

Effect of Fulvic Acids on the Process of Water Purification on Filtration Beds – Anna M. Anielak, Mariusz Wojnicz

Summary

This study examined the process of filtering of infiltrated water containing excessive amounts of iron, manganese, and fulvic acids through two filtration beds-sand and zeolite-exhibiting catalytic properties. The fulvic acids that were added to the filtered water were extracted from mud in Kołobrzeg. The zeolite bed was modified with manganese oxide using our own technology and required periodic regeneration using 0.3% KMnO_4 solution. Our study showed the fulvic acids' negative effect on the process of water purification. The zeolite bed reduces this effect and is more effective than the quartz sand bed.