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Editorial

The carbon-based materials have been interested by researchers during the last decades because the carbon sources are abundantly available in the world wide. Today, these materials, in various forms including diamond, carbon black, pyrolytic carbon, glassy carbon, graphite, graphene, carbon nanotubes, carbon fibers, porous carbons and ..., play a principal role in different technology areas. The energy storage, coating, catalysis, medicine, pollutant absorber, electronic devices are some relevant applications of carbon -based materials.

In Iran, many research groups are working on the carbon structures with different applications to develop more sustainable and smart variants of them. In this issue, we are going to open a window in front of readers to have

better understand about the recent researchers efforts in Iran by presenting four papers on corrosion protection by carbon based coating, wear properties of diamond like carbon composite, CO₂ supercritical extraction and mechanical behavior of functionalized carbon nanotubes on the nanocomposite. Because of the introduction of new nano carbon structures has forced further the potential of carbon to nanotechnology applications in Iranian research groups, a brief review on the applications of carbon nanotubes and graphene nanosheets is another part of this issue.

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