

Profile Page



Name : Dr Ravi Verma

Designation : Assistant Professor Grade-i

Department : Instrumentation & Control Engg.

Qualification : Post Doctorate Instrumentation and Applied Physics (Indian Institute of Science, Bangalore)
Ph.D. Instrumentation and Applied Physics (Indian Institute of Science, Bangalore)
Masters in Engineering Instrumentation and Applied Physics (Indian Institute of Science, Bangalore)
B.Tech. Electronics Instrumentation and Control (Y.M.C.A. faridabad)
Diploma Mechanical (Government Polytechnic Ambala)

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Research Interests :

Instrumentation and Control, Low temperature Instrumentation, Achieving Ultra High Vacuum for space simulation, Cryosorption Pump, Measurement of Thermal properties of Materials.

Other Profile Links :

Google Scholar Link :

Dr. Ravi Verma [Click Here](#)

Personal Web Link :

Ravi Verma [Click Here](#)

Journal Publications :

Year	Journal	Publication
2020	Cryogenics, 108, 103089	Ravi Verma, HN Nagendra, GA Vivek, Srinivasan Kasthuriengan, NC Shivaprakash, Upendra Behera, Studies on activated carbons towards the performance improvement of cryosorption pump

2019	International Journal of Thermal Sciences, 136, 389-395	Aritra Chatterjee, Ravi Verma, HP Umashankar, S Kasthuriengan, NC Shivaprakash, Upendra Behera, Heat conduction model based on percolation theory for thermal conductivity of composites with high volume fraction of filler in base matrix
2019	Composites Part B: Engineering, 176, 107163	Ravi Verma, HN Nagendra, VB Mahesh Kumar, GA Vivek, Srinivasan Kasthuriengan, NC Shivaprakash, Upendra Behera, Performance improvement of cryosorption pump by enhancing thermal conductivity of epoxy-aluminum composite
2018	Cryogenics, 95, 116-126	Aritra Chatterjee, Ravi Verma, NC Shivaprakash, S Kasthuriengan, Upendra Behera, Analytical heat conduction model of particle reinforced tertiary composite materials based on complete spatial randomness of fillers in base matrix and its application in the development of cryosorption pump
2017	International Journal of Thermal Sciences, 118, 292-302	Ravi Verma, Aritra Chatterjee, Azlaan Mustafa, NC Shivaprakash, S Kasthuriengan, Upendra Behera, Analytical heat conduction model of a composite material based on complete spatial randomness of filler in base matrix
2017	Review of Scientific Instruments, 88, 8	Ravi Verma, Aritra Chatterjee, Srinivasan Kasthuriengan, NC Shivaprakash, Upendra Behera, Note: Development of a cryocooler based high efficiency cryosorption pump

Conference Publications :

Year	Conference	Publication
2020	IOP Conference Series: Materials Science and Engineering	HN Nagendra, R Verma, P Sagar, K Akber, S Kasthuriengan, NC Shivaprakash, AK Sahu, U Behera, Design optimization and calibration of a void fraction measurement capacitance sensor for LN2 flow
2020	Indian Journal of Cryogenics	HN Nagendra, Ravi Verma, S Kasthuriengan, NC Shivaprakash, AK Sahu, Upendra Behera, Development of simple capacitance and diode based void fraction sensors for cryogenic two phase
2019	IOP Conference Series: Materials Science and Engineering	Ravi Verma, HN Nagendra, S Kasthuriengan, NC Shivaprakash, Upendra Behera, Thermal conductivity studies on activated carbon based cryopanel
2019	IOP Conference Series: Materials Science and Engineering	HN Nagendra, AV Karthik, Ravi Verma, S Kasthuriengan, NC Shivaprakash, AK Sahu, Upendra Behera, Numerical and experimental investigations on two-phase flow of liquid nitrogen in a flexible transfer line
2019	Indian Cryogenics Council	S Kasthuriengan, Ravi Verma, U Behera, Harith Unnikrishnan, GA Vivek, Pumping speed studies of different activated carbons in a cryocooler based cryosorption pump
2018	Indian Cryogenics Council	Ravi Verma, NC Shivaprakash, Upendra Behera, S Kasthuriengan, GJ Bharath, R Gangradey, Thermal conductivity studies of epoxy-aluminium composites (300 K-4.5 K) for the development of cryosorption pumps

