

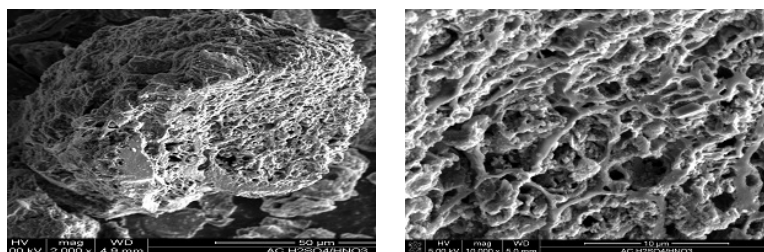
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Super high surface area mesoporous carbon for arsenic removal from ground water

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Arsenic contamination is a global issue. The increasing concentration of arsenic in groundwater causes arsenic poisoning which leads to serious problems to the body, such as kidney and liver medical problem. Also, it can cause skin cancer. Therefore, a convenient, easy and cheap technique is required to remove arsenic from contaminated water. According to the study presented in USA Today (2007), the arsenic problem is faced by around 70 countries and more than 137 million people. In this Study, super high surface area (3000 m²/g) carbon was produced to remove arsenic from water. Carbon mesoporous particles were first activated to make the surface rich with hydroxyl groups and then the surface was modified with cabling agent. The modified mesoporous carbon showed superb material for arsenic removal. The removal percent, based on ICP-MS, was 98-100%. This material will open a new door in the field of arsenic removal.



Biography

Nezar H Khodary obtained his PhD from the University of Southampton, UK in 2005. He is a Member of Royal Society of Chemistry, American Chemical Society, The New York Academy of Sciences, Saudi Chemical Society and Saudi Computer Society. In 2012, he was nominated as Visiting Assistant Professor at Northwestern University. Currently, he is working as an Associate Professor at King Abdulaziz City for Science and Technology, Saudi Arabia.

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