

## عنوان مقاله:

A green approach toward synthesis of large surface ligands based on cellulose extracted from plant

## محل انتشار:

دومین کنفرانس ملی فرآیندهای گاز و پتروشیمی (سال: 1398)

تعداد صفحات اصل مقاله: 7

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## خلاصه مقاله:

An original approach for preparing bio-polymer ligands was developed. Two novel bio-polymer ligands were synthesized via oxidation of cellulose extracted (DAC) from safflower plant. Extracted cellulose polymer was crosslinked and periodate oxidized following to preparation of polycarboxylic acid and Schiff base ligands using sodium chlorite and ethylenediamine, respectively. The physicochemical characterization of the condensation products was performed using Fourier transform infrared (FTIR) spectra. The index bonds of carboxylated and Schiff based cellulose were appeared at about 1731  $\text{cm}^{-1}$  and 1649  $\text{cm}^{-1}$ , respectively. The cross-sectional view of the crosslinked and uncrosslinked products, as absorbed by SEM, showed porous and fibrillose structure for the crosslinked units.

## کلمات کلیدی:

bio-polymer cellulose, cellulose dialdehyde, carboxylation, Schiff base, large surface ligand

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1012427>