2018	IOP Conference Series: Materials Science and Engineering	R Verma, NC Shivaprakash, S Kasthuriengan, U Behera, Optimization of epoxy-aluminium composites used in cryosorption pumps by thermal conductivity studies from 4.5 K to 300 K
2017	IOP conference series: materials science and engineering	Ravi Verma, Upendra Behera, S Kasthuriengan, NC Shivaprakash, SS Udgata, R Gangradey, Measurement of thermal conductivity of materials down to 4.5 K for development of cryosorption pumps
2017	IOP Conference Series: Materials Science and Engineering	S Kasthuriengan, GA Vivek, Ravi Verma, Upendra Behera, Swarup Udgata, Ranjana Gangradey, Performance studies of Cryocooler based cryosorption pumps with indigenous activated carbons for fusion applications

Book/Chapter Publications :

Type	Title	Publisher	Authors	ISBN/ISSN No.	Year
BOOK CHAPTER	A review on the classification, characterisation, synthesis of nanoparticles and their application	BENTHAM SCIENCE	Ravi Verma, Shanky Jha, D. Harimurugan, H. N. Nagendra, Srinivasan Kasthuriengan, N. C. Shivaprakash, Upendra Behera		2022
BOOK	GATE 2012 THEORY, OBJECTIVE QUESTIONS WITH DETAILED SOLUTIONS	CBS	RAVI VERMA AND SATISH KARNA	8123920180	2012
BOOK	GATE 2012 INSTRUMENTATION ENGINEERING TOPIC WISE PREVIOUS YEARS SOLVED PAPERS	CBS	RAVI VERMA AND SATISH KARNA	9788123923109	2012

Research Projects :

Role	Project Type	Title	Funding Agency	From	To	Amount	Status	Co-Investigator
Principal Investigator	Research Project	Development and Performance Evaluation of Cryocooler based Cryosorption pump for Space applications	DST SERB SRG	24-12-2021	23-12-2023	30 LAKHS	RUNNING	N.A.

Events Organized :

Category	Type	Title	Venue	From	To	Designation
	National					

STC	International	Internet of Things for Healthcare Applications (ITHA-2020)	ONLINE MODE (NIT JALANDHAR)	27-8-2020	31-8-2020	CONVENER
STC	National	Modeling and Identification of Physiological Systems (MIPS-2020)	ONLINE MODE (NIT JALANDHAR)	27-7-2020	31-7-2020	COORDINATOR
STC	National	Cryogenics and Composites: Theory and Applications (CCTA 2020)	ONLINE MODE (NIT JALANDHAR)	3-8-2020	7-8-2020	CONVENER
STC	National	Industry 4.0- Industrial Automation Solutions & Applications (IASA-2020)	ONLINE MODE NIT JALANDHAR	21-9-2020	25-9-2020	COORDINATOR
STC	National	Exploratory Applications of Control and Instrumentation (EACI-2020)	ONLINE MODE (NIT JALANDHAR)	26-9-2020	30-9-2020	COORDINATOR

Professional Affiliations :

Designation	Organization
PERMANENT MEMBER	IISc Alumni Association
PERMANENT MEMBER	Indian Science Congress

PG Dissertation Guided :

Student Name	Dissertation Title	Status	Year	Co-Supervisor
SHANKY JHA	Development of bonding strength experimental set-up at cryogenics temperature	Passed out	2022	N.A.

Admin. Responsibilities :

Position Held	Organization	From	To
ASSOCIATE LAB IN CHARGE: ROBOTICS LAB	NIT JALANDHAR	15-2-2020	15-2-2022

Award and Honours :

Title	Activity	Given by	Year
BEST PAPER AWARD	RESEARCH PAPER	REVA UNIVERSITY BANGALORE	2019