

commitment to lifelong learning



undergraduate

skills record



The RSC is an international learned society for advancing the chemical sciences and also the UK's professional body for chemical scientists. Supported by over 47,500 members worldwide and by an internationally acclaimed publishing business, our activities span education and training, contributing to national and international science policy, conference organisation and promotion of the chemical sciences to the wider public. Our relationships with leading national chemical societies and international companies place us at the heart of a global network of over 300,000 chemical scientists.

The RSC's headquarters are in London with a further office based in Cambridge. Other offices are located in China (Beijing and Shanghai), in Philadelphia, USA, in Bangalore, India, and in Tokyo, Japan.

www.rsc.org

The RSC would like to thank the following for their significant input to the Undergraduate Skills Record:

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Contents

Introduction	2
Personal Details	6
A record of your qualifications and work experience	
Department/Institution Induction	8
An overview of your awareness of the facilities and services in your department and university	
Skills Audit	10
A detailed assessment of your skills throughout your course, and an opportunity for you to plan your skills development	
Feedback – Skills Audit	30
An opportunity to invite feedback from a range of people on your Skills Audit for each Phase	
Project Work	33
Skills Profile	37
An opportunity to generate an overview of your skills development including examples highlighted in previous sections	
Skills Profile Feedback	42
An opportunity to invite feedback from a range of people on your Skills Profile	
Career Planning	45
Looking to the future – how the completed USR helps to complete application forms and CVs	
Affiliate Student Membership of the Royal Society of Chemistry	48

Introduction

Why record skills?

If you are to succeed in the rapidly changing and increasingly competitive world of employment, skills such as the ability to communicate effectively, team working, problem solving, organisation and management are essential. Scientific research has become increasingly multidisciplinary and the need for effective communication and the ability to plan and work within a team is more important than ever. There are plenty of opportunities to develop existing skills and identify skills gaps during undergraduate study. The trick is awareness and knowing how to identify the numerous opportunities presented to you every day. Developing and recording your skills means that when you graduate you will have the full range of subject-specific skills and the transferable skills that employers look for. This will give you an advantage over others who have not set about this essential preparation for the world of work.

A permanent record of the skills developed will serve as evidence to future employers of your competence in these particular areas and it will help when writing a CV and completing application forms. The Standard Application Form (SAF) has been agreed between all the university and college careers services and the representatives of many graduate employers, and requires information relating to the skills highlighted in the Undergraduate Skills Record (USR). You will find sample extracts from a SAF in the Career Planning Section (page 45). The completed USR will also serve as a launch pad into continuing professional development (CPD), the practice of which is essential to achieve your full potential.

How do I use the Record?

It is important to remember that **YOU** are the major beneficiary of this process of skills recording. This document is your personal record, to record honestly your achievements and development needs. This record consists of a Skills Audit (i.e. a checklist) and a Skills Profile (i.e. a summary).

The **Skills Audit** allows you to carry out a self-assessment of your current skills and to reflect upon and record your ability in important areas. There is a series of statements associated with each particular skill against which you must rate your ability according to the scale given. With each self-assessment you are asked to provide a short statement of evidence to support your rating. It is quite likely that one statement of evidence will support two or more of the ability statements. Throughout the course of your study you will be able to reflect on your ratings, record progress made, and plan your future development.

The Skills Audit is divided into three phases of study. You are advised to complete Phase 1 during the first few weeks of your course, Phase 2 at the halfway point of your studies, and Phase 3 towards the end of your studies. You can select the appropriate timescales to suit the nature and length of your own particular course.

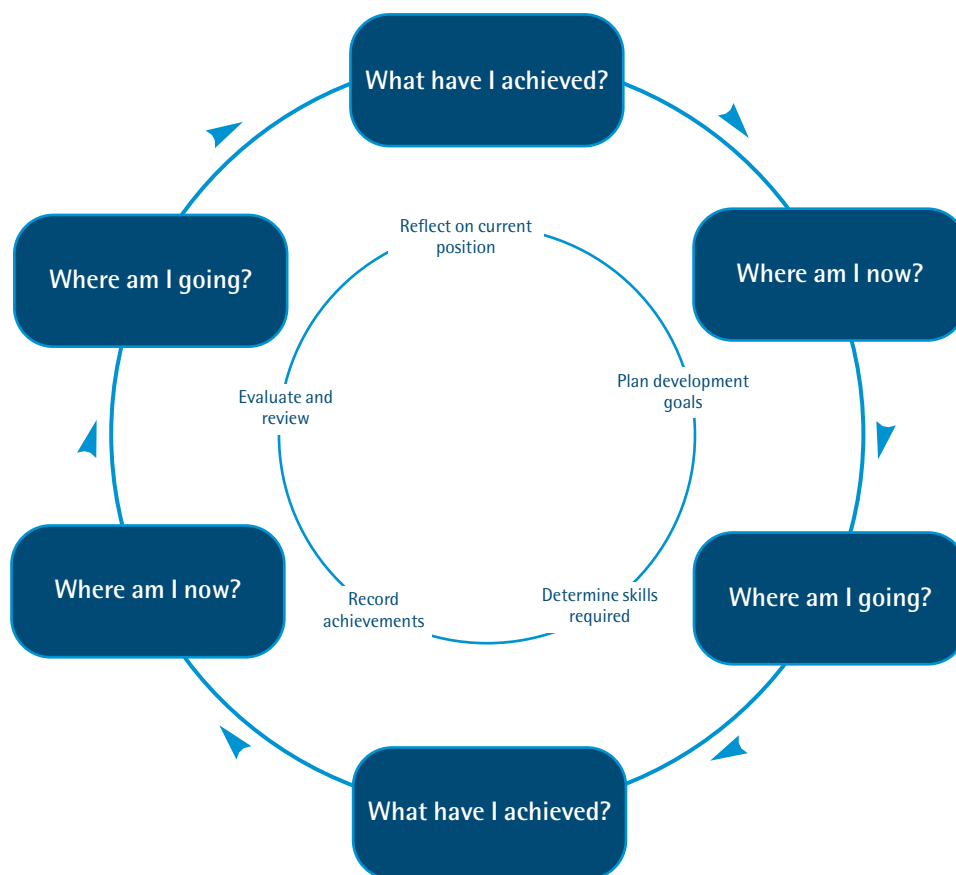
Timescales

Phase 1	4-10 weeks
Phase 2	mid way through studies
Phase 3	end of studies

Of course, you may re-visit your Skills Audit at any time during your course. Your department or personal tutor may help you by setting times for you to complete the different stages of the Record. Additional Skills Audit forms are available to download on the RSC website www.rsc.org/ugskills, and remember, not everything is expected at day one or month one.

