

#### **4<sup>th</sup> INTERNATIONAL CONFERENCE ON IONIC LIQUIDS IN SEPARATION AND PURIFICATION TECHNOLOGY**

The International Conference on Ionic Liquids in Separation and Purification Technology (ILSEPT) is held every two years alternating between different countries such as Spain, Canada and Malaysia. It was celebrated for the first time in Sitges (Barcelona, Spain) in 2011 and it has been again celebrated this year in the same location from 8<sup>th</sup> to 11<sup>th</sup> September 2019. The event was organized by Elsevier and chaired by Thomas Schubert, from IoLiTec Ionic Liquids Technologies (Germany) and Boelo Schuur from the University of Twente (The Netherlands). ILSEPT gives the opportunity to discuss and share the latest research on the application of ionic liquids in different fields of chemistry. This year, as the interest in deep eutectic solvents is increasing, this topic has been included in the scope of the conference.

The conference was organized during 3 days into 6 plenary lectures, 9 keynotes, 50 oral presentations and 2 poster sessions (Monday and Tuesday) with a total of 100 posters dealing among others with the use of ionic liquids and deep eutectic solvents in analytical separations, extraction and leaching, biotechnology and biorefining, molecular modeling and simulation or membrane separation.

On Sunday afternoon a welcome drink reception gave the starting point of the conference. The scientific program started on Monday at 8:30 h with the welcome session and the plenary lecture "Separation gases with ionic liquids" by Joan Brennecke from the University of Texas, Austin. Then, two parallel sessions were held with several oral presentations. After lunch, João Coutinho (University of Aveiro, Portugal) presented another plenary lecture entitled "DES-Do they exist? And why should you be concerned about it", in which he introduced the use of deep eutectic solvents in analytical chemistry. On Monday afternoon, the first poster session with around 50 posters was carried out.

On Tuesday the same schedule was followed, with a plenary lecture at 8:30 h presented by Mara Freire (University of Aveiro, Portugal) about the use of ionic liquid for the purification of biopharmaceuticals. Then, as the previous day, the conference was divided into two parallel sessions (biotechnology and analytical separations). Among other topics, the use of chiral ionic liquids in the enantioseparation of a non-protein amino acid by capillary electrophoresis and the study of the interactions taking place in the separation system was presented. After lunch, Jared Anderson from Iowa State University (USA) and Hiroyuki Ohno from Tokyo University of Agriculture and Technology (Japan), presented two plenary lectures devoted to the use of ionic liquid-based gas stationary phases and about the use of ionic liquids forming two phases in water for extractions, respectively. In addition, several oral presentations and the second session of posters were also held.

On Wednesday, the conference reached its final point and only a morning session was celebrated. As previously days, it started at 8:30 h with a plenary lecture from Isabel Billard (University of Grenoble, France) focusing on the use of ionic liquids on metal extractions followed by two parallel sessions of oral presentations.

Finally, in the closing ceremony, the chairmen consider the possibility to hold next ILSEPT conference in Latin America due to the high number of people from Latin America attending the Congress. To conclude, the 4<sup>th</sup> International Conference on Ionic Liquids in Separation and Purification Technologies has gathered international research groups to share the main advances on ionic liquids and to open new opportunities of collaborations.

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