

Preparation and characterization study of an olive pomace - polyaniline composite conductor in the recovery of heavy metals by electrosorption and adsorption.

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ABSTRACT/RESUME

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Abstract : In this work, we have prepared a new composite material based on olive pomace (OP) and polyaniline (PANI) by the in situ-polymerization chemical method, demonstrated the ability of our material to conduct current through electrical conductivity tests. We used the spectral analysis techniques to characterize the material as well as Laser Particle Size and scanning electron microscopy to show that the PANI was successfully attached to OP. We have applied our new material in the recovery of Hexavalent Chromium by carrying out electrosorption tests at a positive potential imposed. We compared the recovery with chemical adsorption under the same conditions.
