

20th November

13:30	PRE-CONGRESS ACTIVITY: Visit to REPSOL Technology Centre. (Buses will depart from Plaza Zocodover).
19:00	Reception of participants - Sala de Música
19:45	Opening ceremony - Iglesia San Pedro Mártir <ul style="list-style-type: none"> • Julián Garde López-Brea, Vice-Chancellor of Research and Scientific Policy. • Fátima Guadamillas Gómez, Vice-Chancellor of Teaching and International Relations. • José Manuel Velasco Retamosa, General Director of Universities, Research and Innovation (Junta de Comunidades de Castilla-La Mancha, JCCM). • César Gallo, Vice-president of the REPSOL Foundation • Francisco J. Sáez-Martínez, President of the E2KW Organizing Committee.
20:00	“The Energy Challenge” by D. César Gallo, Vice-president of the REPSOL Foundation - Iglesia San Pedro Mártir
20:30	Piano concert - Iglesia San Pedro Mártir

21st November

8:30 Registration of participants “Sala de Música”

9:00-10:00 PLENARY LECTURE (Aula Magna): “Climate as an environmental problem”, Denny Ellerman (European International University). Introduced by Francisco J. Sáez-Martínez, Coordinator of CYTEMA.

-Parallel Sessions-

10:00 - 11:30 Aula Magna	<p>Parallel Session - Eco-Innovation / Chair: <i>Marival Segarra (UPV)</i></p> <ul style="list-style-type: none"> • “From end-of-pipe to cleaner technologies: Eco-innovation by small and medium-sized firms in Europe”. <i>Triguero, A.; Moreno-Mondéjar, L. and Davia, M.A.</i> • “Environmental and employment responsible innovation: Empirical evidence for Spanish firms”. <i>Triguero, A.; Cuerva, M.C. and Álvarez, C.</i> • “Eco-innovation in climate friendly technology: An analysis through patent data”. <i>Duran-Romero, G. and Urraca-Ruiz, A.</i> • “Identifying core environmental technologies through patent analysis”. <i>Chulhyun, K. and Moon-soo, K.</i>
10:00 - 11:30 Sala de Óculos	<p>Parallel Session - Wind Energy / Chair: <i>Gilles Lefevbre (UPEC)</i></p> <ul style="list-style-type: none"> • “Wind power forecast error statistics in Spanish power system”. <i>Martín, S.; Honrubia, A.; Cañas, M.; Gómez, E. and Guerrero, V.</i> • “Proposal for analytical solving method to simulate DFIG wind turbine models”. <i>Cañas, M.; Martín, S.; Honrubia, A. and Gómez, E.</i>

	<ul style="list-style-type: none"> • “Study of wind turbine structures by the wavelet transform”. <i>Ruiz, R.; García, F.P. and Dimlaye, V.</i> • “Experimental platform design to monitor defects in wind turbine blades based on ultrasound technology”. <i>Gómez, C.; García F.P. and Trapero, J.R.</i>
10:00 - 11:30 Teatrillo	<p>Parallel Session - Storage Systems and Energy Management / Chair: Guillaume Da (UPEC)</p> <ul style="list-style-type: none"> • “CISTEM: Cogeneration with PEM fuel cells. Role of UCLM”. <i>Lobato, J.; Cañizares, P.; Mateo, S.; Zamora, H. and Rodrigo, M.A.</i> • “Concentration photovoltaic systems with hybrid energy storage based on ultracapacitors and batteries”. <i>de la Cruz, C.; Baptista, M.; García, A.; del Toro, X. and Roncero-Sánchez, P.</i> • “Reducing the energy consumption in buildings by incorporating microencapsulated PCMS in rigid polyurethane foams”. <i>Talavera, B.; Serrano, A.; Borreguero, A. M.; Garrido, I.; Rodríguez, J. F. and Carmona, M.</i> • “Thermal characterization of GYPSUM composites by using differential scanning calorimetry”. <i>Borreguero, A.M.; Garrido, I.; Valverde, J.L.; Rodríguez, J.F. and Carmona, M.</i>

11:30-12:00 Coffee Break.

