

FACULTY PROFILE

Dr. Shashikala Yalagi

Assistant Professor

Department of Studies in Physics

Qualification : M.Sc, K-SET, Ph.D

Area of Specialization : Atomic and Molecular Physics

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Vision

To utilize my research and teaching experience in building the career of students along with my professional growth. To work for the institutional growth by maintaining the quality parameters set by regulatory bodies.

Educational Qualifications

Sl. No.	Degree	Specialization/ Subjects	University	Year of Award/ Passing
1	Ph.D	Vibrational Spectroscopy	Dr. Jayashree J. Tonannavar Karnatak University, Dharwad	2021
2	K-SET	Physical Sciences	K-SET centre, University of Mysore	2015
3	PG	Physics	Karnatak University, Dharwad	2013
4	UG	Physics, Chemistry, Mathemattics	Karnatak University, Dharwad	2011

Professional Details (Academic/Research Experience)

Sl. No.	Designation	Institution/University	UG/PG	From	To
1	Assistant Professor	Department of Studies in Physics, Davangere University	PG	May, 2019	--
2	Guest Faculty	SVM Arts, Science and Commerce, Ilkal	UG	Dec, 2017	Apr, 2019
3	Research Scholar	Department of Physics, Karnatak University, Dharwad	Ph. D	Dec, 2013	Dec, 2017
4	Guest Faculty	SVM Arts, Science and Commerce, Ilkal	UG	Jul, 2013	Dec, 2013

Areas of Research Interest:	
1.	Vibrational Spectroscopy
2.	Absorption and fluorescence Spectroscopy

Research Publications:	
International Journals	
1.	<i>DL-3-Aminoisobutyric acid: vibrational, NBO and AIM analysis of N-H...O bonded-zwitterionic dimer model</i> Shashikala Yalagi, Jagdish Tonannavar, Jayashree Tonannavar Heliyon 5 (2019) e01933
2.	<i>Information Communication Technology (ICT) in Higher Educational Institutions</i> Shashikala Yalagi Quality Concerns in Higher Education , (2018) 96-101.
3.	<i>Experimental and DFT dimer modeling studies of the H-bond induced-vibration modes of L-β-Homoserine</i> Shashikala Yalagi, J. Tonannavar, Jayashree Yenagi Spectrochimica Acta Part A , 181 (2017) 109-115
4.	<i>A study of vibrational spectra of zwitterionic 3-Aminobutanoic acid, as supported by density functional calculations</i> Jayashree Yenagi, Shashikala Yalagi and J. Tonannavar Asian Journal of Physics , 24(5) (2015) 703-711

Presentations at International Conferences	
1.	<i>Experimental and DFT dimer vibrational analysis of (S)-(-)-(α)-Allylalanine</i> at 8 th International Conference on Perspectives in Vibrational Spectroscopy (ICOPVS-2020) held at JNCASR, Bangalore on 24-28 February, 2020.
2.	<i>Analysis of zwitterionic vibrational modes in (R)-(+)-α-Methylvaline, aided by Self-Consistent Reaction Field dimer modeled in water solvent</i> at ICOPVS-2018 held at BARC, Mumbai on 25-29 November, 2018.
3.	<i>DFT Inter-molecular H-bonded model for the vibration structure of L-β-Homoserine</i> at ICOPVS-2016 held at University of Lucknow, Lucknow during 5-8 November, 2016.

Presentations at National Conferences	
1.	<i>Experimental and DFT analysis of N-H...O bonding in α-Methyl-L-Phenylalanine zwitterionic dimer</i> at National Conference on Emerging Trends in Physics (NCETP) Organized by Department of Physics, Tezpur University , Assam on 16 th June, 2021.
2.	<i>DL-3-Aminoisobutyric acid as zwitterionic dimer: Experimental and DFT analysis</i> at 24th DAE-BRNS National Laser Symposium held at RRCAT , Indore on 2-5 December, 2015

Details of Translation work carried out:	
1.	Translated the lectures of SWAYAM course of 'Engineering Mechanics' in kannada Language.
2.	Translated the lectures of SWAYAM course of 'Quantum Mechanics' in kannada Language.
3.	Translated 'Applied Physics – I' book for 1 st year Diploma Engineering under AICTE - 'Technical Book Writing and Translation Scheme.

