Instrumentation

For detailed characterization of materials

Renishaw micro–Raman equipped with Linkam THMS600PS Pressure System.

- Temperature range:
  -196°C to 600 °C at 0bar
  -125°C to 500°C at 14bar
- Maximum pressure 14bar

UV –Vis with integrating sphere

UV –Vis with sipping pump

AFM

Contact Angle

Direct access to IR – SEM - NMR
For perovskite solar cells fabrication

- Thermal evaporator
- Glove box
- Spin coater
- Vacuum line under Argon atmosphere for solution- and solid-state-synthesis and CVD system (vacuum / inert gas atmosphere)
- Dry box
Instrumentation

For Dye Sensitized Solar Cells

- Sonicator
- Sealing device
- Screen printer
- Oven
- Viscometer
- Anodization cell
Instrumentation

For solar cells’ characterization

2 solar simulators (AM 1.5 G)

2 electrochemical stations (Autolab)

I-V, IPCE
CV, LSV
EIS, IMPS, IMVS

photoelectrochemistry unit
Instrumentation

For stability tests (materials and solar cells)

Thermal stressing station

Faraday cage

Light soaking ageing station
Instrumentation: Photocatalytic Reactors

UV or Vis or solar irradiation

for CO₂ conversion

water purification device, EP2409954 (A1)

for gas pollutants (NOₓ, VOCs)

for water pollutants degradation (evaluation of innovative photocatalysts)