

RESUME

Dr. K. SURESH KUMAR, MSc., MPhil., PhD., DCM

Associate Professor of Physics

Department of Science and Humanities

P.T.Lee Chengalvaraya Naicker College of Engineering and Technology

Vallal P.T.Lee Chengalvaraya Naicker Nagar,

Oovery, Veliyur Post, Kanchipuram – 631502

Cell: 9865810987, Email ID: drksureshkumar@ptleecncet.com

Sl. No	Descriptions	Particulars
1	Name of the Candidate (in capital letters)	K. SURESH KUMAR
2	Father Name	P. KALIAPPAN
3	Date of Birth & Age:	30.07.1980 & 40
4	Native Place	DHARMAPURI
5	Caste/Community	MBC
6	Name of the Community	VANNIYAR KULA KSHATRIYAR
7	a)Present Address	Dr. K. SURESH KUMAR, S/O P. KALIAPPAN, B2, SUBITCHA NILAYAM, KAMARAJAR SALAI, GEM NAGAR EXTENSION, SEVILIMEDU POST, KANCHIPURAM PIN CODE: 631502.
	b)Permanent Address:	Dr. K. SURESH KUMAR, S/O P. KALIAPPAN, NEW ODDUPATTI, BOMMIDI POST, PAPPIRADDYPATTI TALUK, DHARMAPURI DISTRICT, PINCODE: 635301.
8	Contact No & E-Mail Id	Cell: 9865810987. E-mail : lectsuresh25@gmail.com

9. Educational Qualifications:

Degree / Diploma	Subject	Year of passing	Name of the School / College	Name of the Board / University
PhD	PHYSICS	2017	IGCAR, KALPAKKAM	UNIVERSITY OF MADRAS
M.Phil	PHYSICS	2006	ANNAMALAI UNIVERSITY	ANNAMALAI UNIVERSITY
MSc	PHYSICS	2004	SACRED HEART COLLEGE, TIRUPATTUR	UNIVERSITY OF MADRAS
BSc	PHYSICS	2001	GOVT ARTS COLLEGE MEN, KRISHNAGIRI	PERIYAR UNIVERSITY
HSC	MPCB	1997	GOVT. H.S.S, BOMMIDI	TAMIL NADU STATE BOARD
SSLC	TAMIL NADU STATE BOARD	1995	GOVT. H.S.S, BOMMIDI	TAMIL NADU STATE BOARD

10. Experience in chronological order :- 18.2 YEARS

S. No	Name of the Institution	Post held	Period		
			From	To	Total
a.	P.T.LEE CHENGALVARAYA NAICKER COLLEGE OF ENGINEERING AND TECHNOLOGY, KANCHIPURAM	ASSOCIATE PROFESSOR	01.01.2013	TILL DATE 20.05.2022	9.5 YEARS
b.	P.T.LEE CHENGALVARAYA NAICKER COLLEGE OF ENGINEERING AND TECHNOLOGY, KANCHIPURAM	ASSISTANT PROFESSOR/ LECTURER	20.12.2004	31.12.2012	8.1YEARS
c.	Er. PERUMAL MANIMEGALAI COLLEGE OF ENGINEERING, HOSUR	LECTURER	24.04.2004	19.12.2004	8 MONTHS

10.1 Other Academic Services:

S. No	Responsibility
1	Board Chairman for Central Valuation
2	University Representative for Examinations
3	Squad Member for University Examinations
4	External Examiner
5	Academic coordinator (S&H)
6	HOD (S&H)

11. Paper presented in National and International Conferences

S. No.	Theme	Name of the Institution	Organized / Attended	Duration	
				From	To
1.(a)	Conferences (National level) Formation of laser induced downward expanding vapour region in autogenous welding of AISI 316L Stainless Steel joint using pulsed Nd: YAG laser	Venkateshwara University, Thirupathi, AP.	Attended and Paper Presented	03.12.2014	06.12.2014
1.(b)	Conferences (International level) Numerical modeling of an autogenous butt joint welding of low carbon ferritic steel sheets using a pulsed Nd: YAG laser beam	Sri Chandrasekendra Saraswathi Vishwa Mahavidyalaya University, Kanchipuram.	Attended and Paper Presented	18.12.2014	19.12.2014
1.(c)	Conferences (National level) Process of formation of keyhole in autogenous welding of AISI 316L Stainless Steel using pulsed Nd: YAG laser	VIT University, Chennai.	Attended and Paper Presented	03.07.2014	05.07.2014
1.(d)	Conferences (International level) Numerical Modeling and Simulation of a Butt Joint Welding Of AISI 316L Stainless Steels Using a Pulsed Laser Beam	GRIET, Hyderabad	Attended and Paper Presented	22.03.2015	23.03.2015
1.(e)	Conferences (International level) Analytical modeling of temperature distribution, peak temperature, cooling rate and thermal cycles in a solid work piece welded by laser welding process	GRIET, Hyderabad	Attended and Paper Presented	08.03.2014	09.03.2014
1.(f)	Conferences (National level) LASER in Modern Material Processing and Manufacturing	P.T.Lee Chengalvaraya Naicker College of Engineering and	Attended and Paper Presented	14.03.2014	14.03.2014
1.(g)	Conferences (International level) Conductive and convective heat transfer during welding of AISI316L stainless steel using pulsed Nd: YAG laser	Sri Chandrasekendra Saraswathi Vishwa Mahavidyalaya University, Kanchipuram.	Attended and Paper Presented	25.06.18	26.06.18

