



### Light on the Internet:

The website [www.fascination-of-light.net](http://www.fascination-of-light.net) provides lots of user friendly information about the world of light and optical phenomena. You can find details of where and when you can see the exhibition by clicking on 'Events'. And in the 'Download Center' you can find a whole range of documents from posters to instructions for simple optical experiments presented in several languages.

### Contact

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[www.fascination-of-light.net](http://www.fascination-of-light.net)



**Luka, the glowworm, tells stories from the magic world of light to younger children.**

The travelling exhibition is part of the 'Fascination of Light – Light for Schools' campaign, a joint initiative between organisations and associations from research, industry and the media and is supported by the German Federal Ministry for Education and Research (BMBF). As part of the European campaign the exhibition will travel through several European cities with the support of the European Commission.



Light is mysterious.

Light is unique.

Light is fascinating.

Light is the future.

Light is endless.

# FASCINATION OF LIGHT

## Light is with us throughout our daily lives

When we watch a rainbow we see how light is split into its spectral colours. Looking through glasses, we use the light refraction by lenses. Sitting in front of the TV in the evening the picture is made up of glowing of minuscule pixels. And the breath-taking laser show of our favourite band is possible because people have learned to control light and to focus it.



How can glass fibres transmit light?

## Light is everywhere

Even where we do not see it, light has its role: In a DVD player a laser beam reads the information on the DVD. The circuit path on computer chips is made by a photographic process. And every mobile phone relies on light: electronics and shell, display and handling would not work without lasers, light-emitting diodes and LCDs.



How does a laser in a DVD player work?

How can a laser weld a ship?

CD covers shimmer in rainbow colours, tiny letters are written on a hair by a laser, holograms give an amazingly accurate spatial image, a light labyrinth provides a challenge for students. 'Light games' encourage younger visitors to play with mirrors and shadows.

Teachers will find plenty of suggestions and inspiration in the exhibition and the accompanying brochure for making their lessons more vivid. The brochure with clear text and images explains in an understandable way where light comes from, what light is and what can be done with light and optical technologies. There are worksheets for simple experiments with light which are especially suitable for primary school teaching.

'Fascination of Light' raises awareness of career opportunities – in a forward looking industry where light is becoming increasingly important. Light works offers high precision, is contact-free and easy to control. By influencing so many areas of industry it becomes a determining factor of innovation. Experts predict enormous growth rates for technologies involving light – a bright prospect for young people in the century of the photon.

## Light in nature, light in the hand of man

In the travelling exhibition 'Fascination of Light' everybody can experience and understand 'light'. Whether polarisation, colour mixture or material processing by lasers, hands-on exhibits, functional models and multimedia activities invite the visitors to enter the world of light.



Where does light come from, and where do its colours come from?

What has my mobile phone got to do with light?



How many photons are emitted by a laser pointer?

