

Univerza  
v Ljubljani

Fakulteta *za kemijo*  
*in kemijsko tehnologijo*

p.p. 537, Večna pot 113  
1001 Ljubljana  
telefon: 01 479 80 00  
faks: 01 241 91 44  
dekanat@fkkt.uni-lj.si



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

**Dr. F. Javier del Campo García, Ikerbasque  
Research Professor**

*BCMmaterials, Basque Center for Materials,  
Applications and Nanostructures*

z naslovom / title:

**Miniaturization of electrochemical sensors and  
biosensors: fundamentals and device  
engineering**

**v sredo, 23. 3. 2022 ob 15. uri / on Wednesday, 23. 3.  
2022 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:**

This seminar aims to give a broad overview on the miniaturization of electrochemical sensors and biosensors. The talk will be structured in three parts. First, electrochemical sensors and biosensors will be described, highlighting their advantages but also their limitations.

The second part will cover fabrication techniques, from microfabrication to conventional processes and rapid prototyping methods.

Third, I will illustrate these techniques and devices with examples from my experience, mostly targeting health applications. Among these applications, I will cover the integration of sensors in microfluidic devices, the development of a sweat sensor based on electrochromic materials and, last, a new wireless device featuring electrochemiluminescent sensing.