1.(h)	Conferences (International level)	LASER: A Novel Tool for Welding and Manufacturing	The first material research society of Thailand,2017 (MRS-	Attended and Paper Presented	31.10.2017	03.11.2017
1.(i)	Conferences (International level)	An investigation on laser induced downward expanded vapour region in laser weld butt joint of AISI 316L stainless steel	Adhi College Of Engineering & Technology, Tamil Nadu, India	Attended and Paper Presented	08.05.2019	10.05.2019
1.(j)	Conferences (International level)	Physical characteristics of keyhole in 316L Stainless Steel joint during an autogenous pulsed laser beam welding	Sri ChandraSekhar endra Saraswathi Viswa Mahavidyalaya	Attended and Paper Presented	21.03.2019	22.03.2019
1.(k)	Conferences (International level)	Techniques for evaluating microstructure and mechanical properties of laser welded joints	Jeppiaar Institute of technology	Attended and Paper Presented	06.09.2019	06.09.2019
1.(l)	Conferences (International level)	Modeling and simulation of an autogeneous butt joint welding of AISI 316L stainless steel using a pulsed Nd:YAG laser beam.	Sri ChandraSekhar endra Saraswathi Viswa Mahavidyalaya	Attended and Paper Presented	02.03.2017	02.03.2017
1.(m)	Conferences (International level)	Modern Trends in Materials Technology (2009)	Sri Venkateshwara college of Engineering, Sriperumpudur, Chennai.	Attended	19.01.2009	20.01.2009
1.(n)	Conferences (International level)	International Conference on Mechanical, Materials and Manufacturing (2009)	Adhi college of Engineering, Chennai	Attended	29.05.2020	30.05.2020

12. Trainings undergone:

S. No	Nature of Training	Theme	Name of the Institutions	Duration	
				From	To
1.(a)	Workshop	Exploring Plasma Technology for Material Processing (PSSI PSC 2014)	BRNS – Plasma Scholar Colloquium and VIT, Chennai	03.07.2014	05.07.2014
1.(b)	Workshop	Writing Scientific proposals and Papers for Quality Research” (2013)	National Council for Science and Technology Communications, New Delhi and SCSVMV university, Kanchipuram.	14.02.2013	14.02.2013
1.(c)	Workshop	Welding Research today: Challenges and Opportunities (WRT 2012)	Indian Institute of Technology, Madras	23.11.2012	24.11.2012
1.(d)	Workshop	Micro and Nano Technology: Advances and Implications (2008)	SCSVMV university, Kanchipuram.	21.03.2008	22.03.2008
1.(e)	Workshop	Laser Assisted Material Processing (LAMP 2K14)	Centre for Materials Joining & Research (CEMAJOR), Annamalai University, Tamil Nadu	27.12.2014	27.12.2014
1.(f)	Workshop	Instrumentation techniques in physics [PINTECH'15]	SCSVMV University, Kanchipuram.	06.11.2015	06.11.2015
1.(g)	Workshop	Crystal Growth Methods	Sri Sivasubramaniya Nadar College of Engineering	06.01.2007	07.01.2007
1.(h)	Workshop	Three dimensional structure determination of biomolecules	Ramakrishna Mission Vivekananda College (Autonomous)	15.12.2006	16.05.2006
1.(i)	Workshop	International workshop on functional materials (IWFm 2016)	SCSVMV University, Kanchipuram.	29.11.2016	29.11.2016
1.(j)	Workshop	Recent developments in advanced materials (RDAM-17)	Jeppiaar Institute of Technology	19.07.2017	19.07.2017
1.(k)	Workshop	Effective way of writing research papers for journals, conference and submission of project proposals for funding agencies	Pallavan College of Engineering , Kanchipuram	21.01.2017	21.01.2017

