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# Special Issue on Thermal Physics

## Call for Papers

Thermal physics, generally speaking, is the study of the statistical nature of physical systems from an energetic perspective. Starting with the basics of heat and temperature, thermal physics analyzes the first law of thermodynamics and second law of thermodynamics from the statistical perspective, in terms of the number of microstates corresponding to a given macrostate. A central topic in thermal physics is the canonical probability distribution. The electromagnetic nature of photons and phonons are studied which show that the oscillations of electromagnetic fields and of crystal lattices have much in common. Waves form a basis for both, provided one incorporates quantum theory. Other topics studied in thermal physics include: chemical potential, the quantum nature of an ideal gas, Bose-Einstein condensation, Gibbs free energy, Helmholtz free energy, chemical equilibrium, phase equilibrium, the equipartition theorem, entropy at absolute zero, and transport processes as mean free path, viscosity, and conduction.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring **Thermal Physics.**

Authors should read over the journal's Authors' Guidelines carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal at Paper Submission System.

Please kindly notice that the "**Special Issue**'' under your manuscript title is supposed to be specified and the research field "**Special Issue - *Thermal Physics***" should be chosen during your submission.

According to the following timetable:

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| Manuscript Due | October 9th, 2013 |
| Publication Date | December 2013 |

**Guest Editor:**

For further questions or inquiries

Please contact Editorial Assistant at

jmp@scirp.org