-Parallel Sessions-

12:00 - 13:30 Aula Magna	<p>Parallel Session - Tourism and Environment/ Chair: José L. Sánchez Ollero (UMA)</p> <ul style="list-style-type: none"> • "Networking biosphere reserves through corridors on the basis of the millennium ecosystem assessment". <i>Laguna, C.; Muñoz, E.; Gosálvez, R.U.; Falomir, J.P.; Florín M. and Chicote, A.</i> • “Sustainability of nature: the power of the type of visitors”. <i>Cordente-Rodríguez, M. and Mondéjar-Jiménez, J.A.</i> • “Tourism and environment: attitude toward responsible tourism”. <i>Lorenzo-Romero, C. and Del Chiappa, G.</i> • “Radical innovation in tourism clusters: the role of knowledge strategy and external relations”. <i>Elche, D.; Martínez, A. and García, P.</i>
12:00 - 13:30 Sala de Óculos	<p>Parallel Session - Soil Contamination I / Chair: Jorge Loredó (UNIOVI)</p> <ul style="list-style-type: none"> • “Soil pollution related to the mercury mining legacy of Asturias (Northern Spain)”. <i>Ordóñez, A.; Álvarez, R. and Loredó, J.</i> • "Lead in sheep exposed to mining pollution: implications for animal and public health". <i>Pareja-Carrera, J.; Rodríguez-Estival, J. and Mateo, R.</i> • “Soil pollution related to historic Pb-Zn-Ag mining in south Castilla-La Mancha region (south-central Spain)”. <i>Esbrí, J.M.; Higuera, P.; López-Berdonces, M.A.; García-Noguero, E.M.; Martínez-Coronado, A.; Fernández-Calderón, S.; González-Corrochano, B. and Casillas, M.</i>

	<ul style="list-style-type: none"> • “Insights into mercury species transformations in terrestrial organisms exposed to mercury polluted soils”. <i>Rodríguez, C.; Jiménez, M.; Guzmán, F.J.; Rodríguez, R.C. and Berzas, J.J.</i>
12:00 - 13:30 Teatrillo	<p>Parallel Session - Sustainability and water / Chair: Ahmed Murad (UAEU)</p> <ul style="list-style-type: none"> • “Groundwater quality deterioration in AL HAYER Area (SE UNITED ARAB EMIRATES)”. <i>Murad, A.; Werner, P.; Hussein, S. and Gómez-Alday, J.J.</i> • “Microbial fuel cells (MFCs) for wastewater treatment and energy production. A first economic assessment”. <i>Trapero, J.R.; González, A.; Fernández, F.J.; Horcajada, L.; Cañizares, P.; Rodrigo, M.A. and Lobato, J.</i> • “Ground water abstraction with minimum cost. Application to sprinkler irrigation systems with corn crop in Spain”. <i>Carrión F.; Tarjuelo J.M.; Carrión P. and Moreno M.A.</i> • “Social representation of water problem among college students of Castilla-La Mancha”. <i>Romero, S. and Talayero, F.</i> • “Use of isotope discrimination techniques for assessing Nitrogen use efficiency and sustainability of grapefruit crops in medium-long term”. <i>Romero-Trigueros, C.; Nortes, P.A.; Alarcón, J.J.; Querejeta, J.I. and Nicolás, E.</i>

13:30-15:30 Lunch.

15:30-16:30 PLENARY LECTURE (Aula Magna): “Satellite observations of water-cycle variables for renewable-energy management”, Ziad Haddad (NASA – UCLA Joint Center). Introduced by Francisco J. Tapiador, Dean of the Faculty of Environmental Sciences and Biochemistry.

-Parallel Sessions-

16:45 - 18:30 Aula Magna	<p>Parallel Session - Economics of Energy and the Environment / Chair: Óscar Dejuán (UCLM)</p> <ul style="list-style-type: none"> • “The relationship between environmental dynamism, technological posture and CSR as a technological innovation performance determinant”. <i>González, M.I.; Donate, M.J. and Guadamillas, F.</i> • "Mapping energy efficiency barriers". <i>Martín, I.; Florence, A. and González, E.</i> • "An Ecocost-Value Ratio (EVR) approach to the design of a Product-Service System for environmentally sustainable residential heating energy use". <i>Scheepens, A.E.; Flipsen, S.F.J.; Vogiatzakis, P. and Brezet, J.C.</i> • "Oil prices and stagflation: Who is free from stagflation?" <i>Dejuán, Ó. and Oyediran, S.</i> • “Pollution haven hypothesis in emissions embodied in world trade”. <i>López, L.A.; Arce, G. and Kronenberg, T.</i> • “Carbon footprint of the nuclear energy using an IO-LCA”. <i>Zafrilla, J.E., Cadarso, M.A., Monsalve, F., Dejuán, O., de la Rúa, C.</i>
16:45 - 18:30 Sala de Óculos	<p>Parallel Session - Soil Contamination II / Chair: Pablo Higuera (UCLM)</p> <ul style="list-style-type: none"> • “Removal of mercury from natural waters using microcapsules containing TOMAC and DEHPA extractant agents”. <i>Alcázar, A.; De Lucas, A.; Rodríguez, J.F. and Carmona, M.</i>