1.(l)	Workshop	Soft skills: interpersonal relation for effective communication	Panimalar engineering college	10/6/2020	10/6/2020
1.(m)	Workshop	Recent Development and Advances in manufacturing processes-2020	NIT, Nagaland, India	07.12.2020	11.12.2020
2.(a)	Refresher Courses	Non Destructive Testing	ISNT, Chennai chapter and Centre for faculty development, Anna University	15.11.2003	16.11.2003
2.(b)	Refresher Courses	Quantitative Microscopy	ASM-IIM Program – IIT Madras	12.12.2013	13.12.2013
2.(c)	Refresher Courses	Materials Characterization	ASM-IIM Program – IIT Madras	16.12.2013	19.12.2013
2.(d)	Refresher Courses	Materials Characterizations and Failure analysis (2011)	IIT Madras	04.03.2011	05.03.2011
2.(e)	Refresher Courses	Metallurgical Aspects related to Welding (MARWEL 2008)	Indian Institute of Welding, Chennai Branch	25.09.2008	26.09.2008
2.(f)	Refresher Courses	Written English Skills	INTELLIEXPERT	24.09.2012	28.09.2012
2.(g)	Refresher Courses	Advanced Materials Research	Indian ceramic society and bharath institute of engineering &technology	15-6-2020	19-6-2020
2.(h)	REFRESHER COURSES	ARTIFICIAL INTELLIGENCE AND ITS APPLICATIONS	RAMCHANDRA COLLEGE OF ENGINEERING	25-5-2020	30-5-2020
2.(i)	REFRESHER COURSES	PHYSICS OF MATERIALS	JAIN UNIVERSITY	28-5-2020	30-5-2020
2.(j)	REFRESHER COURSES	RESEARCH METHODOLOGY	JEPPIAAR INSTITUTE OF TECHNOLOGY	1/6/2020	2/6/2020
2.(k)	REFRESHER COURSES	ADVANCED MATERIALS FOR ENERGY STORAGE APPLICATIONS	Velammal Institute of Technology	18.07.2020	22.07.2020
2.(i)	REFRESHER COURSES	Faculty Development Programme on Teaching, Learning and Research in Literature & Language	GOVT. V.Y.T.PG. AUTONOMOUS COLLEGE, DURG.	01.07.2020	05.07.2020

2.(j)	REFRESHER COURSES	Recent advances in Process	OP Jindal university	13.07.2020	17.07.2020
NPTEL COURSES					
3.(a)	Orientation Courses	Solid State Physics (12 weeks)	NPTEL, IIT, Kharagpur	July, 2019	October, 2019
3.(b)	Orientation Courses	VLSI chip design hands on using open source EDA	IIITDM, Jabalpur and Sri Sankara arts and science, Kanchipuram	16.12.2019	20.12.2019
3. ©	Orientation Course	Nature and Properties of Materials III	IIT, Kanpur	Feb",2020	April 2020.
4 (d)	Orientation Course	Fundamentals of Lasers	IIT, Kanpur	Aug.,2020	Dec.,2020

12 (a) Research Profile (Dr.K.Suresh Kumar)

S.No	ID Name	ID Link
1	ORCHID	https://orcid.org/0000-0002-7570-1894
2	GOOGLE Scholar	https://scholar.google.co.in/citations?hl=en&user=fzMeHC EAAAAJ#
3	Publons-Web of Science Research ID	www.researcherid.com/rid/W-6109-2018
4	Scopus ID	56964859200

13. Details of Research Publications with ISSN / Volume & Issue No / Year

S No.	Title of the Article	Journal in which Published	Month/ Year of Publication	UGC Recognized Journal for Arts & Scopus/SCI journals for Science
1	Modeling and analysis of Transient thermal responses during welding of 316L stainless steel and low carbon steel joint using pulsed Nd: YAG laser	International Journal of Applied Engineering Research	10 (22), 44118-4 4125, 2015, ISSN: 0973-9769.	Citation index : 2, Scopus Indexed UGC approved(64529)
2	Modeling of heat and mass transportation in the keyhole of 316L stainless steel and steel joints during pulsed Nd: YAG laser welding	International Journal of Applied Engineering Research	10 (22), 43239-4 3243, 2015. ISSN: 0973-9769.	Citation index : 2, Scopus Indexed UGC approved(64529)
3	Analytical modeling of temperature distribution, peak temperature, cooling rate and thermal cycles in a solid work piece welded by laser	Procedia materials science	6, 821-834, 2014, ISSN: 2211-8128.	Citation index : 25 (I'10 index), (h- index) Scopus Indexed UGC approved (48955)

