Running the exercises

Each exercise includes an outline; a student handout denoted by "S"; and a tutor's guide denoted by "T". Additional points to note when running the exercises in this pack:

- The tutor's guide and student handouts are designed to be sufficiently comprehensive to allow the exercises to be run with very little extra preparation. However, it is also possible to adapt them to meet specific course requirements. The exercises are aimed at undergraduates in their penultimate year of a BSc(Hons) course, but the material can be readily modified for use with first year students or postgraduates.
- Each exercise can be run by a single tutor working with a class of students, although the involvement of two or more tutors for some exercises (especially in classes of more than forty) can be beneficial.
- Some exercises are designed for students to work independently, while other exercises require students to work in groups or pairs. Group work is best carried out in groups of four to six, with work assigned to specific groups by the tutor before the start of the exercise.
- The guidance notes assume that one hour teaching slots are available, and the suggested timetabling of exercises are based on fifty minute sessions of teaching/learning time.
- Assessment of the exercises is not too difficult and practicable ways of doing so are included in the tutor's guide for each exercise.
- Experience indicates that the exercises work best if they are a compulsory part of the course (ideally with course credit/assessment linked to them). However, students almost invariably undertake the exercises with great enthusiasm and commitment, achieving work of a high standard.
- Each exercise can be run in isolation, to address a specific aspect of communication, or they can be run as a set of exercises to give a broader coverage of communication skills in chemistry.

The ten exercises can be run as a complete 'module', and there are some advantages in doing this. In particular, the importance placed on communication is emphasised, time can be saved by linking exercises together, and students can reinforce the skills they learn using several exercises. It can also be difficult to allocate enough time for developing transferable skills unless a specific module is identified for this purpose. The table on the following page shows the extent to which each aspect of communication skills is covered in the complete module based on this teaching pack. Feedback and self-assessment forms relating to the whole module are provided in Appendix E.

Summary of communication skills in each exercise

Title	Time* (Hours)	Information retrieval %	Written retrieval %	Visual delivery %	Oral delivery %	Team work %	Problem solving %
The Fluorofen Problem	1 (1)	0	0	0	0	50	50
Scientific Paper	3 (2)	20	0	0	0	30	50
Computer Keyboard Skills	10 (1)	0	10	90	0	0	0
World Wide Web Treasure Hunt	8 (1)	90	5	0	0	0	5
New Chemist Article	18 (1)	20	40	30	0	10	0
Dictionary of Interesting Chemistry	20 (1)	35	35	20	0	10	0
Hwuche-Hwuche Bark	8 (2)	5	0	10	15	45	25
Annual Review Presentation	12 (2.5)	10	0	20	70	0	0
Poster Presentation	12 (2)	20	25	40	0	15	0
Interviews	8 (2.5)	0	25	0	55	20	0
Overall percentage of module		20	14	21	14	18	13

* total time required by student; (tutor contact hours are given in brackets).

The Exercises