



Science to reach

Lets shine!

How to attract today's students?

Illustrative, fun and interactive, **Chemistry and Light** kits connect chemistry, physics, biology and art through visually appealing experiments.



What is their magic? Students will experience different chemical processes (chemical reaction rates, reaction equilibrium, catalyst function, polymerisation, photosynthesis, formation of coordination compounds, etc.) and thus better understand the interrelationships.

They can even take home the results of some of the experiments from the cross-curricular projects, such as a blue photograph taken in the sun or a picture on a plant leaf, to show off.

You can use the experiments in the kits to **quickly spice up a lesson**, in **lab exercises**, **project-based learning** or to show them off at open days and other events.

In short, we've chosen experiments that combine visual beauty, a bit of mystery, a chance to make something, and most importantly, to see how it all fits together.

I use the kit Chemistry and Light regularly in my classroom. I appreciate not only the practical and high-quality equipment of the set but also the clarity and the motivational potential of the whole product. The experiments that the kit offers can help to illustrate the curriculum in the various stages of their educational journey and make the learning process very likeable. I warmly recommend it.

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Article in Journal of Chemical Education, interview in **Czech television**, review of the kits, **videos with experiments** a many more you can find on: **www.chemistryandlight.cz/media**



What is inside?



Rate of a chemical reaction

Demonstrate the rate of a chemical reaction on glowing solutions, try to influence it with pH, temperature or a catalyst and gain an insight into the secrets of chemiluminescence. | **Chem.**

Principles of polymerization in slime preparation

Experiments with hydrogels are a great tool to demonstrate polymerization and reaction equilibrium. In addition, students can take the slime home. | Chem. Bio.

Images in a plant leaf using photosynthesis

In class, try photosynthetic printing using iodine and describe this complex biochemical process directly on a plant leaf that serves as a canvas. | Chem. Bio. Arts



Blueprint photos in the sun

Using photochemical blueprinting or cyanotype, you and your students will create your own photographs on quarters of paper or print an image on a t-shirt, wood or ceramics. | Chem. Phys. Arts

Fancy green fire

A very quick-to-do experiment that always creates a strong wow effect and can kindle the interest of pupils for chemistry. | **Chem. Phys.**

Crystals that glows

Prepare crystals of a manganese or europium complex which glow under UV light or when rubbed, demonstrating triboluminescence and preparation of coordination compounds. | | Chem. Phys.

Interaction of matter and light

Explain the principles of fluorescence and phosphorescence using fluorescent dyes, phosphorescent pigment and samples of natural products glowing under a UV lamp. | Chem. Phys. Bio.

And it doesn't stop there...



ATTRACTIVE EXPERIMENTS

Enchant your students with attractive chemical experiments with light.



LINKED TO CURRICULUM

Methodological notes explain how the experiments match the curriculum.



SIMPLE AND INTUITIVE

Most experiments can be performed without time-consuming preparations and with the option of purchasing refill chemicals.



INSTRUCTIONS FOR EASY USE

Instruction and methodological cards contain precise and clearly defined procedures.



INTERDISCIPLINARY APPLICATION

You can use the school kits in chemistry, physics, biology or art classes.



SAFETY FIRST

Selected experiments are designed as safe student experiments.

More news will be coming soon. Follow our website and our social networks and you won't miss anything.

Contact us

Are you interested in Chemistry and Light school kits? Get in touch with us. We will be happy to answer any questions and help you choose the right kit.

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www.chemistryandlight.eu