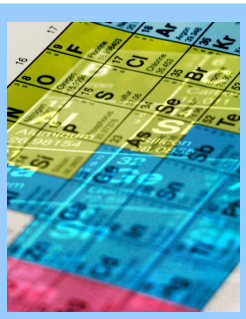
THE ROYAL SOCIETY OF EDINBURGH



RSE@Schools

Chemistry, Colour and Magic

By Dr Christine Davidson

Exploring the chemical properties of important gases in the atmosphere, carbon dioxide, nitrogen and oxygen, this lecture asks how colour changes are brought about in chemical reactions and what uses there are for these reactions?

Along the way we look at how chemistry provides us with energy, colour and light, how we can use chemistry to detect substances around us and how the speed of chemical reactions can be affected by the concentrations of chemicals present

The talk covers topics such as colour changes in solution, the effects of liquid nitrogen, the importance of flame tests and spectrometry, chemiluminescence and pyrotechnics.

A lively demonstration lecture, showing the colour and magic of chemical reactions, this talk aims to introduce the fun and excitement of chemistry. The talk can be adapted for all ages and includes a wide range of practical demonstrations showing how chemistry and colour combine to form some fascinating effects.

Dr Christine Davidson is a lecturer in Inorganic Chemistry at the University of Strathclyde, where her main area of research is environmental and analytical chemistry.

Curriculum Links

- **5-14 Science: Changing Materials**
- **Standard Grade Chemistry: Chemical Reactions**
- **Higher Chemistry: Chemical Reactions**
- **Advanced Higher Chemistry: Principals of Chemical Reactions; Organic Chemistry**

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Photos courtesy of Dr Davidson