**Colourful Chemistry** KS2

**Duration:** 1 hour, max capacity: 30 students

An illuminating, lab-based insight into the wonderful world of chemistry and some of its real-life applications. Students use sparklers, universal indicator, glowing reactions and more to explore a variety of contrasting and highly visual reactions.

**Key Words:**
Chemistry, Reactions, Colour, Light, Laboratory, Chemiluminescence

**Learning objectives**
- Develop an understanding and recognition of laboratory hazard symbols.
- Apply observation skills to a variety of chemical reactions to describe what is happening.
- Distinguish between an atom and an element.
- Distinguish between reactants and products.
- Identify that chemical reactions result in the formation of new materials.
- Recognise that chemical reactions can result in a colour change due to new products that are formed.

**Content**
- Observe and describe the physical properties of a variety of chemical substances.
- Identify the colours associated with metal salts when heated.
- Conduct and observe an experiment to investigate chemiluminescence.
- Conduct a precipitation reaction to illustrate a way in which paint pigments are produced.
- Consider the effects of the environment on a chemical reaction.

**Curriculum Links:**
**Science: States of Matter**
- Compare and group materials together, according to whether they are solids, liquids or gases

**Science: Properties and changes of materials**
- Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating
- Explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning

**Potential Hazards and accessibility**
Students will use glassware and chemical solutions.