

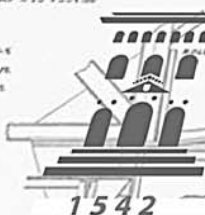
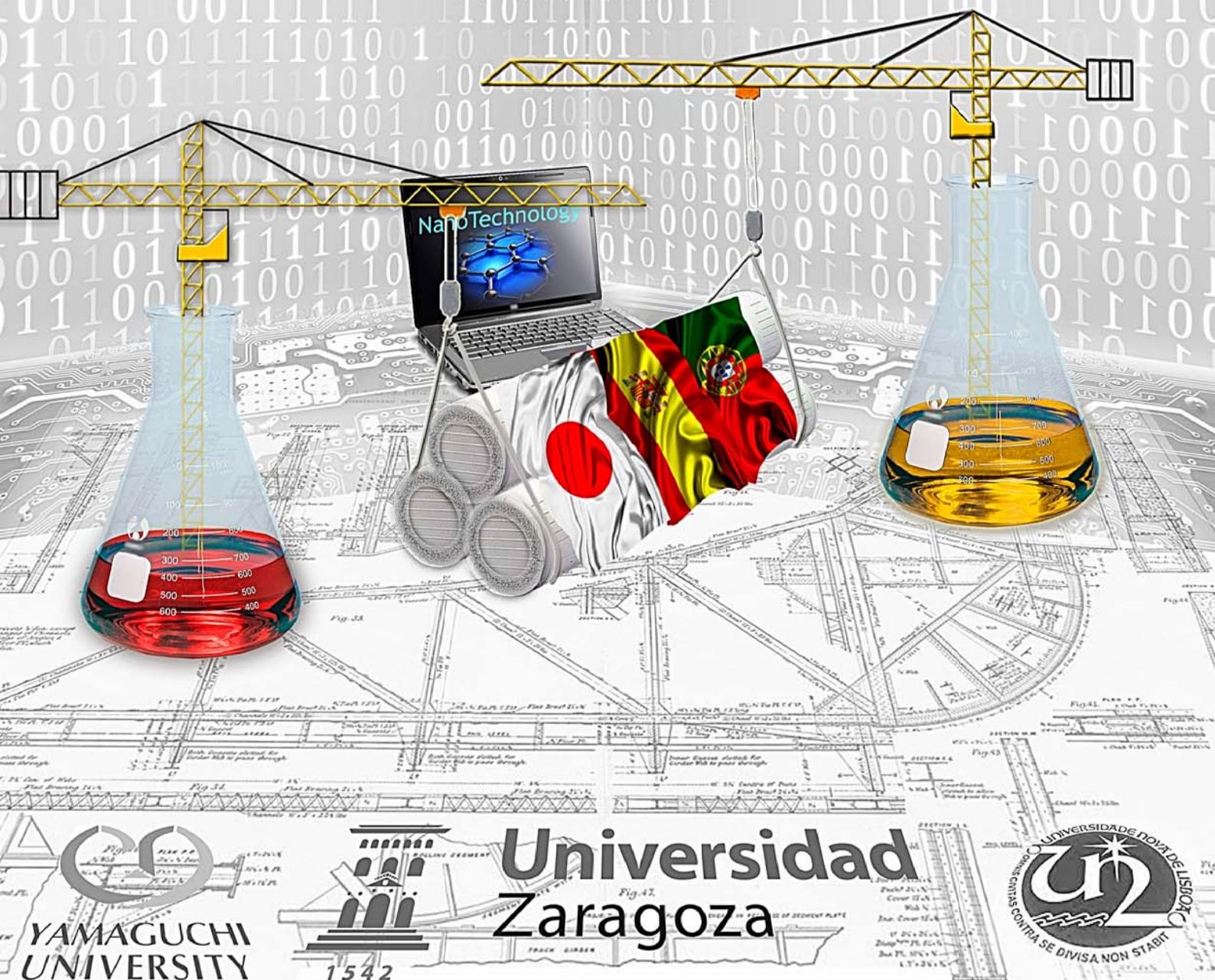
# 4th Congress

University Nova de Lisboa-University of Yamaguchi-University of Zaragoza

## Engineering at the service of our society: from nanotechnology to megastructures

Zaragoza, October 19-20<sup>th</sup>, 2017

# Scientific Program



# Universidad Zaragoza



Organizers:



Sponsored by:



