

Faculty Profile

Dr. Harisha Kumar K

Assistant Professor (Senior Scale)

Department of Physics

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Date of Birth: 12-11-1987



Educational Qualifications:

Exam Passed	Board/ University	Subjects	Year	Division/Grade Merit etc.
High School	K.S.S.E.B	Social Sciences, Science	2003	80.16%
Higher Secondary or Pre-degree	PU Board	PCMB	2005	88.66%
Bachelor's Degree	Mangalore University	Physics, Chemistry, Mathematics	2008	93.2% (5 th Rank)
Master's Degree	Mangalore University	Physics	2010	80.45% (1 st Rank)
NET	CSIR-HRD	Physics	2009	96 AIR
Ph.D.	Mangalore University	Doped tin oxide thin films grown by pulsed laser deposition for supercapacitor applications	2026	

Research Project:

Title of the Project	Name of the funding Agency	Duration	Remarks
Preparation of SnO ₂ Thin Film by Spray Pyrolysis and Application for the Detection of UV Radiation.	UGC MINOR	2 Years	Completed 1.35 Lakhs

Teaching Experience:

Courses Taught	Name of the University/ College / Institution	Duration
UG	University College of Science, Tumkur	9 Years
PG	University College of Science, Tumkur	4 Years

Research Papers Published:

1. **Harisha Kumar K*** and S M Dharmaprakash, *Transparent and conductive thin films of cadmium doped tin oxide fabricated by pulsed laser deposition technique*, Physica B: Condensed Matter, Vol. 665, 15 September 2023, 415059.
<https://doi.org/10.1016/j.physb.2023.415059>
2. **Harisha Kumar K***, Prasad Kumar and S M Dharmaprakash, *Influence of substrate temperature and laser wavelength on the structural, optical and electrical properties of laser ablated tin oxide thin films*, IOP Conf. Ser.: Mater. Sci. Eng. 122101 2023.
<https://doi:10.1088/1757-899X/1221/1/012023>
3. **Harisha Kumar K*** and S M Dharmaprakash, *The structural, optical and morphological study of pulsed laser fabricated Sb doped tin oxide thin film*, Materials Today: Proceedings 66P4 (2022) pp. 2650-2653. <https://doi.org/10.1016/j.matpr.2022.07.421>
4. **Harisha Kumar K*** and S M Dharmaprakash, *Electrochemical properties of cadmium doped tin oxide film and activated carbon composite electrode*, Thin Solid Films, Vol. 818, 140662, <https://doi:10.1016/j.tsf.2025.140662>
5. **Harisha Kumar K*** and S M Dharmaprakash, *Fabrication and electrochemical studies of antimony doped carbon composite electrode*, MMDA-24, Proceedings, pp. 15-23, ISBN: 978-93-340-9470-1.

Book/Book Chapters Published:

Sl. No.	Book Title	Authors	Publisher and ISBN
1.	Innovative Research Trends in Science and Technology Vol. I, 2024	Dr. Harisha Kumar K (Editor)	Bhumi Publishing India 978-93-95847-19-3
2.	Fundamentals of Physics: Electrostatics and Magnetism	Dr. Ramakrishna G, Dr. Malleshappa J, Dr. Prasannakumar J B Harisha Kumar K	Sapna Book House 978-93-88913-18-8 2018, 2019
3.	Fundamentals of Physics: thermodynamics, low temperature physics, radiation and optics	Prof. H Nagabhushana, Dr. Ramakrishna G, Dr. Malleshappa J, Dr. Prasannakumar J B Harisha Kumar K	Sapna Book House 978-93-87979-69-7 2018

4.	Fundamentals of Physics: Digital, Analog Circuits and Semiconductor Devices	Prof. H Nagabushana, Prof. C S Somashekharaiyah Dr. Prasannakumar J B Harisha Kumar K	Sapna Book House 978-93-87979-68-0 2018
5.	Undergraduate Physics Vol. III	Ramakrishna G, Mangala Gowri M, Harisha Kumar K, Narayan Gaonkar	Niruta Publications 2016
6.	Undergraduate Physics Vol. II	Ramakrishna G, Mangala Gowri M, Harisha Kumar K, Narayan Gaonkar	Niruta Publications 978-93-84262-31-0 2016
7.	Fundamentals of Physics: Digital, Analog Circuits and Semiconductor Devices	Prof. C S Somashekharaiyah Dr. Prasannakumar J B Mr. Harisha Kumar K	Sapna Book House 978-93-88913-80-5 2019
8.	Fundamentals of Physics: thermodynamics, low temperature physics, radiation and optics	Dr. Ramakrishna G, Dr. Malleshappa J, Dr. Prasannakumar J B Mr. Harisha Kumar K	Sapna Book House 978-93-87979-69-7 2019
9.	Fundamentals of Physics: Embedded system, introduction to microcontrollers, opamp and quantum mechanics	Dr. Prasannakumar J B Dr. Chethan Prathap K N Mr. Harisha Kumar K	Sapna Book House 978-93-89555-50-9 2020

