

CH451 Industrial Placement Assessment Form



DEPARTMENT OF PURE & APPLIED CHEMISTRY

Student Name:		Reg. No:	
Placement Provider:			
Dates of training period:			
Industrial Supervisor:		Email:	
		Tel:	
Academic Supervisor:			
Date of visit/assessment:			

Introductory Discussion

How has the student's scientific competence at work progressed during the time that they have been with the organisation? How have the student's general aptitude and attitude to work developed?

Comments from Supervisor:

Nature of the Work

Has the work proceeded as initially envisaged?

Risk Assessments & Safety

Were risk assessments updated and training provided as needed during the placement?

Final Report Marking Scheme (marked by academic and industrial supervisor)

Title of Report:

	<i>Mark out of 10</i>	<i>Weighted Mark</i>
<i>0-10 marks</i> Technical Presentation: please review in line with the guidance below: • is the overall report clear and understandable? • is there a logical arrangement and organisation of material? • is there an absence of typing errors? • is the report written in a concise scientific manner using plain English, using past tense and written in the 3rd person? • have suitable display techniques (graphs, tables, photos, etc.) been used where applicable? • have molecular diagrams, descriptive legends, and labels been applied correctly?		
<i>0-10 marks (1.5 weighted, therefore marks are out of 15 once weighting factor is applied)</i> Introduction & Methods , including: • does the report have an adequate abstract summarising the key highlights of the report? • has the background material been effectively covered using relevant topics to provide a rationale for the report? • if a short introduction is included, have relevant papers been used in the review and are these papers correctly referenced? • are the aims and objectives of the report clearly outlined and justified? • have the research questions been clearly defined? • are the methods used (practical, theoretical or research) clearly defined and justified? • where practical work has been undertaken – have the details of all experiments been reported to the level of detail that would allow replication of the research (this may include, e.g., detailed experimental procedures and instrumental operating conditions). • where theoretical work has been undertaken – have sufficient details of the methodological approaches used been presented and adequately justified?		<i>(multiply Marks out of 10 by 1.5)</i>
<i>0-10 marks (1.5 weighted, therefore marks are out of 15 once weighting factor is applied)</i> Presentation and Interpretation of Results , including: • where appropriate, have details been provided to ensure validation of reported data? • where data has been interpreted – have the details of all data analysis been reported as required (including details of software used, conditions used, statistical methods etc.)? • are results reported to sufficient detail in recording of data, correct use of units, and presence of data relating to reproducibility, controls and standardisations? • was data critically appraised, or were the results presented without any interpretation? • was there an evaluation of the validity/accuracy of inferences drawn from data obtained (e.g., correct interpretation of graphs, spectra, computer output) • was sufficient detail given to justify conclusions drawn from evaluation of results? • was evidence-based justifications given to support conclusions (i.e. where conclusions scientifically justified rather than being subjective)? • was an appreciation and evaluation of experimental limitations/errors given in relation to presented data?		<i>(multiply Marks out of 10 by 1.5)</i>
<i>10 marks</i> Overview in evaluating the impact and validity of the research work , including: • was there an ability to rationalise results and take an overview of the key outcomes and limitations of the research work? • were the final conclusions drawn from the research work discussed in relation to the project aims and objectives? • was there an overview assessment of findings in relation to other (previous or related) work? • was there an assessment of any strengths and/or weaknesses of the investigative approaches used? • were any impact pathways defined in relation to the overall outcomes and key findings? • was there an attempt to suggest how future research work could be used to take the outcomes of this research further? Was this presented in a way that discussed potential impact and/or would it convince a researcher to invest time and money in undertaking the proposed work?		
SUB-TOTAL <i>(Maximum = 50 Marks)</i>		

Feedback Comments - *Examiners are asked to justify the marks awarded here.*

Technical Presentation – justification of marks awarded:

Introduction and Methods - justification of marks awarded:

Presentation and Interpretation of Results – justification of marks awarded:

Evaluating the impact and validity of the work – justification of marks awarded

Matrix Assessment of Skills at the End of Placement (*see guidance notes on next page*) **Name of Student:**

NOTE: if any of the table entries does not apply to a particular placement job type then leave blank and rescale the final percentage mark accordingly.

