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Advancements in Thermodynamics and Type-B Energy Processes: Applications and Implications

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Message from the Guest Editors

A promising vein of advanced energy research involves what are called Type-B energy processes. Type-B processes, in contrast, offer radically new possibilities by extending standard thermodynamics in new ways, particularly with respect to the second law. Type-B processes can convert ambient thermal energy into useful work. They are inherent in such studied systems as protonic thermotrophic biochemistry, epicatalysis, and supradegeneracy. All known Type-B systems involve a thermodynamic asymmetry by which energy accumulates at system boundaries (superseding the traditional thermodynamic limit) and which is then harvested by an independent process. The possibilities for Type-B processes may extend far beyond those currently under study.

With this in mind, we are pleased to solicit full-length articles, short communications, perspectives, and review articles pertaining to frontline energy research involving Type-B processes. Theory, experiment, and numerical simulations are also welcome.











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Message from the Editor-in-Chief

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