



KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

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Sreda / Wednesday, 9.5.2018 ob / at 13:00

Velika predavalnica Kemijskega inštituta / Great Lecture Hall,
National Institute of Chemistry, Hajdrihova 19, Ljubljana

In search of visible light active TiO_2 based photocatalysts used in advanced oxidation processes (AOPs) for wastewater treatment

TiO_2 has been extensively studied and identified as the best photocatalyst for the decomposition of many organic pollutants present in wastewater due to its high photocatalytic activity, chemical stability and nontoxicity. The drawbacks of TiO_2 are: (i) wide band gap energy of 3.2 eV, (active under UV light irradiation) and (ii) fast electron-hole recombination. Effective approaches to resolve these drawbacks are modifications of TiO_2 , such as doping with other metal and non-metal elements or coupling with other semiconductors. Different strategies to modify TiO_2 based photocatalysts for the utilization of visible light and to increase their photocatalytic activity will be presented.



Vljudno vabljeni / Kindly invited