

AVVISO DI SEMINARI

Il giorno 12/06/2024 alle ore 12:00
nell'Aula Seminari del Dipartimento di Scienze e
Tecnologie Chimiche



Prof. Neus Sabaté

Research Professor at Institute of Microelectronics of
Barcelona
(IMB-CNM-CSIC).

Terrà un seminario dal titolo:

**Self-powered electrochemical sensors as key components of sustainable
single use point-of-care devices**

Proponente: Prof. Alessandro Porchetta

Abstract:

The main goal of Sabate's research is to obtain single-use electrochemical power sources - biofuel cells and batteries - able to provide a double function power autonomy and sensing capabilities to the new generation of point-of-care devices in order to minimize its environmental impact and affordability.¹⁻³ The talk will show examples of this new generation of disposable self-powered approaches and discuss their opportunities and challenges.

1. Sailapu SK, Liébana S, Merino-Jimenez I, Esquivel JP, Sabaté N. Towards a REASSURED reality: A less-is-more electronic design strategy for self-powered glucose test. *Biosensors and Bioelectronics*. 2024 Jan 1;243:115708.
2. Galyamin D, Liébana S, Esquivel JP, Sabaté N. Immuno-battery: A single use self-powered immunosensor for REASSURED diagnostics. *Biosensors and Bioelectronics*. 2023 Jan 15;220:114868.
3. Merino-Jimenez I, Llorella A, Navarro-Segarra M, Agramunt J, Grandas A, Minteer SD, Esquivel JP, Sabaté N. A Self-Powered Minimalistic Glucometer: A Lean Approach to Sustainable Single-Use Point-of-Care Devices. *Advanced Materials Technologies*. 2021 May;6(5):2001051.