The **Skills Profile** is a summary of your skills development and achievements for each particular skill, and should be completed towards the end of your course after reflecting on your development in Phases 1, 2 and 3.

The cycle of skills recording and development



Which skills?

Planning & Organisation	The ability to plan and organise for the long and short term.
Study Skills	The ability to manage and develop strategies and methods of study.
Handling Information	The ability to retrieve, analyse, evaluate and interpret information.
Communication Skills	The ability to communicate in writing and orally to a range of audiences.
Working with Others	The ability to work in a team and to lead that team when necessary.
Scientific & Practical Skills	The ability to carry out practical activities safely and effectively.
Improving Learning & Performance	The ability to identify opportunities for further development.
Information Communication Technology (ICT) Skills	The ability to use electronic media to interpret and present work.
Problem Solving	The ability to apply acquired knowledge and understanding to the solution of chemical and related problems.

How do I develop them?

There will be many opportunities for skills development throughout your degree, however these opportunities are not just confined to formal study. There are many situations within your social life (interests, hobbies, part-time work, voluntary organisation involvement etc.) as well as year-out experiences, whether in industry or abroad, which will contribute significantly to the development of your transferable skills base. It is important to recognise that many everyday tasks and procedures incorporate skills that you have already acquired and will continue to develop and improve, while others add new skills to your repertoire. For that reason it is important to record these skills early in your career and monitor your continuing professional development (CPD) at different stages.

Feedback

Receiving feedback is a valuable exercise; very often others recognise skills and qualities you possess. It is very easy to overlook certain skills yourself, especially if they are practiced on a daily basis. An important aspect of personal development is the ability to receive (and give) constructive feedback, incorporating this into your development plan and targets. It will be useful to invite feedback at different stages of your undergraduate study. Some of the people from whom you could receive feedback are:

- Fellow students
- Personal tutor
- Project supervisor
- Lecturers

It may be appropriate to ask different people to provide feedback for different skills. You are advised to invite feedback after completing each Phase of the Skills Audit. To do this you will find a simple form to complete at the end of the Skills Audit (page 30-32). You may wish to photocopy this and present it to whom-ever you request feedback from. You should incorporate any appropriate feedback into your development plans and targets.

At the end of your course you should have completed your Skills Profile (page 39). You are advised to invite feedback on your Skills Profile using the feedback form on page 42. Again you may wish to photocopy these, to keep the information in your Skills Audit confidential.

Help and advice from the RSC

As a student of the chemical sciences, it is important to gain the recognition of your professional body. The RSC provides a number of services and events, which can help with your personal and scientific development. We deal with many enquiries from student members each year, ranging from general careers advice to helping find industrial and summer work placements. Details on what the RSC can do for you, including how to join, can be found throughout this Record.

Personal details

Within this section you are encouraged to include details of club/society membership and any personal achievements and/or positions of responsibility. It is easy to forget this sort of detail, but activities such as these can often demonstrate your ability in a number of skills.

Name

University, Department

Registered Course

Reasons for choosing this course *

Personal Tutor

RSC Affiliate student membership number

Post-16 qualifications

*In the later stages of your study you may find it useful to reflect on your reasons for choosing this course. This is a question frequently asked at interview.

Awards/Bursaries

Prior work experience

Club/society membership

Personal Achievements

Help from the RSC

RSC Student Chemical Society Network

The RSC supports a Student Chemical Society Network throughout the UK that encourages students to organise and participate in social and formal events including visits to industry, society balls, demonstration lectures and quiz nights.

Chemical Societies registered with the RSC receive freebies, funding and support.

To find out more about the network and getting involved or to set up your own Society go to www.rsc.org/getinvolved or email info@rsc.org.

Department/Institution induction

This section should be completed in the early stages of your course. It serves as a check point – if you answer No to any of the questions, you should make efforts to find out the relevant information.

General Issues, do you know:

	Y	N
1. Your timetable (including practical classes, tutorials, workshops & seminars)?	<input type="checkbox"/>	<input type="checkbox"/>
2. Who is your personal tutor?	<input type="checkbox"/>	<input type="checkbox"/>
3. Who is the Head of Department?	<input type="checkbox"/>	<input type="checkbox"/>
4. Who to approach if you have academic problems?	<input type="checkbox"/>	<input type="checkbox"/>
5. Who to approach if you have personal/other problems?	<input type="checkbox"/>	<input type="checkbox"/>
6. About ICT provision in your department (including e-mail and internet access)?	<input type="checkbox"/>	<input type="checkbox"/>
7. Where the lecture theatres are?	<input type="checkbox"/>	<input type="checkbox"/>
8. Where the library is and how to use it?	<input type="checkbox"/>	<input type="checkbox"/>
9. What are your recommended course texts?	<input type="checkbox"/>	<input type="checkbox"/>
(see page 9 for details of the RSC members book offer)	<input type="checkbox"/>	<input type="checkbox"/>

Answer Y or N

Safety Issues, do you know about:

	Y	N
1. Emergency evacuation procedures (from lecture theatres and laboratories)?	<input type="checkbox"/>	<input type="checkbox"/>
2. Raising the fire alarm?	<input type="checkbox"/>	<input type="checkbox"/>
3. Health and Safety procedures and guidelines?	<input type="checkbox"/>	<input type="checkbox"/>
4. Provision of chemicals and how to dispose of them?	<input type="checkbox"/>	<input type="checkbox"/>

Answer Y or N

Central Facilities, do you know about:

	Y	N
1. The Student Union?	<input type="checkbox"/>	<input type="checkbox"/>
2. The Student Welfare Office?	<input type="checkbox"/>	<input type="checkbox"/>
3. The Careers Centre/Service?	<input type="checkbox"/>	<input type="checkbox"/>
4. Learning Support Services?	<input type="checkbox"/>	<input type="checkbox"/>

Answer Y or N

Royal Society of Chemistry, do you know about:

