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## Predavanje

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**Dr. Ciprian Iliescu**

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**Tema:**

**»Microfluidics in drug discovery«**

*The talk is focused on the recent research of the author in the field of microfluidics with main application on drug formulation, drug screening and drug delivery. The first part of the presentation ("Microfluidic nanofactory") approaches nanoparticles fabrication under continuous flow using hydrodynamic focusing. The polydispersity of nanoparticles used for gene therapy, for example, gives rise to non-repeatable data and poor efficiencies. The use of microfluidic platforms for chemical synthesis of nanoparticles confers excellent size-control, size distribution, composition and morphology. The second part of the presentation: "Fish and Chips" presents a microfluidic platform for drug screening using Zebra fish embryos as models. The perfusion based microfluidic chip presents a fluidic concentration gradient generator and eight fish tanks of 1.4 mm-diameter (and a depth of 1 mm). The proposed solution allowed high-resolution fluorescence imaging during fish development, revealing the development of internal organs. Last part of the presentation ("Transdermal drug delivery as a microfabrication process") is an interpretation of transdermal drug delivery from microfabrication perspectives.*

**Datum in čas:**

**torek, 23. oktobra 2012**  
**ob 10:15 uri**

**Predavanje bo v Diplomski sobi Fakultete za elektrotehniko v Ljubljani.**

***Vljudno vabljeni!***

