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Fundamentals of Adsorbents-Synthesis, Characterisation, Properties, and Application

Guest Editor:

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Deadline for manuscript submissions:

closed (30 June 2021)

Message from the Guest Editor

The increased use of rare resources has led to excessive mining and, simultaneously, an environmental impact. Aiming for overall resource sustainability, materials for the adsorptive separation, recovery, decontamination, and recycling are being developed. Both synthetic- and biomass-based adsorbents have been found to be highly efficient for recovery and decontamination applications.

The adsorption method is used in both air and solution systems. For issues like rare element recovery/recycling, fresh water scarcity, and heavy metal and radioisotope decontamination, biomass adsorbents, porous coordination polymers, organic resins, inorganic complexes, and so on are being extensively studied. In addition, from the fresh water system to the seawater or the organic-aqueous mixtures, the need for an adequate adsorbent is immense. Therefore, using this platform, I would like to compile all of the unique knowledge and ideas we have on the synthesis, characterization, and application of the adsorbents.













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Message from the Editor-in-Chief

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