	<ul style="list-style-type: none"> • "Mercury pollution around a CHLOR-ALKALI plant in Spain: A biogeochemical approach". <i>Esbri, J.M.; Lopez-Berdonces, M.A.; Díez, S.; Martínez-Coronado, A.; Fernández-Calderón, S. and Higuera, P.</i> • "12 Year Lysimeter experience on crop growing in Almadén soil". <i>Sierra, M.J.; Schmid, T. and Millán, R.</i> • "Ecotoxicological evaluation of acid mine drainages obtained under controlled conditions". <i>García-Lorenzo, M.L.; Martínez-Sanchez, M.J.; Pérez-Sirvent, C.; Belando, M.D.; González, E.; Pérez, V.; Martínez, S.; Martínez, L. and Molina, J.</i> • "Stream sediments as sources of aquatic environment state in the Almadén mercury mining district, Spain". <i>García-Ordiales E.; Loredó J., Esbri J.M.; Lominchar, M.A.; Millan R. and Higuera, P.</i> • "Water movements in frozen soils". <i>Lefebvre, G.; Kaced, S. and Makhoul, S.</i>
16:45 - 18:30 Teatrillo	<p>Parallel Session - Energy Efficiency and Renewable Energy / Chair: Evelyn Géhin (UPEC)</p> <ul style="list-style-type: none"> • "Hydrogen production from methanol by electrochemical promotion of Pt catalysts". <i>González-Cobos, J.; Jiménez, C., Gutiérrez, N.; de Lucas-Consuegra, A. and Valverde, J.L.</i> • "Gasification: Sustainable power production - The Puertollano IGCC plant". <i>García, F.</i> • "Complex Kpis to evaluate Telco's buildings energy efficiency". <i>Molinero, F.J.; Santamaría, R. and García, C.</i> • "Femto- to Millisecond Photodynamics of Porphyrins-Based DSSCs". <i>di Nunzio, M.R.; Cohen, B.; Pandey, S.; Hayse, S. and Douhal, A.</i> • "External load influence on microbial fuel cell performance". <i>González, A.; Lobato, J.; Cañizares, P.; Rodrigo, M.A. and Fernández, F.J.</i>

19:00 Guided visit to Toledo.

22nd November

9:00-10:00 PLENARY LECTURE (Aula Magna): "China's Air Pollution: Is its Cost Bearable for Long?", Guido Ferrari (Renmin University of China and Univesità de Firenze). Introduced by Fátima Guadamillas, Vice-chancellor of International Relationships.

-Parallel Sessions-

10:00 - 11:30 Aula Magna	<p>Parallel Session - Climate Change/ Chair: Manuel de Castro (UCLM)</p> <ul style="list-style-type: none"> • "Effect of wildfire on ecosystem CO2 and water vapour fluxes in an Austrian pine forest". <i>Lopez-Serrano, F.R.; Rubio, E.; Martínez-García, E.; Andrés-Abellán, M.; Picazo Córdoba, M.I.; Wic, C.; García-Morote, F.A.; Lucas-Borja, M.E.; Molero, J.; Candel, D. and Dadi, T.</i> • "Climate change footprint in the Mancha húmeda biosphere reserve". <i>Laguna, C.; Gosálvez, R.U.; Sánchez, G.; Falomir, J.P.; Velasco, A.; Florín, M.; Gil-Delgado,</i>
-----------------------------	---