	Unsatisfactory (0-39)	Satisfactory/Good (40-59)	Very Good (60-69)	Excellent (70-79)	Outstanding (80+)	Score
Leadership and collaboration						
Attitude, conduct, timekeeping	Limited cooperation, inadequate teamwork, attendance unreliable	Fits adequately into the team and operates reliably	Fits well into the team and cooperates fully and responsibly	A key team member, helping the team to integrate and achieve	Capable of contributing to creating an appropriately constructed team	
Ability to use time and organise	Disorganised. Shows lack of common sense	Can use his/her time effectively with guidance	Plans day-to-day work with confidence	Responsible for organising his/her own work schedule	Suggests improvements to overall schedule and work organisation	
Communication and Engagement						
Communication	Unable to construct logical or convincing verbal or written discussion.	Can communicate in an understandable fashion using verbal and written means.	Holds good one-to-one discussions and constructs arguments based on evidence.	Confident and constructive in both one-to-one and in groups.	Fluent, articulate and well-argued presentation skills using verbal and written media	
Practical Application and Understanding						
General chemistry knowledge	Insufficient background to understand the work	Understands key simple concepts	Background sufficient for understanding of work theory	Ability to draw on and use a wide range of basic chemistry	Extends discussions to incorporate new chemical concepts	
Safe and reproducible methods of working	Consistently failed to follow guidelines	Worked safely under supervision	Took responsibility for following all safety aspects	Maintained an excellent safety record and attention to detail related to safety	Actively contributed to developing new safety protocols and procedures	
Specialised work knowledge	Has acquired little understanding of the work	Has appreciated an outline of the important work chemistry	Conversant with the chemistry of the work with little supervisory input	An ability to make full use of relevant material without supervisory input	Shows an innovative approach and implements new ideas in the field of work.	
Practical ability	Has little understanding of how to conduct technical components of project	Basic understanding of methods/techniques required	Demonstrates sound level of skill and can apply techniques competently	Demonstrates an understanding of techniques and can apply them to a high standard without supervision	Excellent technical expertise and able to suggest modifications independently	
Data recording & management, knowledge transfer	Poor record-keeping and difficult to track activity	Experimental work was adequately recorded and associated data stored	All record keeping performed to a high standard	Experimental, raw and processed data knowledge all easily accessible	Excellent data management and contributed to developing or improving company procedures	
Innovation and Creativity						
Initiative and creativity	Totally at a loss in any unfamiliar situation	Contributes on a day-to-day basis, but relies on help if in difficulty	Has solved day-to-day problems and contributed overall	Significant initiative shown throughout the work	Contributes excellent ideas which take the project into different directions.	
Need for supervision	Hourly instruction was needed	Needed regular supervision to maintain momentum	Supervision was reporting-back with discussion of problems	Supervision on major items only	Able to work unsupervised across most functions of the role	
If no rows excluded then the MAXIMUM TOTAL = 100. If some rows are not applicable, then state the adjusted total used for the percentage calculation (e.g. $63 / 80 = 79\%$) These marks were discussed extensively at the final meeting and the academic supervisor is in full agreement with the awarded marks.					SUB-TOTAL MARK (%)	
					%	

Assessment Guidance (Skills Matrix Total Mark)

Unsatisfactory 0-39	Missed many feedback meetings and did not engage with the supervisor of the work Was not in attendance for much of the time Was not able to progress work due to an inability to complete work competently or due to significant unexplained absence. Did not apply themselves sufficiently to the work Did not attempt to understand the material or relevance of the work Did not produce a literature report and/or a final report
Satisfactory 40-49	Attended feedback meetings Not proactive Did not set clear work targets independently Some but not all work elements and tasks completed Attempt at application of basic principles but lacking in interpretation or analysis Lack of critical analysis of relevant literature Only a minor contribution to the content and structure of the final report
Good 50-59	Attended feedback meetings Set clear work targets Demonstrated collaboration Delivery of work elements to time targets Completed majority of work elements and tasks with minor gaps Competent attempt at application of basic principles but analysis and explanation lacking clarity and depth Attempt at critical analysis of relevant literature No strong evidence of deep and independent learning
Very Good 60-69	Attended feedback meetings Proactive in setting tasks Demonstrated leadership and collaboration Completed all the work elements and tasks Competent and complete attempt at application of basic principles but does not demonstrate deep understanding through analysis and explanation Some success in critical analysis of relevant literature Contributed actively to the compilation of the final document Demonstrated some evidence of independent learning and understanding of chemistry topics not dealt with directly in the degree course
Excellent 70-79	Attended feedback meetings Demonstrated significant leadership and collaboration Completed all the work elements and tasks Competent and complete attempt at application of basic principles and demonstrates deep understanding through analysis and explanation Competent critical analysis of relevant literature Contributed actively to the compilation of the final document Demonstrated clearly evidence of independent learning and understanding of chemistry topics not dealt with directly in the degree course Demonstrated innovation and creativity
Outstanding 80+	Attended feedback meetings Demonstrated outstanding leadership and collaboration Completed all the work elements and tasks Competent and complete attempt at application of basic principles and demonstrates outstanding understanding through analysis and explanation Outstanding critical analysis of relevant literature Contributed actively to the compilation of the final document Demonstrated strong evidence of independent learning and understanding of chemistry topics not dealt with directly in the degree course Demonstrated outstanding innovation and creativity

MARKS SUMMARY AND ANY ADDITIONAL COMMENTS

Student
Academic and/or Industrial Supervisors

Final Report / 50	
Skills Matrix / 100 (use corrected % if applied)	
Total Mark /150	
FINAL PLACEMENT MARK (%)	

Academic Supervisor Signature:	
Date:	

The completed form should be returned to Laureen Sykes Laureen.Sykes@strath.ac.uk
Please send any enquiries to chemistry.placement@strath.ac.uk