

Dr.M.Ponmurugan

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Date of joining : 19.01.2012

Experience : Teaching: **11 and 1/2** years; Research: **16** years

Field of specialization : Theoretical, Computational and Experimental Physics
/Soft matter Physics / Statistical Physics / Polymer
Physics/Irreversible thermodynamics / q-Statistics/Monte Carlo/
Molecular Dynamic Simulation and Machine/Deep Learning

Qualified examinations :

Ph.D	CSIR-NET	SLET/SET	Others
√	√	√	GATE

Number of research papers /articles published :

Published	Journals	Seminars/ Workshops/ etc	Impact / H-index
International	19	20	6
National	2	23	-

Guidance: **Ph.d:** Completed 1; Ongoing - 4 **M.Phil:** Ongoing -1 **M.Sc** Project: 17

Organizing the conferences/seminars/workshops : National: 5

Conferences/seminars/workshops papers presented : National: 5 International: 6

Academic/Research Accomplishments: DST Fast Track Young Scientist Fellow 2010.

Training the graduate students to build their individual abilities in the course content. Trained the graduate project students to pursue their research work in abroad.

All my project students are placed in well esteemed institutions in Germany, Finland, Sweden, USA and Poland. In particular, one of my project student participated and their project got selected in Lab2Moon international contest.

Selected Publications:

1. "Efficiency at the maximum power of the power law dissipative Carnot-like Heat engines with non-adiabatic dissipation" *M Ponmurugan, Commun. Theor. Phys.* **72**, 025601 (2020)
2. "General relations between the power, efficiency and dissipation for the irreversible heat engines in the nonlinear response regime" *I. Iyyappan and M. Ponmurugan, Phys. Rev. E* **97**, 012141 (2018).
3. "Tsallis Statistics Generalization of nonequilibrium work relations"
M. Ponmurugan, Phys. Rev. E **93**, 032107 (2016).
4. "Transient-state fluctuationlike relations for the driving force on a biomolecule"
M. Ponmurugan, and S. Vemparala, Phys. Rev. E (Rapid) **84**, 060101 (2011).
5. "Generalized detailed Fluctuation Theorem under nonequilibrium feedback control"
M. Ponmurugan, Phys. Rev. E **82**, 031129 (2010).

Link : <https://scholar.google.co.in/citations?user=VSs8ufwAAAAJ&hl=en>