	<p><i>J.A. and Chicote, A.</i></p> <ul style="list-style-type: none"> • "Energy and climate: A global perspective". <i>Bret, A.</i>
10:00 - 11:30 Sala de Óculos	<p>Parallel Session - Biomass and Biofuels I/ Chair: <i>Juan J. Hernández (UCLM)</i></p> <ul style="list-style-type: none"> • "Environmental sustainability study of biodiesel from <i>acrocomia totai</i>". <i>Lapuerta, M.; Ruiz, R.A. and Lechón, Y.</i> • "Effect of alternative fuels on diesel low temperature combustion". <i>Sanz-Argent, J.; Hernández, J.J. and Ballesteros, R.</i> • "Effect of intake multipoint port injection of hydrated bioethanol and n-butanol on the performance and emissions of an automotive diesel engine". <i>López, A.; Cadrazco, M.; Atehortúa, J.; Campuzano, F.; Cardona, S. and Pianeta, J.</i> • "Biomass production of paulownia <i>Elongata X Fortunei</i> cv (Scrophulariaceae) in abandoned farmlands of semi-arid environments (Southern Spain)". <i>García-Morote, F.A.; López-Serrano, F.R.; Andrés-Abellán, M.; Martínez-García, E.; Rubio, E.; Candel, D.; Dadi, T.; Molero, J.; Picazo-Córdoba, M.I.; Wic, C. and Lucas-Borja, M.E.</i> • "Life cycle assessment of a hybrid poplar (<i>Populusx. Euroamericana</i>). Energy crop under src regime in the Genil valley (Spain)". <i>Landholm, D.; Laina, R.; Tolosana, E.; Sixto, H.; Cañellas, I.; Peralta, E. and San Miguel, G.</i>
10:00 - 11:30 Teatrillo	<p>Parallel Session - Legislation and climate policy/ Chair: <i>José A. Moreno (UCLM)</i></p> <ul style="list-style-type: none"> • "Waste disposal tax of the Valencian Community". <i>De Miguel, E.</i> • "Section 31 of patent act 1983 and the opportunity to promote green technology". <i>Yusof, M.</i> • "Packaging innovations in the global private label market: An overview". <i>Gázquez-Abad, J.C.; Mondéjar-Jiménez, J.A. and Jiménez-Guerrero, J.F.</i> • "Powers of the municipality in Mexico for the use of environmental economic instruments". <i>García, M.T.</i>

11:30-12:00 Coffee Break

-Parallel Sessions-

12:00 - 13:30 Aula Magna	<p>Parallel Session - Solar Energy I / Chair: <i>Fernando Langa (UCLM)</i></p> <ul style="list-style-type: none"> • "Quantum Photoelectricity". <i>Palomares, E.</i> • "Dye-Sensitized Solar Cells. Tuning the Electronic Properties of the Dyes". <i>De la Cruz, P.; Aljarilla, A.I.; Caballero, R.; Arrechea, S. and Langa, F.</i> • "New dyes for solar cells based on triphenylamine and thiophene derivatives". <i>Domínguez, R.; Aljarilla, A.I.; de la Cruz, P.; Langa, F.; Clifford, J.N.; Pellejà, L. and Palomares, E.</i> • "Recursive estimation methods to forecast solar irradiance". <i>Martín, A. and Trapero, J.R.</i>
12:00 - 13:30	<p>Parallel Session - Biofuels and Biomass II/ Chair: <i>Magín Lapuerta (UCLM)</i></p>

Sala de Óculos	<ul style="list-style-type: none"> • "Pretreatment technologies for an enhanced bio-ethanol production from municipal solid wastes". <i>Pontón, S.; González, A.; Montoya Gómez, N.Y.; Martínez, J.A.; Cañizares, P. and Fernández, F.J.</i> • "Composition and morphology characteristics of the soot produced by a small power generation diesel engine fuelled with crude jatropha and palm oil". <i>Álvarez, A.; López A., Ruiz F.; Atehortúa J.; Campuzano F. and Cardona S.</i> • "Research regarding the fertilization influence upon biomass production in sorghum (<i>Sorghum Bicolor</i> L. Moench)". <i>Radu, S.; Florin, V. and Dorin, C.</i> • "Gasification of lignocellulosic biomass". <i>López-González, D.; Fernández-López, M.; Valverde, J.L. and Sánchez-Silva, L.</i> • "Effect of the operating conditions on the performance of a dual-fuel diesel engine running with gas from biomass gasification". <i>Hernández, J.J.; Barba, J. and Soriano, J.A.</i>
12:00 - 13:30 Teatrillo	<p>Parallel Session - Air Pollution and Atmospheric Chemistry / Chair: José Albaladejo (UCLM)</p> <ul style="list-style-type: none"> • "Budget in technology energy RD&D, and their effects on the energy intensity and GHGPC emission level". <i>Balsalobre, D.; Álvarez, A. and Cantos, J.M.</i> • "Research on air pollution using multicriteria methods, genetic algorithms and GIS software". <i>Borza, S.; Petrescu, V. and Borza, I.C.</i> • "An experimental approach to measure particle deposition in large circular ventilation ducts". <i>Da, G.; Géhin, E.; Ben-Othmane, M.; Havet, M.; Sollicc, C. and Motzkus, C.</i> • "Is CF₃CH=CH₂ an environmental friendly HFC alternative?". <i>Jiménez, E.; González, S.; Ballesteros, B.; Nopcean, L.V. and Albaladejo, J.</i>

13:30-15:30 POSTER PARTY: CAÑAS, TAPAS & POSTERS

15:30-16:30 PLENARY LECTURE (Aula Magna): "Organic Solar Cells: A chemical approach", Nazario Martín (Universidad Politécnica de Madrid). Introduced by Fernando Langa, Head of INAMOL.