4	Numerical modeling and simulation of a butt joint welding of AISI 316L stainless steels using a pulsed laser beam	Materials Today: Proceedings	2 (4-5), 2256-2266, 2015, ISSN: 2214-7853	Citation index : 11 (I¹⁰ index), (h- index) Scopus Indexed UGC approved (49021)
5	Laser beam a novel tool for welding: A review	IOSR Journal of Applied Physics	8 (6), 08-26,2016, ISSN: 2278-4861	Citation index : 07 (h- index), UGC approved (49054@2016)
6	Conductive and convective heat transfer during welding of AISI 316L stainless steel using pulsed Nd: YAG laser	Materials today: Proceedings	August, 2019, ISSN: 2214- 7853.	Scopus Indexed UGC approved (49021)
7	An investigation on laser induced downward expanded vapour region in laser weld butt joint of AISI 316L stainless steel	IOP materials Science and Engineering	July, 2019, ISSN: 1757-899X	Scopus Indexed UGC approved
8	Physical characteristics of keyhole in 316L Stainless Steel joint during an autogenous pulsed laser beam welding	Lecture Notes in Mechanical Engineering	Accepted in March, 2019, ISSN: 21954364	Scopus Indexed UGC approved
9	Numerical modeling of an auto genous butt joint welding of low carbon ferritic steel sheets using a pulsed Nd: YAG laser beam	Indian Journal of Science	14 (43), 143-50, 2015ISS N: 2319-7730	Citation index : 04 (h- index), UGC approved
10	Optimization of operating parameters for autogenous welding of AISI 316L stainless steel and steel using pulsed Nd: YAG laser	IOSR Journal of Applied Physics	8 (3), 46-54, 2016, ISSN: 2278-4861	Citation index : 02, UGC approved (49054@2016)
11	Selection and Precise Application of Operating Parameters of Nd: YAG and Other Laser Sources for Material Processing	Journal of material science and engineering	4, 188, 2015, ISSN: 2169-0022	Citation index : 02
12	Modelling and analysis of temperature distribution and thermal cycles on a 316L Stainless steel during laser welding	International Journal of current science and technology	4 (5), 209-215, 2015. ISSN : 2320-8090	Citation index : 01 UGC approved

13	A Literature survey on modeling of laser welding and its related processes	IOSR Journal of Applied Physics	8 (6), 42-53, 2016, ISSN: 2278-4861	Citation index : 01 UGC approved (49054@2016)
14	LASER: A Novel Tool for Welding and Manufacturing	The first material research society of Thailand, 2017 (MRS-Thailand, 2017)	Dec, 2017, ISSN: 2214-7853.	Scopus Indexed
15	Modeling and analysis of transient thermal responses during dissimilar welding of 316l stainless steel and mild steel using pulsed Nd YAG laser	International Journal of current science and technology	2017, ISSN: 2320-8090.	Indexed in Google scholar
16	Investigation on Transient Thermal Responses on 316L Austenitic Stainless Steel and Low Carbon Ferritic Steel Welding Using Pulsed Nd:YAG Laser	Journal of Material Sciences & Engineering	4 (6), 100197, ISSN: 2169-0022	Indexed in Google scholar, Publons
17	An overview of the experimental techniques for characterization of laser-welded metal joints	Materials Today: Proceedings	September, 2020, ISSN: 2214- 7853.	Scopus Indexed UGC approved(49021)
18	Modeling and simulation for welding of AISI 316L stainless steel using pulsed Nd:YAG laser	International journal of material sciences	12(1), 2017, 1-12, ISSN: 0973-4589	Indexed in Google scholar

14. Conferences / Seminar/Symposiums Organized:

S. No.	Theme	Name of the Institutions	Organized	Duration		
				From	To	
(a)	Seminars	Recent trends in nano science and technology	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	02.02.2017	02.02.2017
(b)	Seminars	Crystallography and drug design	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	12.04.2017	12.04.2017
©	Seminars	Smart materials	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	18.04.2011	18.04.2011
(d)	Seminars	Transforms in transforming engineering	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	13.10.2013	13.10.2013
(e)	Seminars	Innovation techniques in mathematics	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	24.03.2014	24.03.2014
(f)	Seminars	Usage of English language for engineers	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	24.03.2014	24.03.2014
(g)	Quiz	Physics Quiz, 2020	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	10/6/2020	10/6/2020
(h)	Webinar	Road map to get quality patent	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	18.06.2020	18.06.2020
(i)	Webinar	Smart engineering materials and applications	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	12.07.2020	12.07.2020

(j)	Webinar	Differential equations and applications	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	27.4.2020	27.4.2020
(k)	Webinar	Communicative approach in English	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	23.07.2020	23.07.2020
(l)	Seminar	Recent trends in functional materials	P.T.Lee Chengalvaraya Naicker College of Engineering and Technology	Organized	18.04.2022	18.04.2022