	Y	N
1. The help and advice the RSC can offer?	<input type="checkbox"/>	<input type="checkbox"/>
2. How to become a member?	<input type="checkbox"/>	<input type="checkbox"/>

Answer Y or N

Help from the RSC

Massive savings off books and journals from the RSC and other major publishers

In your first year of membership you will receive a voucher for £20 off selected RSC books and periodic tables. You will also be entitled to the following exclusive discounts:

- Up to 35% off RSC books and journals
- 30% off Wiley books
- 20% off all books from Pearson Education including titles by Longman, Prentice Hall and Addison Wesley

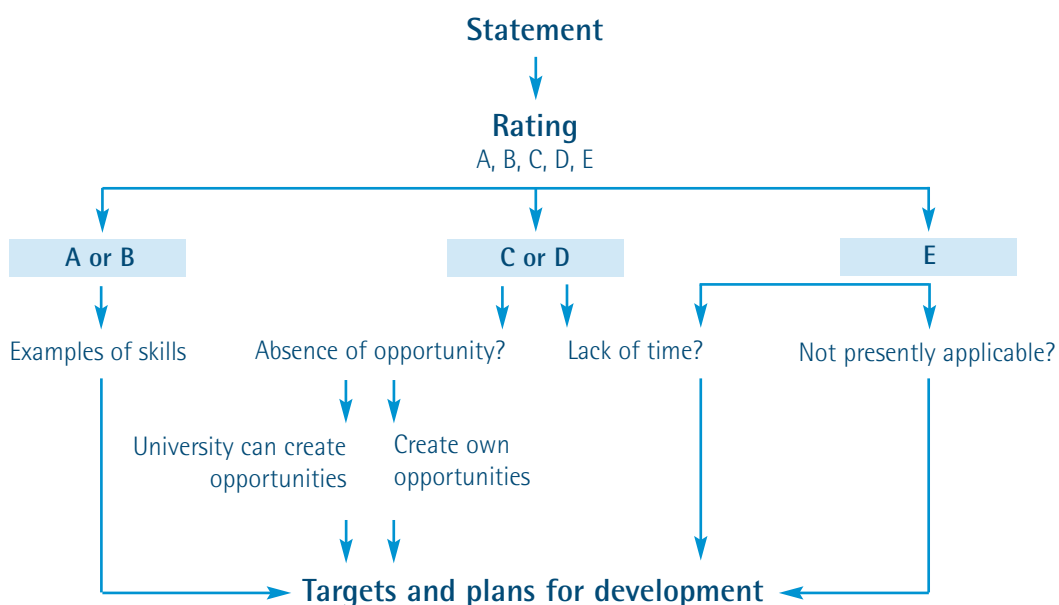
- 20% off Oxford University Press titles over £10
- Up to 20% off Institute of Chemical Engineers (IChemE) publications
- 20% off RAPRA books (specialised for the rubber and plastics industry)
- 20% off Blackwell chemistry titles

See www.rsc.org/studentzone/HEstudents for more information

Skills Audit

There are nine categories of skills in the Skills Audit. Rate yourself according to the scale shown for all of the statements in each skill category. The evidence you provide to support your ratings is very important. You will use this evidence to construct your Skills Profile and plan for future development. Remember, it is quite likely that one statement of evidence will support two or more of the ability statements. Throughout the course of your study, you will receive feedback from a number of sources for different course activities. For example if you have to give a presentation or written report you will receive feedback from your tutor or fellow students. You should incorporate this feedback into your development targets. If you require additional space, you can download continuation sheets from www.rsc.org/lap/educatio/ugskills

The following flow chart will help guide you through the process.



Use the following to rate yourself against each of the skills in the Skills Audit:

Ability Ratings

- A** I can use this skill very well
- B** I can use this skill well but some improvements could be made
- C** I need to improve this skill
- D** I need to put in considerable work to develop this skill
- E** I have not had the opportunity to develop this skill

The following example shows that you can use experience from outside your academic course as evidence of your ability in a particular skill. It also indicates how you can incorporate any feedback you receive into your development targets.

Example - Planning & Organisation

undergraduate
skills
record

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Chemical Sciences

Planning & Organisation

Rate yourself against the following statements of 'My ability to...'

1. ...plan ahead and demonstrate good time management	Phase 1 B	Phase 2 B	Phase 3 A
2. ...identify targets in my course	D	C	B
3. ...plan for practical and project work	C	C	B
4. ...plan ahead for meetings with lecturers and/or project supervisor	C	B	B
5. ...plan for the next stage of my career	D	C	B

Rating A-E for each statement

Phase 1
C

Phase 2
CB

Phase 3
B

How do you rate yourself overall for Planning & Organisation?

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Chemical Sciences

undergraduate
skills
record

Provide evidence for your ratings (remember, your evidence need not always be confined to academic study):

phase 1 date: Dec 2002

Note comments, targets and plans, and examples to support your scoring

I have successfully completed tutorial/homework and practical sessions to set deadlines. When I am given the notes for practical sessions I familiarise myself with the experimental procedures before the session. I have made appointments with my lecturers to discuss difficulties I have had with certain course modules.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2 *To organise an appropriate summer work placement. To do this I will need to identify local companies and send an up-to-date CV. I will concentrate on areas of chemistry which I think I may wish to pursue as a career. I will continue to make meetings with my lecturers, but will do some extra reading around before approaching them with difficulties.*

phase 2 date: March 2004

Note comments, targets and plans, and examples to support your scoring

As the 2nd year representative of the department's Chemico, I helped to plan and organise the annual chemistry ball, which involved planning the most effective time to sell tickets to my year. I have improved with planning ahead for meetings with lecturers. Reading up on the issues involved allows me to concentrate on aspects of my course which I find the most difficult. My summer placement has helped me to identify the best optional units to choose for next year.

Remember to invite feedback, incorporating this into your targets for Phase 3

Development Targets for Phase 2

To use my lecture notes better. The feedback I have received from my practical sessions suggests that I would have a better understanding if I use my lecture notes to help with my practical write-ups.

phase 3 date: March 2005

Note comments, targets and plans, and examples to support your scoring

I have organised a revision group with my friends, identifying course targets and problem areas which require further work. I use my lecture notes as an aid to my practical session write ups. This has resulted in an increase in my average mark. I have planned to meet with a career adviser soon, to discuss possible career paths.

