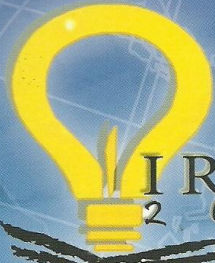




الجامعة الإسلامية العالمية ماليزيا
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according to 3^{**}(3-1) Fractional Factorial Design. Statistical analysis showed that the maximum virus titer can be achieved at virus sample concentration level of about 58.45% (v/v), centrifugation speed of 13729.03 rpm and centrifugation time of 4 hours.

PP-106

Sorbiochin – Adsorbent for Precious Metals

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Platinum, gold and palladium are precious metals which are widely used in industries for catalysts preparation, electronic components, electroplating, etc. Recovery of these trace metals in low concentration from solutions, plating bath, industrial effluents, etc. are essential for economic reasons and pollution prevention. One option is to use a separation technology based on solid phase extraction (SPE) for the recovery of low concentration of the precious metals. Sorbiochin, a melamine–chitosan–formaldehyde resin has been synthesized from biopolymer and was found suitable for preconcentration of trace amounts of gold, platinum and palladium. The Sorbiochin is made into powders or discs and can be used to preconcentrate the precious metals from aqueous solutions. Sorbiochin adsorption of the precious metals is optimum at pH 1. The tendency of Sorbiochin to adsorb the precious metals is in the sequence of Pd(II) > Au(III) > Pt(II), and more than 5 - 50 mg of the metal ions can be adsorbed per gram of the resin. The precious metals can be desorbed almost completely from the resin by eluting with a common chelating agent.

PP-109

Starrageen Softgel

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The instability of gelatin based capsule when filled with certain liquid pharmaceutical formulations has drawn a great concern among scientists. Moreover, the costly expense to obtain gelatin from its sources and its limited availability are also the major disadvantages of using gelatin in industrial scale. The source of gelatin can be a problem for potential areas of use or for particular consumers, especially in obtaining the halal gelatin. An alternative composition from a mixture of carrageenan and a number of starches to replace gelatin in the production of soft gel capsules for packaging of liquid drugs has been discovered. This gelatin replacer has the properties equivalent to those of the gelatin in forming soft gel capsules.

PP-110

Characterization of Experimental Polypropylene Ternary Nanocomposites Produced under Different Process Conditions

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Polymer ternary nanocomposites are credited with better mechanical properties relative to their binary precursor apparently due to the additional strength of the second reinforcing element. They represent emerging paradigms in composite development and application. However research in these emerging composites is limited and evolving. The present paper reports on the characterization of experimental polypropylene ternary nanocomposites produced in the laboratory under different process conditions using multiwall carbon nanotube as secondary filler element. Full factorial experimental design was explored to study the effect of temperature, mixing speed and CNT loading on the morphological and mechanical features of the ternary nanocomposites. Yield strength, tensile strength at fracture and morphological characterization were studied using UTS and SEM machines respectively. The results revealed that process temperature and CNT loading influences the morphological and mechanical properties of polypropylene ternary nanocomposites, whereas, the mixing speed has little effect on these