



PhDIIn Day

**Friday, November 10, 2017
at 9.00**

**Aula delle Lauree di Ingegneria
Università di Salerno**

***A unique taste of state-of-the-art-research
at the Department of Industrial Engineering
[by its Ph.D. students]***

9:00 Opening session

9:30 Flash presentations by the PhD students (XXXII Cycle)

10:50 Poster session & Coffee break

11:30 Flash presentations by the PhD students (XXXI Cycle)

12:50 Poster session

13:30 Closing remarks

Dottorato di Ricerca in Ingegneria industriale



9:00 Opening session and introduction of the Ph.D. course in Industrial Engineering

9:30 I Flash Presentation Session

- 9:30** *Advanced metering infrastructure communication protocol in accordance with the IoT paradigm (Ferro M.)*
- 9:35** *CyberSecurity and IoT: new challenging perspectives (Pascale F.)*
- 9:40** *Traveling wave fractal applicators for microwave heating (Moretti D. G.)*
- 9:45** *Control oriented modeling of exhaust aftertreatment systems for automotive applications (D'Aniello F.)*
- 9:50** *Optimized control of a domestic refrigerator (Del Duca M. G.)*
- 9:55** *Industrial Ecology application to wine sector: state of art and researches in progress (Ferrara C.)*
- 10:00** *Development of an advanced algorithm for online Solid Oxide Fuel Cells monitoring and diagnosis, based on dynamic and circuital models (Gallo M.)*
- 10:05** *Strategies for emissions reduction and optimal performances in Diesel engines: experimental testing of a low temperature regenerating catalytic DPF (Rossomando B.)*
- 10:10** *Real-time estimation of the tribological characteristics in the vehicular systems and their applications in vehicles control purposes (Sharifzadeh M.)*
- 10:15** *Electrical Energy Storage Systems (Tiano F. A.)*
- 10:20** *Development of active flexible packaging for food preservation (Apicella A.)*
- 10:25** *Study, fabrication and characterization of materials for solid oxide fuel cells application (Coppola N.)*
- 10:30** *Design of an advanced rapid heating/cooling system for micro-injection moulding and its application to control the final morphology of a semicrystalline polymer (De Meo A.)*
- 10:35** *Drying of vegetables: improvement of quality and process modeling (Önal B.)*
- 10:40** *Utilization of high hydrostatic pressure process for the production of starch based hydrogels for innovative applications (Wachtendorff D. L.)*

10:50 I Poster Session & Coffee Break

11:30 II Flash Presentation Session

- 11:30** *Patient specific device design method validation: "in vivo" test (Cataldo E.)*
- 11:35** *Innovative ADAS Solutions to Improve Vehicle Efficiency and Driving Performance (D'Amato A.)*
- 11:40** *New Maintenance Methodologies for Sustainable Manufacturing (Franciosi C.)*
- 11:45** *Integrated Open-source Robotic Framework for NAS10-UNISA (Unmanned Airship) (Rivera Z.)*
- 11:50** *Process optimization for the energetic valorization of microalgae (Battipaglia G.)*
- 11:55** *Multi-functional self-healing materials for structural applications (Calabrese E.)*
- 12:00** *Use of PEF for extraction improvement of valuable compounds from food residues, by-products and microalgal biomass (Carullo D.)*
- 12:05** *Relevant phenomena and process parameters in granulation for manufacturing of pharmaceutical, nutraceutical and zootechnical products (De Simone V.)*
- 12:10** *Production of pharmaceutical and nutraceutical formulations for bioavailability improvement using Supercritical Assisted Atomization (Di Capua A.)*
- 12:15** *Liposomes production using a supercritical fluid assisted process (Trucillo P.)*
- 12:20** *Virtual sensors for two-wheeled vehicles control (Carratù M.)*
- 12:25** *3-D FEM modeling and characterization of RFP-CMUT arrays (La Mura M.)*

12:30 II Poster Session

13:30 Closing remarks