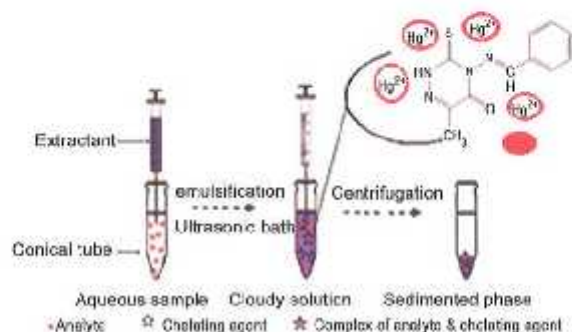


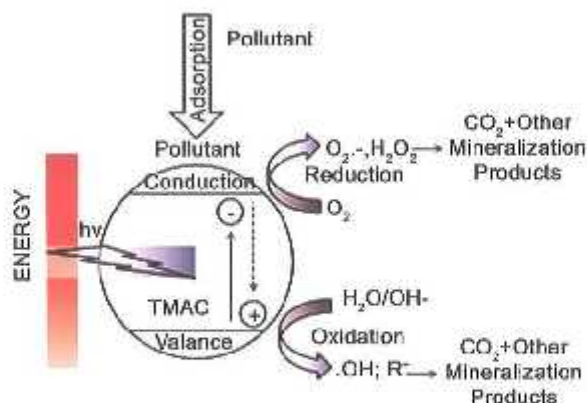


## Notes

## 423 Ultrasound assisted emulsification microextraction for selective determination of trace amount of mercury(II)



Leila Hajiaghababaei\*, Saeed Zandinejad, Sana Berijani  
& Saeed Suzangarzadeh

429 Synthesis and characterization of titania-magnetic activated carbon composite for photocatalytic degradation and mineralization of *p*-nitrophenol

Surabhi N Shintre & Pragati Thakur\*

435 Host-guest complexation between 3-hydroxyflavone and  $\beta$ -cyclodextrin: Preparation, characterization and cytotoxicity studies

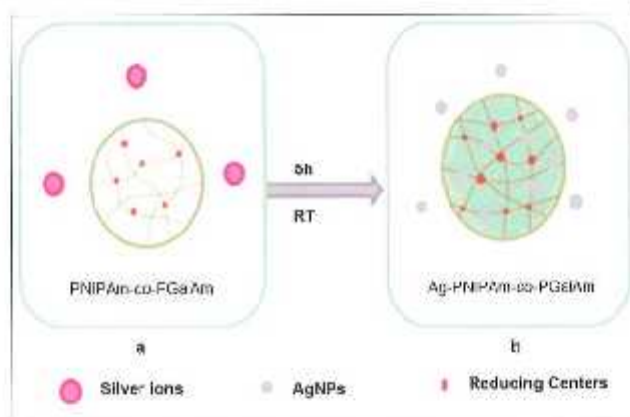
Inclusion complex of HF with  $\beta$ -CD has been prepared by various synthetic method such as physical, kneading and co-precipitation methods. No major difference is observed between the cytotoxic activities of pure HF and its solid complex against breast cancer cell line.



Arumugam Praveena,  
Meenalshisundaram Swaminathan,  
Samikannu Prabu & Rajaram Rajamohan\*

441 *In situ* formation of silver nanoparticles in thermosensitive glycogels and evaluation of its antibacterial activity

Colloidal AgNPs have been synthesized using PNIPAm-co-PGalAm hydrogel, where the anomeric masked aldehyde of sugar moiety plays the role of reducing agent. As an excellent stabilizer, PNIPAm anchors the AgNPs in the hydrogel, while with PGalAm as a reducing agent the AgNPs formed are well distributed on the surface of the hydrogel. This gel composite shows enhanced antibacterial activity.



Anuja S Kulkarni, Vaishali P Dhanwe,  
Archana B Dhumure, Ayesha Khan,  
Vaishali S Shinde\* & Pawan Kumar Khanna\*

447 Synergistic interactions in W/O microemulsions containing imidazolium based  $C_{12}$ mimBr and sodium lauryl sulfate

The physicochemical properties and synergistic effects of W/O microemulsion systems containing imidazolium based surfactant, 1-dodecyl-3-methylimidazolium bromide ( $C_{12}$ mimBr)-sodium lauryl sulfate (SLS)/ alcohol/alkane/ 5% NaCl solution at different molar ratios of water-to-surfactant ( $w_0$ ) are studied. The W/O microemulsions are formed at the molar fractions of SLS-to- $C_{12}$ mimBr+SLS ( $X_{SLS}$ ) ranges of 0.0-0.3 and 0.7-1.0. Synergism between  $C_{12}$ mimBr and SLS is found to exist in the W/O microemulsions containing these two surfactants.

J L Choi\*, J Q Zhang, N Lin, N Hon, J W Song,  
Y Zhang & J J Lu

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