

Dynamics and Kinetics of Chemical Reactions Induced by Light

15 h, in spring 2023

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A continuation of the course “Fundamentals of chemical experiments using visible light”, we will focus on the study of the kinetics of photo-induced chemical reactions. We will try to find a balance between the theoretical description of them and the way to properly obtain the experimental observables needed. Special attention will be provided to the many experimental and analysis traps that lead to biased or wrong interpretations commonly found in the literature.

Short outline:

1. Revision of few concepts of chemical kinetics.
2. How does light trigger some chemical reactions?
3. Experimental techniques.
4. Physical models for chemical reactions.
5. Bimolecular reactions: coupling diffusion to chemical reactivity.
6. Complex media.
7. Examples of interesting reactions.

Please register via email (gangulo@ichf.edu.pl) two weeks before the start of the course.