



Studying the Indigenous Crude Oil Methanogens and Their Potential in MEOR

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Abstract: An increased interest for potential application of microbial surface active compounds is based on their broad range of functional properties which mainly comprise emulsification, phase separation, surface activity, and viscosity reduction of heavy crude oils. In this study the abilities of crude oil indigenous methanogens were considered for microbial enhanced oil recovery (MEOR). Some methanogenic consortia were isolated from several Iranian petroleum platforms. Their temperature (15°C to 70°C), salinity (0.5% to 20%) and pH (2-9) tolerance were studied. The selected biosurfactant and exopolymer producing consortium could grow from 0.5 to 20% salinity and 45°C to 70°C and from pH 3 to 8 that makes it a potential choice for in situ MEOR.

Keywords: *Methanogen, MEOR, Methane, Crude oil*

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