Welcome ceremony for PhD students by the UPC Doctoral School 2019-2020 academic year
Announcement of the winners of the 2019 Special Doctoral Awards

Field: Architecture, Urbanism and Construction


Álvaro Rodrigo Cuéllar Jaramillo, doctoral thesis entitled El bosque habitable. La experiencia de construir ciudad paisaje en Finlandia. Doctoral programme Urbanism, PhD supervisor Prof. Joaquim Sabaté Bel.


Field: Civil Engineering


Albert Carles Brangari, doctoral thesis entitled Microbial and geochemical dynamics in soils and their impact on the hydraulic properties: From laboratory experiments to model development. Doctoral programme Earthquake Engineering and Structural Dynamics, PhD supervisors Prof. Daniel Fernández García and Prof. Xavier Sánchez Vila.

Claudia Rivetti, doctoral thesis entitled The use of integrative approaches to characterize new mechanisms of toxicity of pollutants in the aquatic environment. Doctoral programme Marine Sciences, PhD supervisor Prof. Carlos Barata Martí.

Laura Scheiber Páges, doctoral thesis entitled Support tools for groundwater management in the proximity of a mine site. Doctoral programme Geotechnical Engineering, PhD supervisors Prof. Carlos Ayora Ibáñez and Prof. Enric Vázquez Suñé.

Alessandro Solimeno, doctoral thesis entitled Numerical Modelling of Microalgae Systems for Wastewater Treatment. Doctoral programme Environmental Engineering, PhD supervisor Prof. Joan García Serrano.
Field: ICT Engineering


Sergio Gorreta Mariné, doctoral thesis entitled Dielectric charge control in contactless capacitive MEMS. Doctoral programme Electronic Engineering, PhD supervisors Prof. Manuel M. Domínguez Pumar and Prof. Joan Pons Nin.


Sandra Lagén Morano, doctoral thesis entitled Coordination Strategies for Interference Management in MIMO Dense Cellular Networks. Doctoral programme Signal Theory and Communications, PhD supervisors Prof. Adrian Agustín de Dios and Prof. Josep Vidal Manzano.


Field: Industrial Engineering

Víctoria Beltran Sanchidrián, doctoral thesis entitled Vibrational spectroscopies study of Pinus resin in materials from cultural heritage objects. Doctoral programme Polymers and Biopolymers, PhD supervisors Prof. Salvador Buti Papio and Prof. Nativitat Salvadó Cabré.

Francesca Capelli, doctoral thesis entitled Development of high-capacity substation connectors compatible with HTLS technology. Doctoral programme Electrical Engineering, PhD supervisor Prof. Jordi Riba Ruiz.

Anna Diez Escudero, doctoral thesis entitled Tuning the biological performance of calcium phosphates through microstructural and chemical modifications. Doctoral programme Materials Science and Engineering, PhD supervisors Prof. Montserrat Español Pons and Prof. Maria Pau Ginebra Molins.

Edmundo Guerra Paradas, doctoral thesis entitled Monocular SLAM: Data association and sensing through a human-assisted uncalibrated visual system. Doctoral programme Automatic Control, Robotics and Vision, PhD supervisors Prof. Antoni Grau Salides and Prof. Rodrigo Francisco Munguía Alcalá.

Elyas Rakhshani, doctoral thesis entitled Analysis and Control of Multi-area HVDC Interconnected Power Systems by using Virtual Inertia. Doctoral programme Electrical Engineering, PhD supervisors Prof. Álvaro Luna Alloza and Prof. Pedro Rodríguez Cortés.
Mònica Reig i Amat, doctoral thesis entitled Integration of electrically driven membrane separation processes for water treatment and resources recovery. Doctoral programme Chemical Process Engineering, PhD supervisors Prof. Jose Luis Cortina Pallas and Prof. Oriol Gibert Agulló.

David Valentin Ruiz, doctoral thesis entitled Influence of the boundary conditions on the dynamic behavior of large hydraulic machines. Doctoral programme Mechanical, Fluids and Aerospace Engineering, PhD supervisors Prof. Eduard Egusquiza Estevez and Prof. María del Carmen Valero Ferrando.

Alexander Vallmitjana Lees, doctoral thesis entitled Multiscale Image Analysis of Calcium Dynamics in Cardiac Myocytes. Doctoral programme Biomedical Engineering, PhD supervisor Prof. Raúl Benítez Iglesias.


Field: Sciences


Azahara de la Torre Pedraza, doctoral thesis entitled On the fractional Yamabe problem with isolated singularities and related issues. Doctoral programme Applied Mathematics, PhD supervisor Prof. María del Mar González Nogueras.


Alejandro Torres Sánchez, doctoral thesis entitled A Theoretical and Computational Study of the Mechanics of Biomembranes at Multiple Scales. Doctoral programme Applied Mathematics, PhD supervisor Prof. Marino Arroyo Balagué.

Achim Woessner, doctoral thesis entitled Exploring flatland nano-optics with graphene plasmons. Doctoral programme Photonics, PhD supervisor Prof. Frank Koppens.