



Lugar:

Escuela de Ingeniería de Bilbao

Edificio II-i
Sala de Juntas Ed. II-i
15 de diciembre de 2025

9:30 h.

Acceso gratuito. Aforo limitado. Se requiere registro enviando un correo electrónico a:

soc4sensing@ehu.eus

SOCE

ikerlan

GAIA
CLUSTER ICT4

BMH

Workshop on Graphene

El día **15 de diciembre de 2025** se celebrará la jornada "Workshop of Graphene" de la mano de la "fab" de grafeno de Euskadi **GRAPHENEA** y de investigadores de **Boise State University** en la Escuela de Ingeniería de Bilbao.

Orden del día:

9.30 -9.35: **Presentación de la Jornada.**

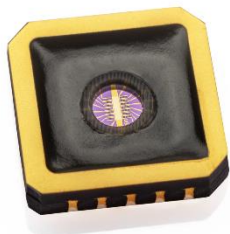
9.35-10.30: **Aplicaciones de los "chips" de grafeno.** Se presentarán casos de uso y aplicaciones para el sector médico e industrial.

10.30-11.30: **¿Cómo diseñar tu "chip" de grafeno?** De la mano de los especialistas de Graphenea, y a través de un ejemplo práctico, conoceremos el proceso de diseño de un "chip" de grafeno utilizando herramientas Open-Source.

*NOTA: La Cátedra SoC₄sensing ofrecerá a través de **un concurso de ideas** dirigido al alumnado, la financiación de "chips" de grafeno desarrollados.*

11.30 -12.00: Pausa Café

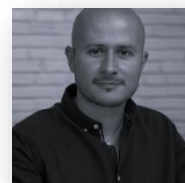
12.00-14.00: **Grafeno y nuevos materiales emergentes 2D. Experimentos con Grafeno (Live!).** Los investigadores de **Boise State University** presentarán las últimas investigaciones en materiales emergentes para sensores avanzados y realizarán diversos ensayos demostradores en los que se utilizará entre otros materiales, espuma de grafeno y tintas de nueva generación.



Prof. Dave Estrada David received his Master of Science in Electrical Engineering from UIUC in 2009, and his Doctor of Philosophy in Electrical Engineering at UIUC in 2013. David then joined Prof. Rashid Bashir's Laboratory of Integrated Bio Medical Micro/Nanotechnology Applications as a Visiting Postdoctoral Researcher before moving to the Materials Science and Engineering Department at Boise State University. His work has been recognized with several awards, including the Gregory Stillman, John Bardeen, SHPE Innovator of the Year awards. He is also a recipient of NSF CAREER from DMR Biomaterials and the Presidential Early Career Award for Scientists and Engineers (PECASE) from NASA. His research interests are in the areas of 2D materials and their applications in energy, healthcare, and the environment.

Dr. Juan Manuel Gómez works in the Process Integration and Yield department at Graphenea, focusing on manufacturing process optimization, yield improvement, and the development of new process flows for graphene devices. He coordinates cross-functional teams, implements process control metrics, and manages integration across the full fabrication line to ensure robust and scalable production.

Previously, he worked as a Process Engineer at Graphenea, where I designed and produced graphene devices for biosensing, Hall sensors, gas sensing, and humidity sensing applications. He hold a Ph.D from CIC nanoGUNE (Basque Country, Spain), where his research focused on spin transport phenomena in magnetic insulator/heavy metal interfaces.



La Cátedra SoC₄sensing es una iniciativa público-privada cuyo objetivo principal es impulsar el diseño de "Chips" en el País Vasco para la Industria, Energía y Aeroespacio a través de la formación, investigación y difusión de la microelectrónica.

Workshop on Graphene

2025eko abenduaren 15ean "Workshop of Graphene" jardunaldia ospatuko da Euskadiko **GRAPHENEA** grafeno-fab eta Bilboko Ingeniaritza Eskolako **Boise State Universityko** ikertzaileen eskutik.

Gai-zerrenda:

9.30-9.35: **Jardunaldiaren aurkezpena.**

9.35-10.30: **Grafeno-txipen aplikazioak.** Medikuntza- eta industria-sektorerako erabilerak eta aplikazioak aurkeztuko dira.

10.30-11.30: **Nola diseinatu zure grafeno-txipa?** Gapheneako espezialisten eskutik, eta adibide praktiko baten bidez, grafenozko "txip" baten diseinu-prozesua ezagutuko dugu Open-Source tresnak erabiliz.

OHARRA: SoC4sensing Katedrak garatutako grafeno-txipak finantzatuko ditu ikasleentzako ideia-lehiaketa baten bidez.

11.30 -12.00: Atsedenaldia.

12.00-14.00: **Grafenoa eta 2D material berriak. Esperimentuak Grafenoarekin (Live!).** Boise State Universityko ikertzaileek sentsoare aurreratuentzako material emergenteetan egindako azken ikerketak aurkeztuko dituzte, eta saiakuntza frogatzaileak egingo dituzte, besteak beste, materialak, grafeno-aparra eta belaunaldi berriko tintak erabiliz.

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SoC4sensing Katedra ekimen publiko-pribatua da, eta bere helburu nagusia Euskadin Industria, Energia eta Aeroespaziorako "Txipen" diseinua bultzatzea da, mikroelektronikaren prestakuntzaren, ikerketaren eta hedapenaren bidez.