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in kemijsko tehnologijo

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VABILO NA PREDAVANJE
V OKVIRU DOKTORSKEGA ŠTUDIJA
KEMIJSKE ZNANOSTI / INVITATION TO
THE LECTURE WITHIN DOCTORAL
PROGRAMME IN CHEMICAL SCIENCES

Prof. Dr. Özdemir Doğan

*Middle East Technical University, Department of Chemistry
Ankara, Turkey*

z naslovom / title:

**Azomethine ylide chemistry and its applications
to asymmetric synthesis of organic compounds**

**v sredo, 22. 5. 2024 ob 15. uri /
on Wednesday, 22. 5. 2024 at 15.00**

**v predavalnici 1 v 1. nadstropju Fakultete za kemijo in
kemijsko tehnologijo, Večna pot 113 / in lecture room 1,
1st floor at the Faculty of Chemistry and Chemical
Technology, Večna pot 113**

Vljudno vabljeni! / Kindly invited!

Abstract:

1,3-Dipolar cycloaddition reaction is an important tool for the synthesis of variety of heterocyclic compounds. The main focus of this talk will be based on the 1,3-dipolar cycloaddition reactions of azomethine ylides and their use for the synthesis of pyrrolidines. Pyrrolidines are structurally important motifs for the synthetic organic chemists. There are many biologically active compounds in the nature having pyrrolidine units. In addition, active compounds of many drugs have pyrrolidine core in their structure. Besides a short history of the development of azomethine ylide chemistry, ways of forming azomethine ylides and their use in asymmetric synthesis of pyrrolidines will be presented. Related with the methods used for asymmetric azomethine ylide chemistry, auxiliary controlled reactions, chiral metal-catalysts and chiral organocatalysts will be discussed. Our contribution to this field especially the use of chiral metal catalysts developed in our group will be the main content of this talk. The last part of this talk will cover our recent studies for the asymmetric piperidine synthesis.

