1.2miles	
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	Degradation of High Temperature Polymer Electrolyte Membrane Fuel Cells (HT-PEMFC)	
Written Report submitted to host institution	Yes	

Experimental Techniques used:	Sample preparation, SEM, EDX, Electron Diffraction, FIB, TEM (last three performed by supervisor), data analysis	
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
Interaction with other researchers	on a scale of 1 (low) to 10(high)	8

Report 2

1. General		
Placement Location	MPIE, Düsseldorf, Germany	
Arrival and Departure Dates	July 4 – August 31	
No. of working days spent at Institution	43	
2. Financial		
Cost and method of return travel from the UK (£)	Flights LHR ↔ DUS, £129	
Total cost of daily travel to and from Institution	0 (on foot)	
Total cost of accommodation (say if provided free)	€980 = £830	
Value of Armourers & Brasiers bursary	£155	
Total received from College	0	
Total received from Institution	€1600 = £1350	
3. Accommodation		
Accommodation address	Gutenbergstraße 57, 40235 Düsseldorf	
Type of Accommodation	Room in landlord's house	
Distance from Institution	15 minutes (1.5 km) on foot	
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)	10
4. Research Project		
Title of Research Project	Nanotribology of Copper: Mechanics and Texture Evolution	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Nanoindentation, SEM, EBSD	
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)	8

ESI, Leoben, Austria

Report 1

1. General		
Placement Location	Erich Schmidt Institute, Leoben	
Arrival and Departure Dates	01/07/16 – 31/08/16	
No. of working days spent at Institution	37	
2. Financial		
Cost and method of return travel from the UK (£)	Flight and train, £180 + £30	
Total cost of daily travel to and from Institution	Walking (free)	
Total cost of accommodation (say if provided free)	£450	
Value of Armourers & Brasiers bursary	£100	
Total received from College	£250	
Total received from Institution	EU 2238 (after tax)	
3. Accommodation		
Accommodation address	Room 4, Flat 12, House 14, Studentheim Schlägel und Eisen, Salzlände, Austria	
Type of Accommodation	Student Flat	
Distance from Institution	12 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)	8
4. Research Project		
Title of Research Project	Mechanical Properties of Fe-C Electrodeposits	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	AFM/Nanoindentation, Vickers Hardness, Optical Microscopy, Metallurgical Preparation (grinding, polishing etc), SEM, XRD, 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)	7
Interaction with other researchers	on a scale of 1 (low) to 10(high)	6

Report 2

1. General	
Placement Location	ESI Leoben, Austria
Arrival and Departure Dates	1/7/16 - 30/8/16

No. of working days spent at Institution	38	
2. Financial		
Cost and method of return travel from the UK (£)	<p>I went back to England for a week in the middle of my placement and to the Czech Republic after so I did more journeying than needed!</p> <p>Flight costs: Stansted to Salzburg £58 (incl. baggage) Bratislava to Stansted £32.54 Stansted to Salzburg £56.69 Prague to Stansted £95.96 (incl. baggage and booked late)</p> <p>Train costs: Salzburg to Leoben €19 (advance ticket) Railcard €19 (45% off train tickets in Austria) Leoben to Bratislava €21.90 (w/ railcard) Salzburg to Leoben €20.60 (w/ railcard) Plus train costs in England to get to Stansted.</p> <p>Total: ~£220 (not including me popping back midway)</p> <p>There was the option of a summer ticket which gave unlimited travel in Austria for about €70 which would have been well worth it in hindsight. I easily spent double that on trains.</p>	
Total cost of daily travel to and from Institution	FREE 15 minute walk	
Total cost of accommodation (say if provided free)	£421.53	
Value of Armourers & Brasiers bursary	£100	
Total received from College	£500	
Total received from Institution	£2157.94	
3. Accommodation		
Accommodation address	14/16 Salzlände, Judendorf, Leoben	
Type of Accommodation	Room in a 6 bed student flat. Only the two of us from Cambridge there for the first month then one or two other students for the second.	
Distance from Institution	15 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)	10
Convenience of location	on a scale of 1 (low) to 10 (high)	10
4. Research Project		
Title of Research Project	The Effect of Strain Rate and Thermal Cycling on Multilayer Insulation Materials for Space Applications	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Tensile testing, 4 point probe electrical measurements, optical microscope, SEM, FIB	

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)	7

University of Technology, Vienna, Austria

1. General		
Placement Location	Vienna	
Arrival and Departure Dates	01/07/2016 – 31/08/2016	
No. of working days spent at Institution	39	
2. Financial		
Cost and method of return travel from the UK (£)	333	
Total cost of daily travel to and from Institution	2 Euro	
Total cost of accommodation (say if provided free)	Provided free by placement	
Value of Armourers & Brasiers bursary	650	
Total received from College	0	
Total received from Institution	0, free accommodation	
3. Accommodation		
Accommodation address	Molkereistrasse 1, 1020 Wien	
Type of Accommodation	Shared flat	
Distance from Institution	5 km	
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)	10
Convenience of location	on a scale of 1 (low) to 10 (high)	9
4. Research Project		
Title of Research Project	Solid state sintering of Ni and stainless steel composites with diamond or SiC	
Written Report submitted to host institution	Yes	
Experimental Techniques used:	Mechanical mixing, hydraulic pressing, pressureless sintering, thermal conductivity measurement, SEM	
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)	5