

# 6<sup>th</sup> INTERNATIONAL SEMINAR ON THERMODYNAMIC ENGINEERING OF FLUIDS

**Monday 25<sup>th</sup> July 2016**

9:00 - 9:10	Welcome by Alberto Coronas (Director of the Group of Research on Applied Thermal Engineering – CREVER)
Chairman: Alberto Coronas	
9:10 – 9:30	Configuration and Energy Balances in Photovoltaic and Solar Thermal Systems to Preserve Raspberries in a Small Cooling Chamber. <i>Gabriel Merino (Universidad de Concepción, Chile)</i>
9:30 – 9:50	Suitable Phase Change Materials (PCMs) for Thermal Energy Storage (TES) in Fruit Refrigeration Systems <i>Felipe Godoy (Universitat Rovira i Virgili, Spain)</i>
9:50 – 10:10	Cold Storage with Phase-Change Materials in Cold Chambers <i>Adriana Coca (Universitat Rovira I Virgili, Spain)</i>
10:10 – 10:30	Development of Solar-Driven Hybrid Refrigeration Cycles with Thermochemical Storage. <i>Jaume Fitó (Universitat Rovira I Virgili, Spain)</i>
10:30 – 10:50	Modelling of Micro-Heat Exchangers for Thermal Components of Compression-Resorption Heat Pumps. <i>Maycon Cesar Figueira (Universitat Rovira I Virgili, Spain)</i>
10:50 – 11:20	Coffee Break
Chairman: Joan Carles Bruno	
11:20 – 11:40	Membrane Absorber Integration in Absorption/Resorption Refrigeration Systems. <i>Miguel Ángel Berdasco (Universitat Rovira I Virgili, Spain)</i>
11:40 – 12:00	Effect of the Wettability Improvement of Polypropylene Tubes on the Absorber Performance of a Liquid Desiccant System <i>Juan Prieto (Universitat Rovira I Virgili, Spain)</i>
12:00 – 12:20	<i>Testing and Modeling of a Scroll Expander With R134a &amp; Ammonia/Water Working Fluids</i> <i>James (Universitat Rovira I Virgili, Spain)</i>
12:20 – 12:40	Applications of CFD in Investigating Fluid Dynamics Behavior and Heat and Mass Transfer Processes in the Components of Absorption Cooling Systems <i>Faisal Asfand (Universitat Rovira I Virgili, Spain)</i>
12:40 – 13:00	Innovative strategies to enhance properties of solid hydrogen storage materials based on hydrides <i>Ángel Martín (Universidad de Valladolid, Spain)</i>
13:00 – 14:00	Lunch
<b>Master Thesis Defense. Chairman: Daniel Salavera</b>	
14:00– 14:30	Exergy analysis of an absorption heat pump in cooling and heating modes <i>María Regidor Sánchez, Universidad de Valladolid</i>
14:30 – 15:00	Heterogeneous hydrolysis of cellobiose with ruthenium-based catalysts <i>Manuel Lanza Ruiz. Universidad de Valladolid</i>
15:00 – 15:30	Aprovechamiento del calor residual producido en la regasificación del GNL por medio de una red energética de distrito que usa CO <sub>2</sub> como fluido de trabajo <i>Antonio Atienza (Universitat Rovira i Virgili, Tarragona)</i>
15:30 – 16:00	Analysis of gas turbine power cycles performance while exploiting LNG exergy released during its regasification process <i>José Antonio Loria (Universitat Rovira i Virgili, Tarragona)</i>
16:00 – 16:30	Characterization and Modeling of Scroll Expander for ORC application. <i>Ahmed Syed Junaid (Universitat Rovira i Virgili, Tarragona)</i>
16:30 – 17:00	Technical, economic and environmental impact of the energy recovery from LNG regasification plants <i>Nasiruddin Tajuddin Sheikh (Universitat Rovira i Virgili, Tarragona)</i>
17:00 – 17:30	Utilization of the cryogenic exergy of LNG with a Rankine cycle <i>Gabriele Fambri (Universitat Rovira i Virgili, Tarragona)</i>
17:30	Closing
17:30 – 18:30	Visit to the laboratories

# 6<sup>th</sup> INTERNATIONAL SEMINAR ON THERMODYNAMIC ENGINEERING OF FLUIDS

**Tuesday 26<sup>th</sup> July 2016**

9:00 - 9:10	Welcome
Chairman: Ángel Martín ( Universidad de Valladolid)	
9:10 – 9:30	Performance Evaluation of Resorption/Absorption Heat Pumps for Industrial Applications. <i>Enric Prats (Universitat Rovira I Virgili)</i>
9:30 – 9:50	Recovery of Cold from the Regasification of LNG in Cryogenic Air Separation Plants. <i>Andrea de las Heras (Universitat Rovira I Virgili)</i>
9:50 – 10:10	Polygeneration system based on the recovery of cold from the regasification of LNG for the production of power, fresh water and refrigeration. <i>Sabrina Guedes (Universidad de Pau y Pays de l'Adour)</i>
10:10 – 10:30	Performance evaluation of CO <sub>2</sub> compression heat pumps for industrial Applications. <i>Oumaima Skalli (Universidad de Pau y Pays de l'Adour)</i>
10:30 – 11:00	Coffee Break
11:00 – 11:20	Implementing Near-Infrared Spectroscopy for the 'In-Situ' Measurement of the Working Fluid Mixtures Composition in Absorption Refrigeration Systems. <i>M. Isabel Barba (Universitat Rovira I Virgili, Spain)</i>
11:20 – 11:40	Simple and Quick Test to Evaluate the Potential Application of New Working Fluids for Absorption Systems using Minimum Data <i>Andry Cera (Universitat Rovira I Virgili, Spain)</i>
11:40 – 12:00	Performance Evaluation of Absorption Refrigeration System using NH <sub>3</sub> /IL Working Fluids <i>Hifni M. Ariyadi (Universitat Rovira I Virgili, Spain)</i>
12:00 – 12:20	Performance Analysis of a Combined Ejector Double-Effect Absorption Refrigeration Cycle <i>Doniazed Sioud (University of Monastir, Tunisia)</i>
12:20 – 13:00	Poster session: M. Angélica, Andrés, Heber, Muaz, Alejandro, Cubana, Leone, José Luis
13:00 - 14:00	Lunch