## Oral presentations

Thursday 19th

### CHEMICAL ENGINEERING

- 9.15 h. Opening ceremony- Prof. Válter LUCIO -Prof. Ignacio GARCES
- 9.30: Dr. Izumi KUMAKIRI  
"H<sub>2</sub> separation with micro-porous membranes"
- 10.15: Dr. Luísa NEVES  
"Design of Mixed Matrix Membranes with Metal-Organic Frameworks Supporting Ionic Liquids for CO<sub>2</sub> Capture"

11 h: Coffee Break and posters

- 11.30: Prof. Carlos TELLEZ  
"Trends in membranes with MOFs: Mixed matrix membranes and hollow fibers"
- 12.15: Dr. Carla PORTUGAL  
"Design of magnetic-responsive membranes for bio-applications"
- 13.00: Dr. Victor SEBASTIAN  
"Production of Drug-Polymer nanoparticles using membrane emulsification/nanoprecipitation"

### ENVIRONMENTAL ENGINEERING

- 16.00: Prof. Tsuyoshi IMAI  
"Screening and Characteristics of Extremely Salt Tolerant Hydrogen Producing Bacteria"
- 16.45: Prof. Vanessa PEREIRA  
"Development of photocatalytic membranes for water treatment applications"
- 17.30: Eng. Silvia Escuadra  
"Developments in water quality and treatment"

18.15-19.30: Poster session

Friday 20<sup>th</sup>

#### CIVIL ENGINEERING

- 10.00: Prof. Válder Lucio  
"Strengthening techniques for reinforced concrete flat slab structures"
- 10.45: Prof. Isamu YOSHITAKE  
"Concrete durability and strengthening techniques"
  
- 11.30: coffee break
  
- 12.15: Prof. Javier DOMINGUEZ  
"The beauty of bridges as the splendor of truth?"
- 13.00: Prof. Jose-Maria CASTEJON  
"Influence of bridge design in contemporary architecture (and vice versa)"

#### COMPUTER ENGINEERING

- 16.00: Prof. Toshikazu SAMURA  
"Computer simulation study of theta rhythmic activities in the hippocampus"
- 16.45: Prof. Javier NOGUERAS  
"Research in ICT at I3A"
- 17.15: Prof. Esther PUEYO  
"Understanding heart function through combined clinical, experimental and computational research"
- 18.00: Prof. Jose-Angel BAÑARES  
"Model-Driven Development of Cloud Native Streaming Applications"

**POSTER SESSION (Thursday 18.15-19.30 h)**

1. Takuya ASANO  
"Enhancement of selectivity for H<sub>2</sub> over O<sub>2</sub> for carbon molecular sieve membranes by pyrolytic carbon deposition"
2. Kokoro MIYASHO  
"Preparation of surfactant-polymer composite particles for peptide delivery"
3. Syusuke YAMASAKI  
"Production of carotenoids from food waste using marine microorganisms"
4. Hana WATARI  
"Analysis of the damage level and optimization of disaster volunteer activity in Kumamoto earthquake"
5. Hiroki KATSUBE  
"Analysis of Neural Activity in Hippocampus and Motor Cortex during Forelimb Movement"
6. Mariella POLINO  
"Development of a hierarchical structure on ion-exchange membranes for protein crystallization"
7. Miriam Tovar  
"Preliminary study of gas/vapour separation in zeolite membranes towards their use in membrane reactors"
8. Raquel RASO  
"Experiments of methanol production in zeolite membrane reactor"
9. Patricia UGARTE  
"Performance of wastewater treatment lab-scale membrane bioreactor designed with low cost ceramic membranes"
10. Carlos ECHAIDE  
"MOF nanoparticles for thin film nanocomposite organic solvent nanofiltration membranes"
11. Lorena PASETA  
"Membranes for nanofiltration by application of the Langmuir-Schaefer technique"
12. Beatriz ZORNOZA  
"Mixed Matrix Membranes containing MOFs for pre-combustion CO<sub>2</sub> capture"
13. Andres SANZ  
"A Palladium membrane reactor for dry reforming of methane with in-situ catalyst regeneration"
14. Airama ALBISA  
"From emulsion droplets to solidified PLGA-PEG and PLC particles: The effect of post emulsification step in combination with membrane emulsification"
15. Javier ARAGON  
"Polymeric electrospun membrane for tissue engineering applications"
16. Spyros KONTAXIS  
"Assessment of Quadratic Nonlinear Cardiorespiratory Couplings During Tilt Table Test by Means of Real Wavelet Biphase"
17. Rosa HUERTAS  
"Development of hybrid polysaccharide membranes for gas dehumidification"