



## Heat Transfer and Diffusion Processes in Fractal Domains

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### Message from the Guest Editor

Dear Colleagues,

The aim of studying heat transfer and diffusion processes in fractal domains is to explore the intricate and complex phenomena that arise when heat and mass are exchanged within objects with non-integer (fractal) dimension. By investigating these processes, researchers aim to unravel the principles governing the behavior of heat transfer and diffusion in fractal systems, enabling the design of more efficient heat exchangers, materials, and industrial processes. Additionally, exploring these phenomena may provide valuable insights into natural phenomena, such as heat diffusion in porous media or nutrient diffusion in biological tissues.

Topics that are invited for submission include (but are not limited to):

- Fractal dimension and heat transfer behavior
- Multi-scale heat transfer modeling of fractal structures
- Multi-dimensional diffusion in fractal media
- Fractal heat exchangers: design and optimization
- Heat and mass transfer in biology with fractal characteristics
- Numerical modeling of heat transfer in fractal systems.

Prof. Dr. Qingyong Zhu  
Guest Editor