Remember to invite feedback, incorporating this into your targets for the future

Future development targets *To plan an individual revision timetable for my final exams. To plan a European trip on a limited budget and hopefully to pick up some additional work experience.*

www.rsc.org/ugskills
13

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

Help from the RSC

Industrial Placements and Summer Placements on the RSC website

Members of the RSC can access details of organisations offering placements

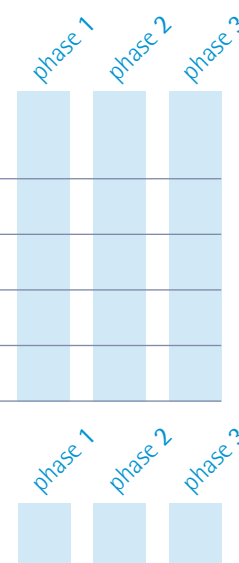
12 www.rsc.org/ugskills

Planning & Organisation

Rate yourself against the following statements of 'My ability to...'

1. ...plan ahead and demonstrate good time management
2. ...identify targets in my course
3. ...plan for practical and project work
4. ...plan ahead for meetings with lecturers and/or project supervisor
5. ...plan for the next stage of my career

Rating A-E for each statement



How do you rate yourself overall for Planning & Organisation?

Example:

1. My ability to plan ahead and demonstrate good time management

phase 1

Note comments, targets and plans, and examples to support your scoring

I have successfully completed tutorial/homework and practical assignments to given deadlines.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

To organise an appropriate summer work placement. To do this I will need to identify appropriate local companies and contact them with an up to date CV.

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

Help from the RSC

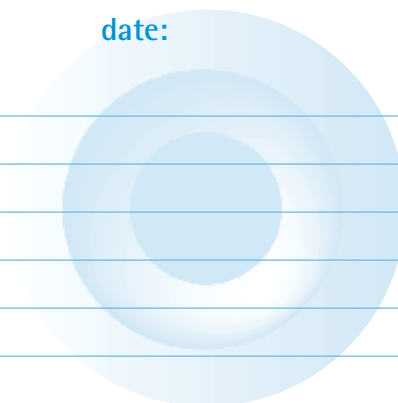
Industrial Placements and Summer Placements on the RSC website:

Members of the RSC can access details of organisations offering year out and summer work placements at www.rsc.org/industrialplacements

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

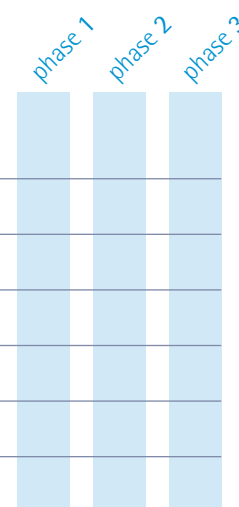
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Future development targets Remember to invite feedback, incorporating this into your targets for the future

Study Skills

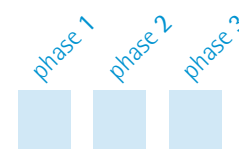
Rate yourself against the following statements of 'My ability to...'

1. ...make, organise, store and find notes effectively
2. ...use lecture time effectively
3. ...make the most of group work, tutorials and practical work to support my understanding
4. ...learn effectively and reflect upon and evaluate the extent of my learning
5. ...think critically and analytically and evaluate arguments
6. ...plan new tasks and assignments
7. ...use good revision and examination techniques



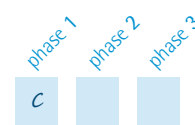
Rating A-E for each statement

How do you rate yourself overall for Study Skills?



Example:

1. My ability to make, organise, store and find notes effectively



phase 1

Note comments, targets and plans, and examples to support your scoring

I take draft notes during lectures and write them up afterwards.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

To write up my draft notes at the earliest opportunity and effectively use additional information from text books.

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

Help from the RSC Getting the Message Across, Key Skills for Scientists

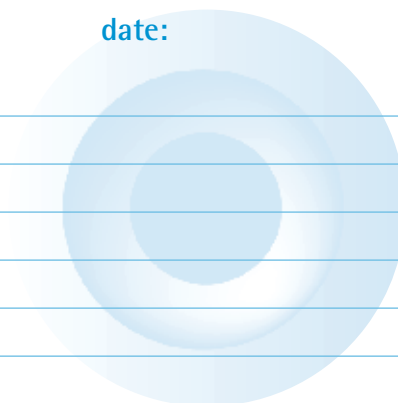
This essential reference guide for degree students and graduates is free to RSC members and gives advice and useful pointers on a range of subjects including: information retrieval, note taking,

keeping a laboratory notebook and report writing. If you would like a copy, please contact education@rsc.org.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

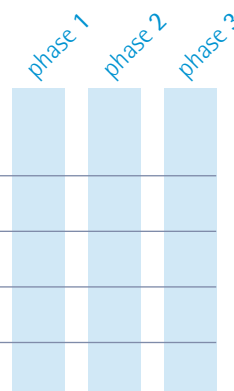
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Future development targets Remember to invite feedback, incorporating this into your targets for the future

Handling Information

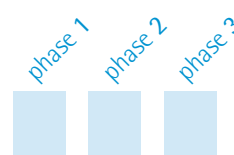
Rate yourself against the following statements of 'My ability to...'

1. ...use safety literature and hazard data (eg COSHH Assessments)
2. ...analyse and evaluate experimental data and interpret laboratory measurements and observations
3. ...evaluate and interpret chemical information (including chemical nomenclature, terminology and units)
4. ...use knowledge in solving problems (including an appreciation of error margins)
5. ...use primary and secondary information sources

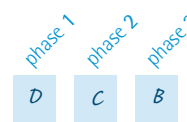


Rating A-E for each statement

How do you rate yourself overall for Handling Information?



1. My ability to use primary and secondary information sources



phase 3

Note comments, targets and plans, and examples to support your scoring

Having understood the initial information given in my research project, I have increased my understanding by retrieving and studying cited material and information sourced from the internet.

Remember to invite feedback, incorporating this into your targets for the future

Future Development Targets

To learn to use Chemical Abstracts and Web of Science more effectively.

