

NMBP Activities at Tyndall National Institute

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EU Brokerage Event on Kets in Horizon 2020

Strasbourg, 17th October 2017

Who we are – Tyndall National Institute

- A leading [European Research Centre](#) in Integrated ICT (Information and Communications Technology) hardware and systems
- Established in 2004, created from the National Microelectronics Research Centre (NMRC) – [Est. 1982](#)
- UCC/DJEI established
- Researchers from UCC, CIT & Industry

- Host to    

- Our Expertise:
 - Smart Sensors & Systems
 - Optical Communication Systems
 - Mixed Signal & Analog Circuit Design
 - Microelectronic & Photonic Integration
 - Semiconductor Wafer Fabrication
 - Nano Materials & Device Processing



Our project expertise (selected)

- **54 H2020 projects in total**
- **MOEEBIUS (2015-19):** Modelling Optimization of Energy Efficiency in Buildings for Urban Sustainability
- **Nanorestart (2015-18):** NANOMaterials for the REStoration of works of ART
- **CHEOPS (2016-19):** Production technology to achieve low Cost and Highly Efficient phOtovoltaic Perovskite Solar cells
- **HISENTS (2016-19):** High level Integrated SEnsor for NanoToxicity Screening
- **COMPOSITION (2016-20):** Ecosystem for COllaborative Manufacturing PrOceSses – Intra- and Interfactory Integration and AutomaTION
- **GaNonCMOS (2017-2020):** GaN densily integrated with Si-CMOS for reliable, cost effective high frequency power delivery systems
- **RECOSt (2017-21):** Development of near zero energy building renovation

Targeted topics

CE-SPIRE-02-2018: Processing of material feedstock using non-conventional energy sources

CE-NMBP-24-2018: Catalytic transformation of hydrocarbons

CE-NMBP-25-2019: Photocatalytic synthesis (**Coordinator?**)

LC-NMBP-27-2019: Strengthening EU materials technologies for non-automotive battery storage (**Coordinator?**)

LC-NMBP-30-2018: Materials for future highly performant electrified vehicle Batteries

DT-NMBP-12-2019: Sustainable Nano-Fabrication

LC-NMBP-32-2019: Smart materials, systems and structures for energy Harvesting (**Coordinator?**)

DT-FoF-06-2019: Refurbishment and re-manufacturing of large industrial equipment

LC-EeB-02-2018: Building information modelling adapted to efficient renovation

LC-EeB-06-2018-20: ICT enabled, sustainable and affordable residential building construction, design to end of life

DT-SPIRE-06-2019: Digital technologies for improved performance in cognitive production plants

Contact details

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