-Parallel Sessions-

16:45 - 18:30 Aula Magna	<p>Parallel Session – Solar Energy II / Chair: Emilio Palomares (ICIQ)</p> <ul style="list-style-type: none"> • "Fullerene Functionalized Quantum Dot/P3HT Bulk Heterojunction Solar Cells". <i>Albero, J.; Riente, P.; Clifford, J.; Pericas, M. and Palomares, E.</i> • "Selective Methods in Fullerenes Chemistry". <i>Vidal, S.; Filippone, S. and Martín, N.</i> • "Novel porphyrins for application in Bulk Heterojunction Solar Cells (BHJ)". <i>Arrechea, S.; Aljarilla, A. and Langa, F.</i> • "Life cycle assessment of a hybrid concentrated solar power plant: comparison between different fossil and renewable fuels". <i>Corona, B. and San Miguel, G.</i>
16:45 - 18:30 Sala de	<p>Parallel Session - Sustainability and waste treatment / Chair: Juan F. Rodríguez (UCLM)</p> <ul style="list-style-type: none"> • "An environmental solution for polystyrene wastes by means of terpene oils and CO₂".

Óculos	<p><i>Gutiérrez, C.; Gracia, I.; de Lucas, A.; Garcia, M.T.; and Rodriguez, J.F.</i></p> <ul style="list-style-type: none"> • “Global process of flexible polyurethane foams recycling by split – Phase Glycolysis”. <i>Simón, D.; Borreguero, A.M.; de Lucas, A.; Molero, C. and Rodriguez, J.F.</i> • “Demonstration of an integral and sustainable system for multi-waste recycling and valorization”. <i>Hidalgo, D.; Gómez, M.; Martín-Marroquín, J.M.; Corona, F.; Antolín, G. and Basany, M.</i> • “A sustainable froth flotation process: A Chilean case study”. <i>Reyes-Bozo, L.; Higuera, P.; Godoy-Faúndez, A.; Salazar, J.L.; Valdés-González, H.; Vyhmeister, E. and Herrera-Urbina, R.</i> • “Electrocatalytic conversion of CO₂ into energy compounds”. <i>García, J.; Tostón, S.; Jiménez, C.; Martínez, F.; Camarillo, R.; Asencio, I. and Rincón, J.</i> • “Removal of aniline from wastewater using bovine hemoglobin and hydrogen peroxide”. <i>Valero-Ruiz, E.; Pérez-Prior, M.T. and González-Sánchez, M.I.</i>
16:45 - 18:30 Teatrillo	<p>Parallel Session - Green Chemistry / Chair: Antonio de la Hoz (UCLM)</p> <ul style="list-style-type: none"> • "Green synthesis of biofuel precursors from agricultural wastes". <i>Moreno, A.; Lucas-Torres, C. and Cabañas, B.</i> • “Tri-reforming of methane: Converting CO₂ and CH₄ into valuable chemical compounds”. <i>García-Vargas, J.M.; Valverde, J.L.; Díez, J.; Dorado, F. and Sánchez, P.</i> • “Carbon dioxide recycling for fuel production by UV-Vis photochemistry”. <i>Tostón, S.; Camarillo, R.; Martínez, F.; Jiménez, C.; Asencio, I. and Rincón, J.</i> • “Rigid polyurethane foam from grape seed oil”. <i>Díaz-Medino, A.; Pérez, A.; Rodríguez, J.F. and Carmona, M.</i> • "Green synthesis of 1,3,5-triazinylglycine derivatives. New chemosensors for mercury and zinc cations". <i>Sánchez-Migallón, A.; Ramírez, J.R.; Alañón, A.; de la Hoz, A.; Arellano, L.M. and Ruiz-Carretero, A.</i> • “Uses of sulfonated STARBONS® in esterifications”. <i>Mena-Durán, C.J. and Macquarrie, D.J.</i>

21:00 GALA DINNER – Hotel San Juan de los Reyes