Example:

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

Help from the RSC

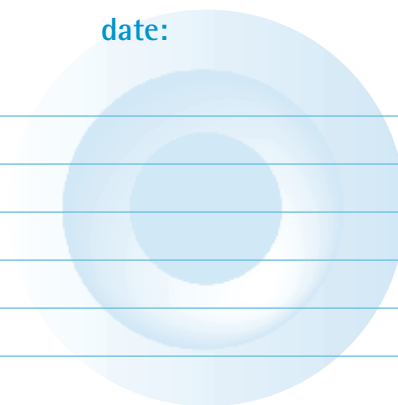
- Access to the largest collection of chemical science information in Europe via the Library and Information Centre (LIC): books, journals, on-line databases and the Chemical Enquiry Helpdesk - www.rsc.org/library

- *Chemistry World* and *RSC News* – magazines to help you keep up to date with chemical science news and events
- Scientific interest groups covering all areas of the chemical sciences – www.rsc.org/scienceandtechnology

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

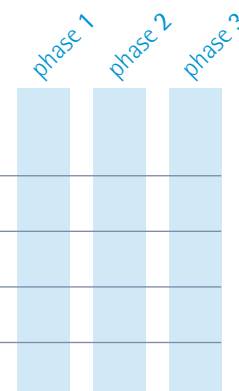
date:

Future development targets *Remember to invite feedback, incorporating this into your targets for the future*

Communication Skills

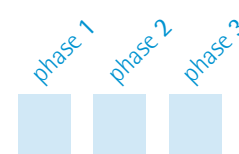
Rate yourself against the following statements of 'My ability to...'

1. ...ask for advice and help from a range of people (fellow students, lecturers, supervisors)
2. ...present ideas coherently to a range of scientific and non-scientific audiences
3. ...maintain good laboratory notes
4. ...provide written reports of my work on time (including essay-type reports on a range of topics)
5. ...plan and present an oral presentation with appropriate visual aids



Rating A-E for each statement

How do you rate yourself overall for Communication Skills?



Example:

1. My ability to present ideas coherently to a range of scientific and non-scientific audiences

D

Phase 1

Phase 2

Phase 3

phase 1

Note comments, targets and plans, and examples to support your scoring

I presented a short piece of work to my tutorial group (Note that this evidence can be used for both statement 2 and 5).

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

Present a piece of work to a larger audience. I require practice and a fuller understanding of the work

I am presenting. To do this I will have to prepare earlier and read more around the subject .

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

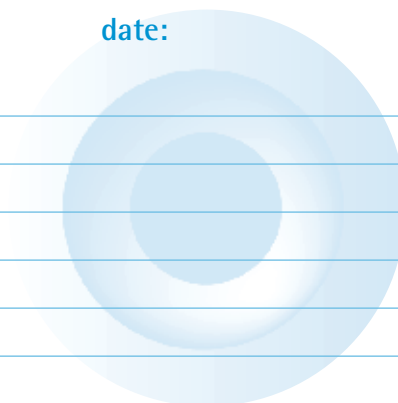
Help from the RSC [Getting the Message Across, Key Skills for Scientists](#)

This essential reference for degree students and graduates is free to RSC members and gives advice and guidance on subjects such as giving oral presentations and how to prepare a poster. If you would like a copy, please contact education@rsc.org.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

date:

Future development targets Remember to invite feedback, incorporating this into your targets for the future

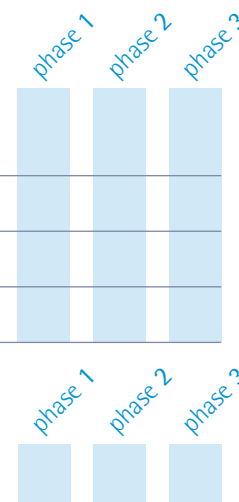
Working with others

Rate yourself against the following statements of 'My ability to...'

1. ...work in groups (eg contributing in labs, tutorials, seminars and workshops)
2. ...assume a number of roles eg team leader, team player
3. ...interact with a range of people to obtain necessary information and assistance
4. ...give and accept constructive criticism

Rating A-E for each statement

How do you rate yourself overall for Working with others?



1. My ability to work in groups (eg contributing in labs, tutorials, seminars and workshops)



phase 1

Note comments, targets and plans, and examples to support your scoring

I contribute effectively in my practical class group, working well with the rest of the team.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

To make opportunities to lead a team. To contribute effectively to the Chemistry Society Committee as 2nd year representative.

Example:

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

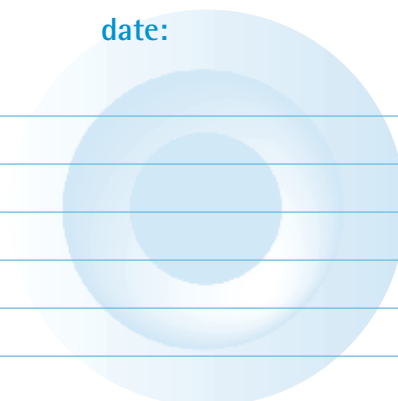
Help from the RSC

The best way to get the most out of being a member of the RSC is to get involved. Meet other members at RSC conferences, meetings and events and develop your networking skills and personal contacts. See www.rsc.org/networks for more information.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

date:

Future development targets *Remember to invite feedback, incorporating this into your targets for the future*

Scientific/Practical skills

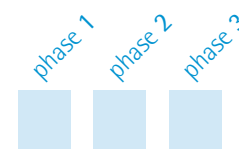
Rate yourself against the following statements of 'My ability to...'

1. ...maintain awareness of the specific hazards relating to the physical and chemical properties of chemicals
2. ...carry out COSHH assessments and handle chemicals safely
3. ...understand the principles behind and processes involved in experiments
4. ...measure and observe chemical events and changes, and record these changes coherently
5. ...understand error margins relating to chemical data and information
6. ...select and use appropriate techniques and procedures for experimental work
7. ...use a range of instrumental techniques



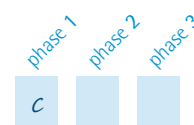
Rating A-E for each statement

How do you rate yourself overall for Scientific/Practical Skills?



Example:

1. My ability to carry out COSHH assessments and handle chemicals safely



phase 1

Note comments, targets and plans, and examples to support your scoring

I carry out COSHH assessments for all chemicals before commencing experimental work.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

To improve my confidence in the assessment of chemical hazards and develop a greater understanding of the potential outcomes.

