In this issue

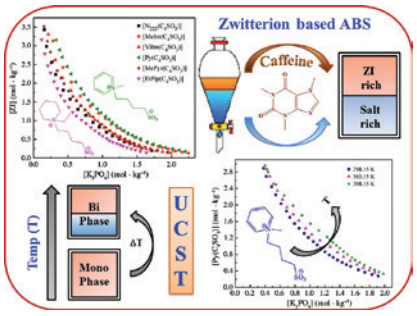
Anusha Basaiahgari, Sandeep Kumar Yadav and Ramesh L. Gardas

Zwitterions as novel phase forming components of aqueous biphasic systems

https://doi.org/10.1515/pac-2018-0921
Pure Appl. Chem. 2019; 91(8): 1279–1294

Conference paper: Application of zwitterions based aqueous biphasic systems for caffeine extraction and the influence of temperature on phase forming behavior.

Keywords: aqueous biphasic systems; caffeine; ionic liquids; ISSP-18; upper critical solution temperature; zwitterions.



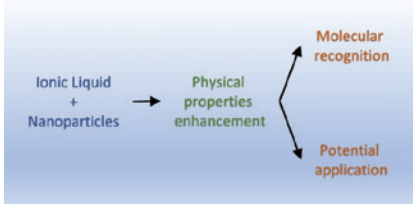
Kamil Oster, Christopher Hardacre, Johan Jacquemin, Ana P. C. Ribeiro and Abdulaziz Elsinawi

Ionic liquid-based nanofluids (ionanofluids) for thermal applications: an experimental thermophysical characterization

https://doi.org/10.1515/pac-2018-1114
Pure Appl. Chem. 2019; 91(8): 1309–1340

Conference paper: This study investigated the unusual thermophysical enhancements caused by the nanoparticles dispersion in ionic liquids, including potential application as heat transfer fluids.

Keywords: heat transfer fluids; ionanofluids; ionic liquids; ISSP-18; nanofluids; nanoparticles; thermophysical properties.



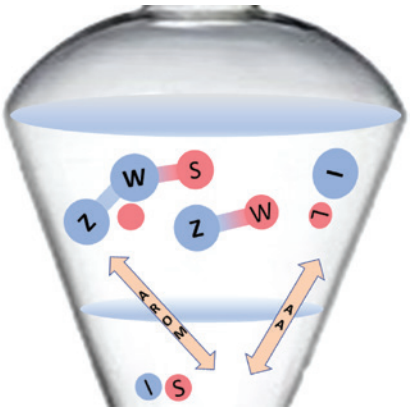
Jordan Mills, Gaelle Level, Chirangano Mangwandi and Marijana Blesic

Aqueous biphasic systems formed in (zwitterionic salt + inorganic salt) mixtures

https://doi.org/10.1515/pac-2018-1222
Pure Appl. Chem. 2019; 91(8): 1351–1360

Conference paper: Study compares phase behavior of aqueous systems composed of zwitterionic salts, ionic liquids, and zwitterions, and their potential for extraction of aromatic molecules and amino acids.

Keywords: amino acid; aqueous biphasic system; ISSP-18; partition coefficient; zwitterionic salt.



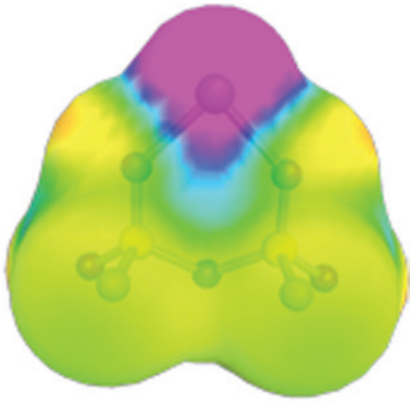
Victor Chaudoy, Johan Jacquemin, François Tran-Van, Michaël Deschamps and Fouad Ghamouss

Effect of mixed anions on the transport properties and performance of an ionic liquid-based electrolyte for lithium-ion batteries

https://doi.org/10.1515/pac-2018-1006
Pure Appl. Chem. 2019; 91(8): 1361–1381

Conference paper: Unseen specific interaction between Li^+ and $[FSI]^-$ in the $[C_3C_1pyr][FSI]$ + Li[TFSI] mixture.

Keywords: batteries; ionic liquid; ISSP-18; lithium salt; NMR self-diffusion; nuclear Overhauser effect.



Néstor M. Carballeira, Denisse Alequín, Leilani M. Lotti Diaz, Victorio Jauregui Matos, Leonardo L. G. Ferreira, Adriano D. Andricopulo, Mikhail Y. Golovko, Rosa M. Reguera, Yolanda Pérez-Pertejo and Rafael Balaña-Fouce

Synthesis of a novel brominated vinylic fatty acid with antileishmanial activity that effectively inhibits the *Leishmania* topoisomerase IB enzyme mediated by halogen bond formation

https://doi.org/10.1515/pac-2018-1113
Pure Appl. Chem. 2019; 91(8): 1405–1416

Conference paper: The brominated acid displayed antileishmanial activity ($IC_{50} = 2.5$ μM) and effectively inhibits *L*TopIB ($EC_{50} = 7.4$ μM) through a mechanism involving halogen bonding.

Keywords: brominated fatty acids; halogen bond; *Leishmania infantum*; leishmaniasis; NTD2018; synthesis; topoisomerase IB.