

## **Общоинститутски Семинар**

**Уважаеми колеги,**

**Институтът по органична химия с Център по фитохимия ви кани на заседание на общоинститутския семинар. Програма:**

**15:00 – 15:45** – лекция на **доц. д-р Иван Бъчваров**,  
Физически Факултет, СУ „Св. Климент Охридски“,  
ITMO University St. Petersburg, Russia

**Development of Ultrafast Lasers and Novel Spectroscopy Techniques at Sofia University: A Route towards New Medical and Material Science Applications**

**15:45 – 16:15** – **ДИСКУСИЯ**

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Since the discovery of lasers, they have been viewed as promising instruments for producing specific material states by selective manipulations that could not be realized by conventional incoherent addition of thermal or electronic energy to the material. Although the selective laser chemistry is still a dream, the selective control of material processing done by optimization of laser wavelength, pulse duration, pulse energy per unit area and laser average power is frequently used to move some contemporary technology beyond of its limits. Hence, the development of laser providing specific set of parameters has been frequently used to move some contemporary technology or measuring technique beyond of its limits. The photon-based methods with femtosecond timing to record molecular dynamics, which fully resolve the primary processes will be presented. A focus of the experimental work will be electron, proton and energy transfer, which have fundamental importance for the building blocks of life. These methods are extensions of the traditional, steady-state absorption and fluorescence spectroscopy in time-resolved mode. Transient-absorption and transient-fluorescence spectroscopy techniques will be presented.

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**Семинарът ще се състои на 31 май 2016 г. (вторник) от 15 ч. в зала „Акад. Богдан Куртев“ на ИОХ-ЦФ – I<sup>ви</sup> етаж, бл. 9, ул. Акад. Г. Бончев, София 1113**