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

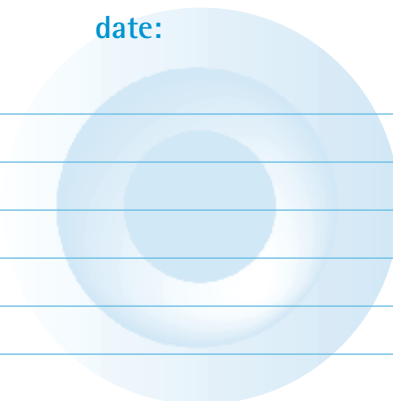
Help from the RSC

RSC Members have access to the latest news. Make sure you're up to date with what's going on in the world of the chemical sciences and industry each month through your copy of *Chemistry World*. This magazine covers everything from news reports and feature articles to job adverts.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

date:

Future development targets Remember to invite feedback, incorporating this into your targets for the future

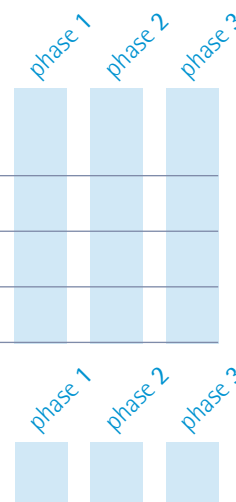
Improving Learning & Performance

Rate yourself against the following statements of 'My ability to...'

1. ...use feedback on work to reflect upon academic performance and progress
2. ...reflect upon and plan for future skills requirements
3. ...identify and create new learning opportunities, drawing on experiences within and outside my course
4. ...maintain an interest in general science issues

Rating A-E for each statement

How do you rate yourself overall for Improving Learning and Performance?



Example:

1. My ability to use feedback on work to reflect upon academic performance and progress

phase 1

Note comments, targets and plans, and examples to support your scoring

I find it difficult to recognise constructive feedback.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

To learn to recognise and request constructive feedback and to incorporate this into practical work and tutorial assignments.

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

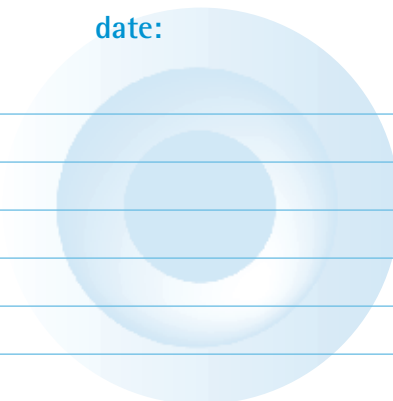
RSC Membership benefits

RSC conferences and scientific interest group meetings cover all areas of the chemical sciences. Focus your membership and take advantage of these excellent networking opportunities. See www.rsc.org/conferences for more information.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

date:

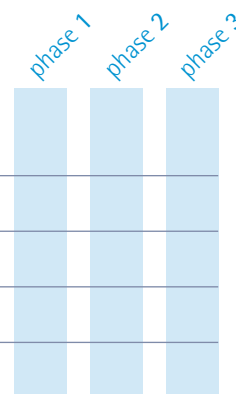
Future development targets Remember to invite feedback, incorporating this into your targets for the future

Information Communication Technology (ICT) Skills

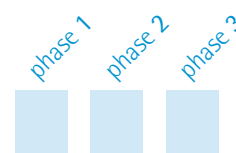
Rate yourself against the following statements of 'My ability to...'

1. ...use e-mail and the internet for communication
2. ...use electronic information sources (eg library systems, internet sources)
3. ...word process scientific reports effectively
4. ...use computers to prepare presentations
5. ...use data processing methods (e.g. spreadsheets)

Rating A-E for each statement



How do you rate yourself overall for Information Communication Technology Skills?



Example:

1. My ability to use e-mail and the internet for communication

phase 1

Note comments, targets and plans, and examples to support your scoring

I frequently contact friends and fellow students via e-mail, and use the internet as an information source to complete tutorial and homework assignments.

Remember to invite feedback, incorporating this into your targets for Phase 2

Development Targets for Phase 2

To learn how to use HTML to build my own website.

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

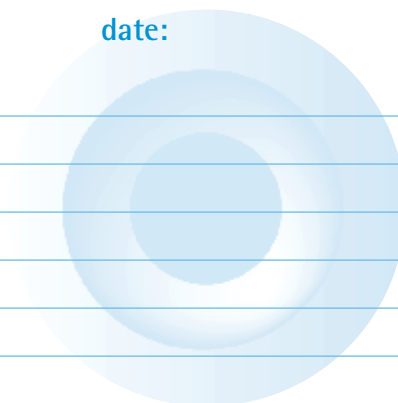
Help from the RSC

Shape your career – make the most of your RSC membership by using your Skills Record in conjunction with your free copies of *Got a Degree? What next...* and *Getting the Message Across – Key skills for scientists*.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

date:

Future development targets *Remember to invite feedback, incorporating this into your targets for the future*

Problem Solving

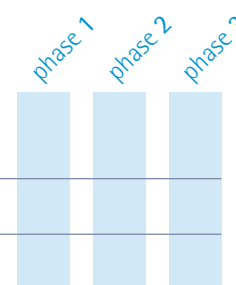
Rate yourself against the following statements of 'My ability to...'

1. ...apply acquired knowledge and understanding to the solution of chemical and related problems

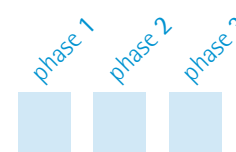
2. ...suggest ideas/solutions in the absence of complete data

3. ...work from first principles

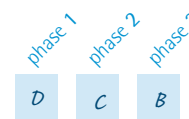
Rating A-E for each statement



How do you rate yourself overall for Problem Solving Skills?



1. My ability to apply acquired knowledge and understanding to the solution of chemical and related problems



phase 3

Note comments, targets and plans, and examples to support your scoring

I recognise the close relationship between the subjects taught in Module X and Module Y, and have applied knowledge to enhance my understanding of both subjects.

Remember to invite feedback, incorporating this into your targets for the future

Future Development Targets

To be accepted onto a PhD programme, and continue my improvement in problem solving.

Example:

Ability ratings

A I can use this skill very well

B I can use this skill well but some improvements could be made

C I need to improve this skill

D I need to put in considerable work to develop this skill

E I have not had the opportunity to develop this skill.

