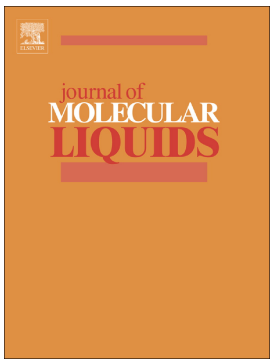

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PII: S0167-7322(18)30280-0
DOI: doi:10.1016/j.molliq.2018.03.048
Reference: MOLLIQ 8822

To appear in: *Journal of Molecular Liquids*

Received date: 17 January 2018
Revised date: 12 March 2018
Accepted date: 13 March 2018

Please cite this article as: Milan Z. Momčilović, Antonije E. Onjia, Dragana N. Trajković, Miloš M. Kostić, Dragan D. Milenković, Danijela V. Bojić, Aleksandar Lj. Bojić , Experimental and modelling study on strontium removal from aquaeos solutions by lagenaria vulgaris biosorbent. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Molliq(2017), doi:10.1016/j.molliq.2018.03.048

EXPERIMENTAL AND MODELLING STUDY ON STRONTIUM REMOVAL FROM AQUAEOS SOLUTIONS BY *LAGENARIA VULGARIS* BIOSORBENT

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Abstract: The shell of *Lagenaria vulgaris* (LV) plant was used as biosorbent for strontium removal from aqueous solutions. Chemical structure of the biosorbent's surface was characterized by the means of FTIR and Boehm's titrations. SEM-EDX technique was used to study the morphology and elemental composition of the material. The analyses pointed out to abundance of acidic functional groups which are charged in solution and hence responsible for ionic exchange of Sr(II) ions. Sorption was examined by varying initial concentrations of Sr(II) in solutions, sorbent's loadings, pH, and contacting times. Equilibrium of the process was