

Course Title: **Chemistry and Spectroscopy of Reactive Intermediates**

Duration: 15 hours

Language of instruction: English

Date of first lecture: 26.02.2024

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Registration deadline: 15.02.2024

Syllabus

- Introduction to reactive intermediates and its importance in various field of science.
 - Intermediates in atmospheric chemistry/Astrochemistry/Biochemistry/Organic Chemistry/Combustion Sciences
- Carbon based and non-carbon-based intermediate species
 - Charged species: Carbonium ion, carbocation, anion, radical cation and radical anion
 - Neutral Species: Radical and other electron deficient intermediates
- Current detection technique of these species.
- Spectroscopy of Intermediates: Comparison study between intermediates (Electronic spectroscopy, Photo-electron spectroscopy, Infrared, NMR spectroscopy)