RSC Membership benefits [Tutorial Chemistry Texts \(TCT\)](#)

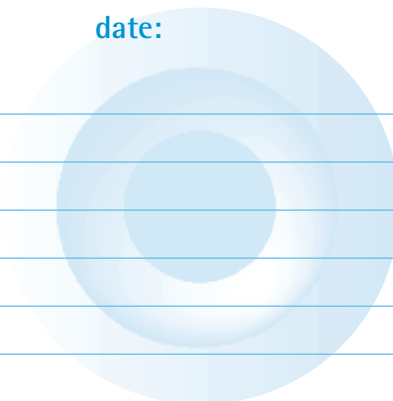
These books are written specially for chemical science students covering many of the topics taught in undergraduate chemistry courses. They provide a concise summary of basic principles and include worked-examples and exam-style questions which will allow you to test your learning and practice for exams.

As a student member of the RSC, if you spend £30 or more on selected RSC publications, including all the books in the TCT series, you can deduct £20 from the total.

Note comments, targets and plans, and evidence to support your scoring
(remember, your evidence need not always be confined to academic study):

phase 1

date:



Development Targets for Phase 2 Remember to invite feedback, incorporating this into your targets for Phase 2

phase 2

date:

Development Targets for Phase 3 Remember to invite feedback, incorporating this into your targets for Phase 3

phase 3

date:

Future development targets Remember to invite feedback, incorporating this into your targets for the future

Project work

During your course, you may carry out one or more research projects. You may also have gained valuable project work practice during periods of work experience. You should draw on the experiences of all project work when recording your achievement and planning future development in this area.

Understanding the aims of your project and identifying the specific techniques you need to apply at the early stages are fundamental to the success of your research project.

Title of Project (1)

Aims of Project

Title of Project (2)

Aims of Project

What techniques are you applying to your project?

– eg analytical techniques, synthetic chemistry, instrumental techniques, molecular modelling.

To record your development you may find it helpful to separate your period of research into three stages.

For example, for a 6-month project:

Stage	Timescale
1	2 months
2	4 months
3	6 months

Rate your proficiency in each of the techniques at the different stages of your project.
Regular high competency user; Competent user; Familiar with method; Rare user.

Example:

Stage 1	
Technique	Proficiency
<i>Assembling apparatus in inert atmosphere</i>	<i>Competent user</i>
<i>NMR Analysis</i>	<i>Rare user</i>
<i>Infra-red spectroscopy</i>	<i>Familiar with method</i>

Stage 2	
Technique	Proficiency
<i>Assembling apparatus in inert atmosphere</i>	<i>Regular high competency</i>
<i>NMR Analysis</i>	<i>Familiar with method</i>
<i>Infra-red spectroscopy</i>	<i>Familiar with method</i>
<i>Surface area measurements (BET)</i>	<i>Rare user</i>

Stage 3	
Technique	Proficiency
<i>Assembling apparatus in inert atmosphere</i>	<i>Regular high competency</i>
<i>NMR Analysis</i>	<i>Familiar with method</i>
<i>Infra red spectroscopy</i>	<i>Competent user</i>
<i>Surface area measurements (BET)</i>	<i>Competent user</i>
<i>Molecular modelling</i>	<i>Familiar with method</i>

Rate your proficiency in each of the techniques, and provide evidence to support your rating.
If you require additional space, you can download continuation sheets from www.rsc.org/ugskills

Stage 1

Technique

Proficiency

Stage 2

Technique

Proficiency

Stage 3

Technique

Proficiency

Set targets for your project, and review your comments at each stage.

Targets at stage 1 - to be completed in stage 2

Targets at stage 2 - to be completed in stage 3

Stage 3 - Identify the areas of success in your project. What could you have done better and what would you have done differently?

Skills Profile

From your Skills Audit, you can generate a Skills Profile. Your Profile should not simply be a list of dates and events, but more a brief summary of your achievements for each particular skill.

Your Skills Profile provides benefits in a number of ways, including:

Applying for employment

You can use your Skills Profile as an aid to completing application forms and constructing your CV. Remember to highlight the skills that are most appropriate to the position for which you are applying.

A Skills Profile should clearly set out the skills and abilities you have to date, ie those that you have identified in the Skills Audit and the Project Work sections. In short, your Skills Profile should address the following:

- What skills do I have?
- What can I do?

Using the different categories in the Skills Audit, generate your Skills Profile. Under each heading provide a brief statement of your ability in this area and provide an example of evidence. Lists of positive and action words are provided; you may wish to use some of these in your Skills Profile. You should also summarise your future development targets in the space provided.

1. Complete your Skills Audit (Phases 1, 2 & 3)
2. Summarise information for your Skills Profile
3. Summarise your future development targets

You are encouraged to invite feedback from a range of sources on your Skills Profile. You may choose for the Record itself to be for your own personal viewing. We would therefore advise you to photocopy your completed Skills Profile and present it with the feedback form to the appropriate person/people.

Action words

Achieve	Administer
Analyse	Articulate
Build	Communicate
Control	Co-ordinate
Create	Design
Determine	Develop
Direct	Engineer
Establish	Expand
Guide	Implement
Improve	Initiate
Lead	Manage
Monitor	Organise
Participate	Process
Qualify	Repair
Specialise	Supervise
Train	

Positive words

Ambitious	Assertive
Capable	Competent
Competitive	Confident
Consistent	Economic
Effective	Efficient
Enthusiastic	Experience
Innovative	Positive
Productive	Proficient
Profitable	Resourceful
Successful	Versatile

Example:

Planning and organisation

I can organise my time effectively, and have the ability to analyse situations to plan ahead for a positive outcome. I can manage assignments and projects, identifying targets in my work as well as identifying the development required to achieve the desired goals.

Target(s)

To gain experience in managing a larger project, including project design and proposals.

Skills Profile

Name:

Date:

Remember, if you prefer the Record to be for your own personal viewing, photocopy your completed Skills Profile and present it with a copy of the feedback form (page 42) to the appropriate person/people.

Planning & Organisation

Target(s)

Study Skills

Target(s)

Communication Skills

Target(s)

Handling Information

Target(s)

Working with Others

Target(s)

Scientific/Practical Skills

Target(s)

Improving Learning & Performance

Target(s)

Information Communication Technology (ICT)

Target(s)

Problem Solving

Target(s)

Remember to invite feedback on your Skills Profile using the Feedback form on page 42.

