KEMIJSKI INŠTITUT

Vabilo na Forum40 / Invitation to the Forum40

Dr. Ciara Susan Byrne

D09, Department of Inorganic Chemistry and Technology

Četrtek / Thursday, 13.5.2021 ob / at 13:00 / on WEBEX

https://ki-si.webex.com/ki-si/j.php?MTID=me6f21b0d7f313fe494544853e1dbc3cd

Meeting number (access code): 163 505 2410
Meeting password: Maj_2021!

Development of Zeolitic Imidazolate Framework (ZIF) adsorbents for energy storage

Zeolitic imidazolate frameworks (ZIFs) are comprised of transition metal ions (Zn) and imidazolate linkers. Due to their properties (large surface areas, suitable pore size distribution and structure stability), ZIFs have great potential for adsorptive separation and storage applications. A number of different ZIF structures have been investigated for heat storage application, with ethanol as the adsorbate. The two main criteria for selecting ZIF structures for selected application are the pore entrance size and the pore/cage capacity as well as structure stability, hydrophilicity/hydrophobicity and pore accessibility. This presentation will discuss the synthesis of ZIFs, their structural properties and their influence on the alcohol adsorption.

Vljudno vabljeni / Kindly invited