

Inspirational chemistry – resources for modern curricula

Written by Vicky Wong
RSC School Teacher Fellow 2004–2005

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Written by Vicky Wong

Edited by Emma Kemp, Colin Osborne, Maria Pack and Kay Stephenson

Designed by Imogen Bertin

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Foreword

Chemistry is an exciting subject that is continually developing and changing to meet the challenges of our modern world. The Royal Society of Chemistry is pleased to be able to provide these resources to support the teaching of the new GCSE's in England, Wales and Northern Ireland starting in September 2006 and hopes they will be of use to teachers in Scotland too.

The experiments and resources range from new approaches to basic science (such as rates and rhubarb) to modern developments such as combinatorial chemistry and nanochemistry. There is a strong emphasis on sustainable development and green chemistry and it is hoped teachers will share with their students current thinking in industry and academia.

*Dr Simon Campbell CBE FRSC FRS
President, Royal Society of Chemistry*

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Vicky Wong

Introduction

This resource was produced in response to the revision of the General Certificate of Secondary Education in England, Wales and Northern Ireland for first teaching in September 2006. I hope that many of the resources will also be useful for teaching in Scotland.

The resource was produced in order to fulfil the RSC's objectives that chemistry curricula should include modern, up-to-date contexts, set where possible in everyday situations.

The writing paralleled the specification development and was accompanied therefore by consultation, to a greater or lesser degree, with awarding bodies.

Vicky Wong

How to use this resource

This resource has been designed with flexibility in mind. A whole unit could be used, but often a single lesson could be based on a selection of the material, or images or interactive activities could be used to support a lesson or part of a scheme of work.

All the material except the teacher's guide is available on the CDROM. Photocopiable, printable and projectable materials are available in two formats:

- Coloured pdf
- Word document (which can be altered or edited by the teacher prior to printing.)

Each worksheet has an index number eg 2.1.1 which enables teachers to search for specific worksheets on the CDROM. These two formats allow teachers flexibility in using the resource according to their local circumstances.

CDROM instructions and system requirements

The CDROM is fully compatible with Windows NT/2000/XP and can be used on most other computer systems equipped with a CDROM drive.

In addition you will need:

- Web browser – the content has been optimised for Internet Explorer 6 but will function correctly using most other browsers. An Internet connection is not required.
- Java – to use the advanced search facilities Java must be installed and enabled.
- Acrobat PDF reader – required to open PDF resource files
- Microsoft Word – required to open Word resource files.

To use, insert the CDROM into the CDROM drive.

PC users: Your PC should run the CD-ROM automatically. If it does not, open the CDROM using My Computer and run the programme IChem.exe. You may access the resources directly from the CDROM or else install them to your PC's hard disk.

Alternatively, use your web browser to open the file index.htm.

Users of other computer systems: Using your web browser, navigate to the CDROM and open the file index.htm.

The CDROM licence allows the files on the CDROM to be downloaded and to be accessible over a network. The RSC will not offer support or guidance on how best to network the files.

Note about printing the PDF version student files: if you encounter a problem where the student sheets print out slightly smaller on the page than you expected, make sure that in earlier versions of Adobe Acrobat, the option for 'Fit to page' on the print dialogue box is unchecked. In more recent versions of Adobe Acrobat this option is found by first choosing the 'Properties' button in the print dialogue box and then the 'Effects' tab. Choose 'Actual size' not 'Fit to page'.

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