

SOLVAY WORKSHOP ON IONIC LIQUIDS: FROM FUNDAMENTALS TO APPLICATIONS

PROGRAM (20 - 23 FEBRUARY 2017 - VENUE: SOLVAY ROOM)

MONDAY 20 FEBRUARY

- 15:45 16:15 Registration (in hall adjacent to the Solvay room)
- 16:15 16:30 Welcome address by Marc Henneaux (Director of the Solvay Institutes)
and Claudine Buess-Herman (Chair of the workshop)

Chairperson: Claudine Buess-Herman

- 16:30 17:15 Bernard Gilbert
Ionic liquids: A(n) (Hi)story
- 17:15 18:00 Kenneth Seddon
*Everything you always wanted to know about ionic liquids,
but were afraid to ask*
- 18:00 19:00 Welcome Drink Reception (in hall adjacent to the Solvay room)

TUESDAY 21 FEBRUARY

Chairperson: Douglas R. MacFarlane

- 9:00 9:45 Barbara Kirchner
Ionic Liquids from theoretical considerations
- 9:45 10:30 Claudio J. Margulis
Ionic Liquids Under Harsh Reactive Conditions
- 10:30 10:50 COFFEE BREAK (in hall adjacent to the Solvay room)
- 10:50 11:35 Patricia Hunt
*Evaluating the valence electronic structure of $[C_4C_{1im}][SCN]$ gas
vs liquid phase*
- 11:35 12:20 Tom Welton
Ionic liquid dynamics in electrical fields
- 12:20 14:00 LUNCH (at the University's cafeteria)
- #### Chairperson: Claudio J. Margulis
- 14:00 14:45 Hiroyuki Ohno
*Functional design of highly thermoresponsive phase changes in ionic/water mixed
systems*

- 14:45 15:10 Contributed talk: Kevin R. J. Lovelock
A new basicity scale for ionic liquids
- 15:10 15:35 Contributed talk: Stuart Bogatko
Ionic liquids and wavefunction in DFT embedding
- 15:35 16:00 COFFEE BREAK (in hall adjacent to the Solvay room)

Chairperson: Annick Hubin

- 16:00 16:45 Corinne Lagrost
Reactivity in ionic liquids from the point of view of an electrochemist
- 16:45 17:30 Marta Feroci
Azolium ionic liquids in electro-organic chemistry
- 17:30 17:55 Contributed talk: Thomas Doneux
Electrochemical reduction of carbon dioxide in room temperature ionic liquids, at gold and copper electrodes
- 17:55 18:05 Break and installation of posters for poster session
(at the UAE RESTAURANT located on the campus)
- 18:05 20:00 Poster session (with walking dinner starting at 18:30)

WEDNESDAY 22 FEBRUARY

Chairperson: Corinne Lagrost

- 9:00 9:45 Douglas R. MacFarlane
Energy applications of ionic liquids-from global perspectives to computational approaches
- 9:45 10:30 Alexei Kornyshev
Energy harvesting and storage with ionic liquids: the essential physics at the nanoscale
- 10:30 10:50 COFFEE BREAK (in hall adjacent to the Solvay room)
- 10:50 11:35 Mathieu Salanne
Ionic liquids for supercapacitor applications
- 11:35 12:20 Enn Lust
Electrical double layer structure at metal electrodes and electrochemical characteristics of supercapacitors based on ionic liquids
- 12:20 14:00 GROUP PHOTO (before leaving for lunch) - LUNCH (at the University's cafeteria)

Chairperson: Herman Terryn

- 14:00 14:25 Contributed talk: Renata Costa
Enhancement of energy storage efficiency by tuning the composition of ionic liquids mixtures

14:25 14:50 Contributed talk: Olivier Fontaine
Biredox ionic liquids: new opportunities toward high performance supercapacitors

14:50 15:35 Andrew P. Abbott
Deep eutectic solvents - towards the concept of liquid active ingredients

15:35 16:00 COFFEE BREAK (in hall adjacent to the Solvay room)

Chairperson: Zineb Mekhalif

16:00 16:25 Contributed talk: Carlos M. Pereira
Electrodeposition from deep eutectic solvents: a nucleation study

16:25 16:50 Contributed talk: Jon Ustarroz
Fundamental studies on the early stages of electrochemical nucleation and growth from Deep Eutectic Solvents

16:50 17:15 Contributed talk: Abhishek Lahiri
Electroless deposition of metals on silicon in Ionic liquids and its application for lithium ion batteries

17:15 18:00 Koen Binnemans
Ionic liquid technology for recovery and separation of rare earths

19:30 Banquet at « La Maison du Cygne » Grand Place, 9 - 1000 Brussels

THURSDAY 23 FEBRUARY

Chairperson: Christian Stevens

9:00 9:45 João A. P. Coutinho
SAIL away - Exploring the potential of surface active ionic liquids: From phase diagrams to the extraction and purification of biomolecules

9:45 10:30 Katharina Schröder
Biomass processing with ionic liquids: Off the beaten track

10:30 10:50 COFFEE BREAK (in hall adjacent to the Solvay room)

Chairperson: Katharina Schröder

10:50 11:35 Cristina Silva Pereira
Ionic liquids unforeseen values in fungal biology and biotechnology

11:35 12:00 Contributed talk: Pieter Naert
Ionic liquid ion exchange: exclusion from strong interactions leaves cations to the most weakly interacting anions

12:00 12:25 Contributed talk: Sónia P. M. Ventura
Impact of ionic liquids on the extraction and purification of phycobiliproteins from red seaweeds

12:25 14:00 CONCLUSIONS - LUNCH (at the University's cafeteria)