Details of Orientation/Refresher's Course attended:

- Orientation Course at Academic Staff College, JNU, New Delhi from 02-04-2012 to 27-04-2012.
- Refresher Course on 'Quantum Mechanics' at Abdur Rahman University, Vandalur, Chennai from 24th November 2016 to 10th December 2016.
- NPTEL-AICTE certificate FDP course on "A Brief Course on Superconductivity" during January- February 2022.
- Faculty Development Course on Electronic Theory of Solids by IIT Kharagpur, NPTEL Online Certification Course January- April 2021.
- Physics Exposure Camp under Olympiad Program at Homi Bhabha Centre for Science Education (TIFR), Mumbai from 03-12-2018 to 07-12-2018.
- Refresher Course in Physics at MMTTC University of Hyderabad, Hyderabad from 26-02-2023 to 09-03-2023.
- NPTEL-AICTE certificate FDP course on "Physics of Functional Materials and Devices" during July- October 2024.

Seminars/ Workshops organised:

- KSTA sponsored two-day workshop on Recent Trends in Condensed Matter Physics held at Tumkur University on 16 and 17 Sept 2011. (Member of organizing committee).
- KSTA sponsored two-day workshop on Recent Trends in Condensed Matter Physics held at Tumkur University on 27 and 28 Sept 2013. (Member of organizing committee).
- Collaborators workshop at the Center of ART, SIT, Tumkur on 20th, 21st and 22nd February 2014.
- One day National Conference on Astronomy and Astrophysics at University College of Science on 05 February 2018.

- National Science Day Celebration Lecture Series on March 04, 2022 at University College of Science, Tumakuru.
- Orientation Towards Basic Physics Programme on January 18, 2023 at University College of Science, Tumakuru.
- Seminar on Attosecond Laser, on November 20, 2023 at University College of Science, Tumakuru.

Extension Activities:

- Science Popularization Programme at Government High School, Hettappanahatti, Sira Taluk on 26-07-2022.
- Science Popularization Programme at Karnataka Public School, Chikkanahalli, Sira Taluk on 06-09-2023.

Membership:

Life Member of Indian Physics Association, Mumbai.

Life Member of Karnataka Physics Association, Bangalore.

Administrative Responsibilities:

Sl. No.	Positions held	Duration
1.	Convenor, LIC, Tumkur University, Tumakuru	2024-25
2.	Nodal Officer, RUSA, Tumkur University, Tumakuru	07-04-2022 to 13-03-2023
3.	Chairman, BOE in PG Physics, Tumkur University, Tumakuru	December 2023- Feb 2024
4.	Coordinator, DOSR in Physics, UCST	24-12-2021 to 27-12-2023
5.	Member BOE, Tumkur University, Tumakuru	2022
6.	Assistant Registrar, Academic Section, TUT	20-07-2018 to December 2020
7.	Member BOAE, Tumkur University, Tumakuru	2020
8.	Program Officer, National Service Scheme, UCST	2012-13 to 2017-18
9.	Deputy Chief Superintendent, UG Examinations, University College of Science, Tumakuru	May 2017
10.	Custodian, UG Commerce Valuation	April/May 2018
11.	Deputy Custodian, B.Ed. Valuation	January 2014
12.	Deputy Custodian, B.Ed. Valuation	June 2013
13.	Deputy Custodian, UG Commerce Valuation	May-June 2012
14.	UG Examination Squad Member, TUT	November 2012
15.	UG Examination Squad Member, TUT	November 2011

Paper presentation in Seminars/ Conferences/full paper in Conference Proceedings:

