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Editorial

In about a decade now, there has been an increased interest in the field of water-soluble polymer and its interaction with an oppositely charged polymer or surfactant as polyelectrolyte (PE) nanoparticle. It is known that a mixture of polyelectrolyte (PE) solutions with opposite charge surfactants exhibiting properties is not specific to individual components. The driving force for the formation of complex is the presence of two interactions: Electrostatic and hydrophobic. One of the most promising and studied water-soluble polymers is a copolymers of poly (acrylamide-co-sodium acrylate) as nanoparticle. The presence of groups capable of dissociation ($-C(O)O^-Na^+$) and association ($-C(O)NH_2$) with water molecules in the structure enables the polymer analogous conversion of the polymer to change the hydrophilic-lipophilic balance. In this research fluorinated water-soluble copolymers as nanoparticles are capable of forming complexes with the surfactant cetyltrimethylammonium bromide (CTAB) or the polycation poly (diallyldimethylammonium chloride). The interaction between fluorinated polyelectrolytes (PE) and CTAB or with oppositely charged PEs in aqueous solution has been studied using dynamic surface tension and PE titration. It is revealed that the dynamic surface tension is reduced by a factor of 1.3 to 1.75 using fluorinated water-soluble copolymers with surfactant. Aqueous solutions of fluorinated copolymers of poly (acrylamide-co-sodium acrylate) may be applied on paper making more hydrophobic.

A review on quantum computing using carbon nanotube and quantum dots is also presented. The journal continues its objective to publish high quality research and reviews in the area of nanoscience and nanotechnology. The effort of all the authors along with all the editors who made this edition possible is highly appreciated.

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