Details of the Programmes attended:	
<i>Orientation Programme attended:</i>	
'4-week orientation programme for "Faculty in Universities/Colleges/Institutes of Higher Education, organized by Teaching Learning Centre, Ramanujan College, University of Delhi under MHRD-PMMMNTT during 26 th June – 24 th July, 2020.	
<i>Refresher Course attended:</i>	
UGC sponsored Online Refresher Course in Physics organized by UGC-HRDC, Sampalpur University during 16-29 September, 2021.	
<i>Short-term Course attended:</i>	
'5th Online Short-Term course on E-Content Development' organized by UGC-HRDC, Gujarat University during 14 – 20 May, 2020.	
<i>Faculty Development Programmes attended:</i>	
1.	FDP on 'Seeking solutions during and post pandemic Covid-19: A perspective from food security, health, education, economy and technology' organized by University of Buraimi, Oman during 21-26 June, 2020.
2.	FDP on 'Advanced materials and characterization' organized by NIT, Andhra Pradesh during 15-19 June, 2020

3. 'Green energy and renewable energy for Physics and Electronics teachers' organized by MHRD's FDP Centre, UGC-HRDC, Savitribai Phule University, Pune during 08-12 June, 2020.
4. Online FDP on 'Recent Trends in Material Frontiers' organized by St. Joseph's College of Engineering, Chennai during 29-30 May, 2020.
5. 'FDP on Material Science' organized by Thanthai Hans Roever College, Perambalur during 27 – 28 May, 2020.
6. International Level Online FDP on 'How to train Media Students to Handle Pandemics like Covid-19' organized by IQAC and Dept. of Multimedia and Mass Communication, Nirmala Memorial Foundation College of Commerce and Science in association with Griffith University, Australia during 04 – 08 May, 2020.
7. FDP organized by Davangere University, Davangere during 06 – 13 January, 2020.

Conference/Workshops/Trainings attended/organized:

International/National Conferences (Attended):

1. 'National Conference on Emerging Trends in Physics (NCETP)' Organized by Department of Physics, Tezpur University, Assam on 16th June, 2021.
2. 'International Virtual Conference on Advanced Materials (IVCAM 2020)' organized by Basavaprabhu Kore Arts, Science and Commerce College Chikodi on 14th July, 2020.
3. International Virtual Conference on 'Bhavishya of India after Covid-19' organized by Thakur College of Science and Commerce, University of Mumbai on 2nd May, 2020.
4. ICOPVS-2020 held at JNCASR, Bangalore on 24-28 February, 2020.
5. ಸ್ವದೇಶಿ ವಿಜ್ಞಾನ ಆಂದೋಲನ-ಕರ್ನಾಟಕ, ಬೆಂಗಳೂರು ಮತ್ತು ದಾವಣಗೆರೆ ವಿಶ್ವವಿದ್ಯಾಲಯ, ದಾವಣಗೆರೆ ಇವರ ಸಂಯುಕ್ತ ಆಶ್ರಯದಲ್ಲಿ ಆಯೋಜಿಸಿರುವ 15 ನೇ ಕನ್ನಡ ವಿಜ್ಞಾನ ಸಮ್ಮೇಳನ, ಜರುಗಿದ ದಿನಾಂಕ 15-17 ನೇ ಸೆಪ್ಟೆಂಬರ್ 2019.
6. ICOPVS-2018 held at BARC, Mumbai on 25-29 November, 2018.
7. ಕರ್ನಾಟಕ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಅಕಾಡೆಮಿ, ಮಾಹಿತಿ, ಜೈವಿಕ, ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಇಲಾಖೆ, ಬೆಂಗಳೂರು, ಕರ್ನಾಟಕ ವಿಶ್ವವಿದ್ಯಾಲಯ ಹಾಗೂ ಧಾರವಾಡ ಪ್ರಾದೇಶಿಕ ವಿಜ್ಞಾನ ಕೇಂದ್ರ, ಧಾರವಾಡ ಇವುಗಳ ಸಂಯೋಗದಲ್ಲಿ ಆಯೋಜಿಸಿರುವ "ಕನ್ನಡದಲ್ಲಿ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರಜ್ಞಾನ ಸಮ್ಮೇಳನ" ಜರುಗಿದ ದಿನಾಂಕ 23-24 ನೇ ನವೆಂಬರ್ 2018.
8. ICOPVS-2016 held at University of Lucknow, Lucknow during 5-8 November, 2016.

9. 24th DAE-BRNS National Laser Symposium held at RRCAT, Indore on 2-5 December, 2015.

Seminars Attended :

1. *Three days National Convention on NEP 2020* held during 21-23 September, 2020 organized by IQAC, Davangere University, Davangere.
2. *NAAC Revised Assessment and Accreditation Framework* held on 24th March, 2018 organized by SVM Arts, Science and Commerce College, Ilkal.
3. *National Seminar on Frontier Methods and Techniques for Probing Molecules and Materials* held during 21-22 March, 2018 organized by Dept. of Physics and Electronics, Karnatak University, Dharwad.
4. *National Seminar on Current Topics in Condensed Matter Physics* held during 27-28 March, 2017 organized by Dept. of Physics, Karnatak University, Dharwad.
5. *Laser Science and Applications* held during 8-9 March, 2013 organized by Dept. of Physics, Karnatak University, Dharwad.
6. *UGC National Seminar on Sustainable Solid Waste Management* held during 11-12 March, 2011 at SVM Arts, Science and Commerce College, Ilkal Karnataka.