Sl. No.	Description	International (Abroad/Within country)/ National / State/University
1	<i>'Influence of substrate temperature and laser wavelength on the structural, optical and electrical properties of laser ablated tin oxide thin films'</i> at International E-Conference on Physics of Materials and Nanotechnology ICPN 2021, October 28 to 30, 2021 at Mangalore University, Mangalagangothri.	International E Conference
2	<i>'The structural, optical and morphological study of pulsed laser fabricated Sb doped tin oxide thin film'</i> , International Conference on Recent Advances in Engineering Materials (ICRAEM 2022) at Alva's Institute of Engineering and Technology, Moodbidri, India 03-05 March, 2022.	International Conference
3	<i>'Fabrication and electrochemical studies of antimony doped tin oxide carbon composite electrode'</i> , 2 nd National Conference on Modern Materials, Devices and Applications at Maharani Cluster University, Palace Road, Bangalore, November 4 and 5, 2024. (Best oral presentation award).	National Conference

Seminars, Conferences/ Workshops attended:

Name of the Seminar/ Conference/ Symposia Workshop, etc.	Name of the Sponsoring Agency	Place and Date
Induction Program for Newly Appointed Faculty of Aided Degree Colleges and Universities	Karnataka State Higher Education Council, Bengaluru.	20-22 September 2011 Bengaluru
One Day Seminar on Frontiers of Nanotechnology	Karnataka State Higher Education Council, Bengaluru.	31 May 2011 Bengaluru
Social Relevance's of Nano Technology	Tumkur University and Karnataka State Higher Education Council, Bengaluru.	31 December 2011 Bengaluru
Nuclear Applications, Hazards and Safety Measures	BRFST, DRDO, BRNS and Dept. of Physics Tumkur University, Tumkur.	10-02-12 to 11-02-12
Vedanta: A Holistic Approach	Vedanta Bharathi and Tumkur University	26-28 December 2011 Tumkur
National Conference on Karnataka Music and Culture	Tumkur University, Tumkur Gayana Samaja, Bengaluru.	Gayana Samaja Bengaluru. 16-03-13

International Conference on Contemporary Human Sufferings: Wisdom of Bhagavan Buddha	Tumkur University, Tumkur Sara Jey Monastic University, Bylkuppe.	Tumkur University, Tumkur. 06-03-13
International Conference on Yoga in Education	Tumkur University, Tumkur	Tumkur University, Tumkur, 27-28 Nov 2012
Training Program for NSS Program Officers	ETI Mysore, KSOU Mysore	19-01-13 to 25-01-13
Clean Room Training Workshop	SIT, Tumkur	18-12-14, 25-12-14, 01-01-15 and 15-01-15
Emerging trends in basic sciences and humanities	University College of Science	26 th August 2015, Tumakuru.
Workshop on Successful Execution of NSS Programs	Tumkur University	15 th September 2015, Tumakuru
National workshop on Theoretical Physics	Alva's College, Moodbidri	26 th and 27 th February, 2016, Moodbidri.
Design and development of low-cost equipment for Physics and Electronics	University College of Science, Tumakuru	9-12 March, 2016, Tumakuru.
National Conference on Human Rights: Contemporary Issues and Challenges	University College of Science, Tumakuru	28 th January 2017
Health and Fitness in Modern Society	University College of Science, Tumakuru	13 th April 2017
Workshop on CBCS Syllabus	Sri Siddaganga College of Arts Science and Commerce	01 July 2017
Two days National workshop on Laser and Light	University College of Science, Tumakuru	17 and 18 th August 2017
National Conference on Trends in Advanced Materials and Their Applications	Tumkur University, Tumakuru	30 November 2017
One day National Conference on Astronomy and Astrophysics	University College of Science, Tumakuru	05 February 2018
National webinar on Importance of Precise Measurements in Science and Technology and Advances in Materials Science	Crescent Institute of Science and Technology Chennai	15-06-2020

A Two Day Online National Conference on Nano Materials and Characterization Techniques in Physics and Materials Research	Dr. A V Baliga College of Arts and Science, Kumta	01-08-2020 and 02-08-2020
One day international webinar on “Materials for Energy Applications”	DOSR in Physics, Tumkur University, Tumakuru	10 November 2021
Training program under Intellectual Property Awareness Mission organized by The Government of India	Online	January 13, 2022
National Level Online Workshop on Artificial Intelligence Awareness in Physics	Online, Indian Association of Physics Teachers	15 Feb to 20 Feb 2024
National Level Talk on CV Raman: random Reflections from Different Angles	Online	27-02-2024