

## Royal Society of Chemistry approved training courses

Explore your options. Develop your skills. Discover learning that suits you.

## Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

- subject area
- location
- event type
- skill level

Members get at least 10% off

Visit rsc.li/cpd-training





Showcasing research from Dr. Karol Szczodrowski's and Prof. Sebastian Mahlik's laboratory, Institute of Experimental Physics, University of Gdańsk, Gdańsk, Poland.

Lanthanide ions (Eu  $^{3+}$ , Er  $^{3+}$ , Pr  $^{3+}$ ) as luminescence and charge carrier centers in Sr  $_2 TiO_4$ 

Materials containing optically active lanthanide ions (Ln) are widely studied for optoelectronic applications. To understand the effects responsible for excitation energy transfer between the host and activators as well as other processes determining optical properties, one should consider the location of Ln states *vs.* conduction and valence band of the host. We propose a new method to determine the position of Ln levels relative to the bands using photoconductivity excitation spectra combined with optical spectroscopy measurements. We believe that this method will be useful for broad class of optical materials.



## As featured in:



See K. Szczodrowski *et al., Dalton Trans.,* 2023, **52**, 4329.



