14:30 Oral

Fundamentals in cavitation, sonochemistry and sonoluminescence: Report on WG9 activity

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Results and ongoing work of the members of Working Group 9 are presented. The topics include experiments and calculations of aspherical bubble collapse, laser induced bubble dynamics and sonoluminescence, molecular dynamics calculations of the bubble interior, interaction of sound field and cavitation bubble structures, and others.

Tea and posters
Thursday afternoon, 8 June, 15:00

Oral reviews - Working Groups
Thursday afternoon, 8 June, 15:30

15:30 Oral

Diversity oriented synthesis under (highly efficient) microwave conditions. Report on WG10 activity.

Dariusz Bogdal
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The work that has been performed since the beginning of the Action D3 by the members of working group WG10 "Diversity oriented synthesis under (highly efficient) microwave conditions" related to the join papers, proceedings, presentations, visits, student exchange, STSM, and other joint grant applications will be presented.

16:00 Oral

High-Energy Micro-Environments Applications in Textiles (HEMEAT)

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Non-traditional techniques creating high-energy micro-environments could represent novel processing routes for the textile industry. The use of high-energy micro-environments (particularly ultrasound and microwaves) could enhance mass transport in wet processes from bulk of the industrial liquors to textile structured materials. Those techniques could also be applied in the treatment of dye-house effluents providing better solutions to the decrease of pollution content. These techniques can be applied as stand-alone measures or as novel components of multi-disciplinary approaches. Recent in the area of high-energy micro-environments have shown potential to apply these techniques in the production of novel textile finishing effects and products, like coated and glued textile materials. In this presentation the last developments from all partners with the WG will be presented and discussed.

Conclusions
Thursday afternoon, 8 June, 16:30

Management Committee Meeting and parallel poster session

Posters are listed here in alphabetic order.
Thursday afternoon, 8 June, 17:15

17:15 Poster

Multicomponent Reactions in Microreactor Technology: Imidazole Synthesis via a Four-Component Reaction

Davy R. Acke1, Romano V. Orru2, Christian V. Stevens1
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In this study, the CYTOS® College System, a microreactor produced by CPC-Cellular Process Chemistry Systems GmbH [1], was used to produce imidazoles in a continuous way.

The imidazole core is an important unit in heterocyclic chemistry. It occurs in different natural products and in a variety of synthetic compounds. Some examples of imidazole-containing compounds in living organisms are the essential amino acid histidine and histamine. A lot of imidazoles show biological activities [2]. Known imidazole based drugs are ketoconazole, which has antifungal properties and losartan, a drug against hypertension. More recently, interest in imidazoles is still increasing due to applications as green solvents by means of ionic liquids [3] and in organometallic chemistry as N-