Skills Profile Feedback

Name:

Date:

Present this feedback form to a suitable person(s) with a copy of your Skills Profile. You may find it useful to ask for feedback from a range of people. They should state their relationship to you (ie personal tutor, project supervisor, fellow student etc.) in the space provided.

Skill: Planning & Organisation

Relationship:

Date:

Skill: Study Skills

Relationship:

Date:

Skill: Handling Information

Relationship:

Date:

Skill: Communication Skills

Relationship:

Date:

Skill: Working with Others

Relationship:

Date:

Skill: Scientific/Practical Skills

Relationship:

Date:

Skill: Improving Learning & Performance

Relationship:

Date:

Skill: Information Communication Technology (ICT)

Relationship:

Date:

Skill: Problem Solving

Relationship:

Date:

Career Planning

Possession of a degree is far more common than it was some years ago, and competition for jobs is fiercer than ever. A wide range of career choices are open to you; with greater options it is important to plan for your career aspirations at the earliest opportunity. Being able to follow your chosen career comes more easily to those who are prepared, proactive and motivated. There are a number of steps to take when preparing for further study or employment. Consider the following.

- Have you discussed your career aspirations with the University Careers Service?
- Have you discussed your career with staff in your department?
- Do you have the skills profile for your chosen career?
- Do you have an up to date CV?
- Have you filled in practice application forms?
- Have you had a practice interview?
- Have you taken an aptitude test?

The RSC publication *Got a Degree? What next...* gives you an indication of the opportunities that are available to graduates of the chemical sciences within the chemical and pharmaceutical industries as well as in other fields of employment. There are sections on job hunting and guidelines for writing your Curriculum Vitae (CV) and on interview preparation. There is also some information about membership of the RSC and how to become a Chartered Chemist (CCChem) - the professional qualification for all chemists. This publication is available free to RSC members, email education@rsc.org to request a copy.

The RSC has produced a series of employment profiles which give a useful insight into the life of chemical scientists who work in the pharmaceutical and chemical industries. There are also profiles which illustrate the wide range of opportunities available to chemical science graduates in non-scientific disciplines. If you would like to receive copies of these profiles, please contact the RSC Education Department education@rsc.org or visit www.rsc.org/profiles.

Standard Application Form

The Standard Application Form (SAF) has been agreed between all the university and college careers services and the representatives of many graduate employers. As well as sections on Personal Details, Education and Work Experience, the SAF requires you to provide evidence of specific skills and abilities. Overleaf are extracts from the SAF*, completed using example evidence submitted for the Undergraduate Skills Record.

Planning, implementation and achieving results:

Describe a challenging project, activity or event which you have planned and taken through to a conclusion. Include your objective, what you did, any changes you made to your plan and state how you measured your success.

At the end of my second year I planned to spend three months in a chemical company on work experience. My objective was to arrange a short placement which would provide me with some practical project experience. After researching the business areas of a number of organisations, I wrote to those that performed the type of chemistry I am interested in, stating my requirements as being a three-month project to work on. My first applications were addressed broadly to 'Research and Development'. After a disappointing response I visited the websites of each company and where possible, targeted my application to named personnel. I was offered an interview at 2 of the companies. After talking at length with scientists from both companies, I was offered a paid 3-month placement at HowesMed. I was required to write a report on the project work I was involved with, and received very positive feedback from my project manager and team. On returning to my final year of studies, I felt more confident in the laboratory and my report writing skills had improved.

Influencing, communication and teamwork:

Describe how you have achieved a goal through the actions or opinions of others (perhaps in a team context).

What were the circumstances? What did you do to make a difference? How do you know the result was satisfactory?

As part of my chemistry communications module I had to give a 15-minute presentation on one aspect of the chemical sciences. I worked in a group of two people and had to present to the year group of 45 students and staff. During small practice presentations we invited feedback from a number of different people, both staff and fellow students, and incorporated the feedback into subsequent talks. The presentation was graded as 8/10 and formed part of my overall marks for the module.

* Extracts from SAF reproduced with the permission of AGCAS (Association of Graduate Careers Advisory Service)

Responding to Job Advertisements

When you are ready to apply for positions, consider the advert carefully. You will be able to use some of the evidence submitted in your Skills Record to demonstrate that you have the qualities and abilities required for that particular position. Below is an example of an advertised graduate level position, with suggestions of how to use extracts from your skills record effectively.

OPPORTUNITIES FOR GRADUATES

HowesMed Associates, a leading organisation in science innovation, are looking to recruit top level graduates with well developed skills.

You will be a good **communicator** with excellent **organisational skills** as well as the ability to work in a high-pressured environment with a **range of people**. You will be flexible, self-motivated, quick to learn and keen to **achieve project goals**.

If you can demonstrate these qualities, please send your CV or SAF and covering letter to Dr Deborah Lang, HowesMed Associates, PO Box W1, London

Use extracts from your Skills Profile to demonstrate your communication skills

Use extracts from your Skills Profile to demonstrate your planning & organisation skills

Use extracts from your Skills Profile to demonstrate your ability to work with others

Use extracts from your Skills Audit and Project Work sections to demonstrate ability to set and meet targets

There are a number of publications which advertise job opportunities and provide general careers advice which should be available from your University Careers Service. These include:

- Prospects Finalist
- Prospects Directory
- Hobsons Science and IT Casebook

There are also lots of websites which detail job advertisements for chemists (both in the chemical sciences and non-science areas). The following might be useful:

- www.prospects.ac.uk
- www.newscientistjobs.com
- www.rsc.org/chemistryworld
- www.jobs.ac.uk
- www.naturejobs.com
- <http://jobs.guardian.co.uk>
- www.thesjobs.co.uk

Notes

Royal Society of Chemistry

Registered Charity Number: 207890

Burlington House
Piccadilly, London
W1J 0BA, UK
Tel: +44 (0)20 7437 8656
Fax: +44 (0)20 7734 1227

Thomas Graham House
Science Park, Milton Road
Cambridge, CB4 0WF, UK
Tel: +44 (0)1223 420066
Fax: +44 (0)1223 423623

Email: info@rsc.org
www.rsc.org

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