

# GRAPHENE DAY

## University of Trieste

Aula Magna, Building M

Via Giorgieri, 10, Trieste (Italy)

4<sup>th</sup> November, 2019

9:00 – 9:15 Opening ceremony

### **9:30 – 11:00 SESSION I: Chemistry** (Chairs: Maurizio Prato, Alberto Bianco)

9:30 – 10:00 Alberto Bianco (CNRS, France) – Controlled chemical functionalization of graphene materials

10:00 – 10:30 Cristina Africh (CNR, Italy) – Graphene and N-doped graphene on Ni: growth, structure and chemical activity

10:30 – 11:00 Alessandro Baraldi (University of Trieste, Italy) – The enticing interaction of graphene with atoms, molecules and surfaces

11:00 – 11:30 Coffee break

### **11:30 – 12:45 SESSION II: Environmental safety** (Chairs: Mauro Tretiach, Fabio Candotto Carniel)

11:30 – 12:00 Josè Maria Navas (INIA, Spain) – Mechanisms of toxic action of Graphene related Materials on fish cell lines and modulation of the toxicity of environmental pollutants

12:00 – 12:30 Fabio Candotto Carniel (University of Trieste, Italy) – Graphene related materials in aeroterrestrial environments: effects on the sexual reproduction of seed plants

12:30 – 12:45 Federica Cavion (University of Trieste, Italy) – Ecotoxicological effects of graphene oxide on *Artemia franciscana*

12:45 – 14:45 Lunch

### **14:45 – 16:15 SESSION III: Applications** (Chairs: Maurizio Prato, Alberto Bianco)

14:45 – 15:15 Vittorio Pellegrini (IIT, Italy) – Graphene : from lab to market

15:15 – 15:45 Laura Ballerini (SISSA, Italy) – Graphene tuning of neuronal networks: interfacing synapses at the nanoscale

15:45 – 16:15 Manuela Melucci (CNR, Italy) – Graphene oxide enhanced membranes and sorbents for water treatment

16:15 – 16:45 Coffee Break

**16:45 – 18:00 SESSION IV: Human safety** (Chairs: Aurelia Tubaro, Marco Pelin)

16:45 – 17:15 Mario Duran Prado (University of Castilla-La Mancha, Spain) – Graphene related materias: impact on cell metabolism

17:15 – 17:45 Marco Pelin (University of Trieste, Italy) – Safety assessment of graphene-related materials at the skin level

17:45 – 18:00 Guotao Peng (Karolinska Institute, Sweden) – Graphene oxide in the gut: interactions with the aryl hydrocarbon receptor (AhR) using in vitro and in vivo models

18:00 – 18:15 Closing remarks