Seminars organized:

1. National webinar on 'Smartness of smart materials' on 09th September, 2021.
2. National webinar on 'Particle Accelerators: Current and Future Application' on 19th July, 2021.
3. National webinar on 'White Dwarfs, Neutron Stars and Black Holes' on 13th July, 2021.
4. National webinar on 'Studies on Conducting Polymer Nanocomposites and its Applications' on 08th July, 2021.
5. National webinar on 'The Ubiquitous Gallium Nitride Nanostructures' on 07th July, 2021.
6. National webinar on 'Exploring Biomaterials for Energy and Environmental Applications' on 30th June, 2021.
7. National webinar on 'Ultrafast Optics' on 29th June, 2021.
8. National webinar on 'Arduino Microcontroller, Coding, I/O Interfacing and Circuit Simulation' on 27th June, 2021.
9. National webinar on 'Sensors' on 16th June, 2021

10. 'Celebration of National Science day and Inauguration of Physics forum – SPECTRUM' in association with IQAC, Davangere University on 23rd March, 2021.
11. International webinar on 'ICT Initiatives and Flipped Learning' on 28th August, 2020.
12. National webinar – Short term course on 'Basic Electronics' during 06 – 12 July, 2020.
13. National webinar on 'Raman Effect and its applications' on 25th June, 2020.
14. National webinar on 'Super Capacitors' and 'Flexible OLEDs – The Future of lighting and Display Technology' on 18th and 20th June, 2020.
15. National webinar on 'Biological effects of ionizing radiation, and 'Biological bases of radiation protection, on 12th and 17th June, 2020.
16. 'Celebration of National Science day' in association with IQAC, Davangere University on 28th February, 2020.

Workshops Attended:

1. AICTE –Technical Book Writing Workshop on 14 – 16 September, 2021 organized by AICTE, New Delhi.
2. Workshop on NAAC criteria on 03 – 10 February, 2021 organized by IQAC, Davangere University, Davangere.
3. Workshop on PEO's, PO's and CO's in Outcome based education environment organized by IQAC, Davangere University on 15-12-2020.
4. International online workshop on 'Nanomaterial Synthesis is Emerging Facet of the world' held on 20th May, 2020 organized by Late Pushpadevi Patil Arts and Science College, Risod.
5. 'Recent Developments in Materials Research' held on 16 -17 November, 2018 organized by Indian Academy of Sciences, Bengaluru and Higher Education Academy, Dharwad.
6. International Workshop on *NMR and TEM* held during 11-12 December, 2014 organized by Indian Institute of Science, Bangalore.
7. National workshop on *PIXS: Applications in Basic and Applied Science* held during 23-26 Feb 2012 organized by BARC, Mumbai.
8. State Level *Astronomy Programme* held during 8-9 Oct, 2010 organized by KSCST, Indian Institute of Science, Bangalore.
9. Three days workshop on *Entrepreneurship Awareness* held during 28-30 Sept, 2010 organized by CEDOK, Dharwad.

10. Two days workshop on <i>Communication Skills</i> held during 3-4 Sept, 2010 organized by SVM Arts, Science and Commerce College, Ilkal.
Workshops organized:
1. One Day workshop on PEO's, PO's and CO's in Outcome based education environment on 15-12-2020.
2. One day workshop for college teachers on FRONTIERS OF PHYSICAL SCIENCES at Davangere University on 03-02-2020.
Training Programmes Attended:
1. AICTE sponsored online Short Term Training Programme (STTP) on 'Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices, Series III held during 24-29 May, 2021 organized by Swarnandhra College of Engineering and Technology, Kakinada.
2. AICTE sponsored online Short Term Training Programme (STTP) on 'Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices, Series II held during 17-22 May, 2021 organized by Swarnandhra College of Engineering and Technology, Kakinada.
3. AICTE sponsored online Short Term Training Programme (STTP) on 'Emerging Trends in Nanomaterials for Electronic and Optoelectronic Devices, Series I held during 10-15 May, 2021 organized by Swarnandhra College of Engineering and Technology, Kakinada.
4. Training on Nanosurf 'Atomic Force Microscope' held on 8-9 June, 2015 at University of Agricultural Sciences, Dharwad.

Professional Membership:	
1.	Life Member, Indian Laser Association
2.	Life Member, Indian Science Congress Association

Additional (Academic/Administrative) Assignments:	
1.	Member, BoS in Physics (PG), Davangere University, Davangere.
2.	Member, BoE in Physics (PG), Davangere University, Davangere.
3.	Member, University Science and Technology Forum, Davangere University, Davangere.
4.	Member, Gender Sensitization Committees against Sexual Harassment, Davangere University, Davangere.
5.	Member, Local Inspection Committee, Davangere University, Davangere.
6.	Master Trainer, E-Governance Unit, Davangere University, Davangere.

7.	Warden of Saraswati Ladies hostel, Davangere University, Davangere.
8.	Member, Stock verification Committee, Davangere University, Davangere.
9.	Student welfare coordinator of Department of Studies in Physics, Davangere University, Davangere.
10.	Scholarship coordinator of Department of Studies in Physics, Davangere University, Davangere.
11.	'Shistu Paalana Margadarshakaru' for September, 2020 and August, 2021 PG examinations, DoS in Physics, Davangere University, Davangere.