

K R GAYAKVAD | RESUME



- » Full Name Mr. Ketankumar Rameshbhai Gayakvad
- » Caste Hindu Maratha-UR/OPEN
- » Status: Assistant Professor of Physics
- » Skills: Problem Solving in Physical Science
- » Interests: Observing Nature and Reading Natural Sciences

Summary

Mr. Ketankumar R. Gayakvad obtained B.SC. and M.SC. degree in Physics from Shivaji University, Kolhapur. Maharashtra. He qualified NET(LS), GATE and JEST in Physical Science. He has been invited for the talk on: Introduction To Statistical Mechanics, Atomic and Molecular Physics, Introduction to The Sky, Galaxies and The Earth in Space. He is pursuing PH.D. in Physics from Shivaji University, Kolhapur. He is working as an Assistant Professor of Physics, K. J. Somaiya College of Science and Commerce (Autonomous), Mumbai. Maharashtra. 400077.

Experience

- 01/10/2015 - **Assistant Professor** KJSSC, Mumbai.
now
- » Working at K.J.Somaiya College of Science and Commerce, Mumbai.
 - » Recognized Teacher of Mumbai University Ref No.: TAAS(CT)/ICD/2015 -16/14383
 - » Recognized Teacher of Mumbai University to guide student for the M.Sc. degree in the subject of Physics(By Papers) since 03/07/2019 Ref. No.: PG/ICD/2019-20/1130
 - » Taught Electricity and Electronics and Modern Physics at UG-Level
 - » Taught Mathematical Methods of Physics, Electrodynamics, Statistical Mechanics, Atomic and Molecular Physics and Applied Thermodynamics at PG-Level

Research and Publications

- 01/07/2017- **PH.D. Scholar** RCK,SUK,Maharashtra.
now
- 2021 **Review Article** Pramanna-Journal of Physics
- » Title: Synthesis and Characterization of Mn and V doped CoFe_2O_4 for Random Access Memory Applications.
 - » Title of the Manuscript: Cobalt ferrite as an active material for resistive random-access memory.
 - » <https://doi.org/10.1007/s12043-021-02211-z>
 - » Publisher: Springer Nature
 - » Pramana 95,172(2021)
- 2022 **Book Chapter** Elsevier
- » Title of the Chapter: Introduction and applications of magnetic nanoparticles
 - » Title of the Book: Fundamentals and Industrial Applications of Magnetic Nanoparticles
 - » ISBN: 9780128229989, 0128229985
 - » Publisher: Elsevier Science
- 2023 **Research Article** Open Ceramics
- » Title of the Manuscript: Yttrium doping induced modifications in the electrical properties of cobalt zinc ferrite
 - » <https://doi.org/10.1016/j.oceram.2022.100314>
 - » Publisher: Elsevier
 - » Open Ceramics Volume 13, March 2023, 100314

2019-2020

Minor Research Project-Mumbai University

- » Synthesis and characterization of spinel ferrite materials to study their resistive switching performances for RRAM.
- » Ref No. AAMS/ICD/106 of 2021 dated 23/07/2021
- » Amount Sanctioned: 50,000/-

Education

2008 - 2010

Masters Degree, Physics

Shivaji University

- » Thesis: Synthesis and Characterization SILAR deposited TiO_2 thin film.
- » Specialization: Modern Optics
- » Student of Dr. Appasaheb Pawar Vidhyarthi Bhavan, Shivaji University, Kolhapur.

Research Paper Presented at National/International Conferences

2020

Paper(Poster) Presentation at AFM2020

KIIT,Bhubaneswar

- » Paper Titled: "Structural and Magnetic properties of yttrium doped cobalt zink ferrite." presented at International Virtual Conference on Advances in Functional Materials(AFM-2020)organized by KIIT,Bhubaneswar,Odisha,India.

2020

Paper(Oral) Presentation at ICCESMN-2020

SGM,Karad

- » Paper Titled:"Review@Cobalt ferrite as an Active Material for RRAM." presented at International E-Conference on Cutting Edge Smart Materials and Nanotechnology(ICCESMN-2020) jointly organized by Department of Physics and IQAC,Sadguru Gadge Maharaj College, Karad. Maharashtra.

2021

Paper(Oral)Presentation at ICAMS-2021

RRM,Jath,Sangli.

- » Paper Titled, "Mini Review: Comparative Study between Microwave Sintered and Conventionally Sintered Spinel Ferrites." presented at Sixth International Conference on Advances in Material Science(Online) (ICAMS-2021) organized by Post Graduate Department of Physics and IQAC of Raje Ramrao Mahavidyalaya, Jath,Sangli. Maharashtra. India-416404

2021

Paper Presentation at ROWS-21

Kerala

- » Paper Titled, "Laser Lithotripsy" presented at Raman Optronics Webinar Series 2021,Virtual International Conference(ROWS-21) organized by the Department of Optoelectronics, University of Kerala, Trivandrum, Kerala. India.

2022

Paper Presented at ICRT-PCB Nano-2022

Satara. Maharashtra.

- » Paper Titled, "Pulsed Laser Deposited CoFe_2O_4 thin films" presented at 1st International Conference on Recent Trends in Physical, Chemical, Biological Nanosciences(ICRT-PCB Nano-2022) organized by Department of Physics, Chemistry and Life Sciences with IQAC, Lal Bahadur Shastri College of Arts, Science and Commerce, Satara. Maharashtra.

2023

Paper Presented at ICISTM-2023

Karad. Maharashtra.

- » Paper Titled, "Optimization of spin coated thin film of V doped CoFe_2O_4 " presented at International Conference on Innovation in Smart and Technomaterials (ICISTM-2023) organized by Department of Physics, Sadguru Gadage Maharaj College, Karad. Maharashtra.

2023

Paper Presented(Oral) at ICRTFNA-2023

Kolhapur. Maharashtra.

- » Paper Titled, "Structural studies on spin coated Mn doped CoFe_2O_4 " in Oral session presented at International Conference on 'Recent Trends in Fabrication of Nanomaterials and Their Applications (ICRTFNA-2023) organized by Department of Physics and IQAC, Rajarshi Chhatrapati Shahu College, Kolhapur. Maharashtra.

2023

Paper Presented(Poster) at ICRTFNA-2023

Kolhapur. Maharashtra.

- » Paper Titled, "Structural characterization of spin coated CoFe_2O_4 " in Poster session presented at International Conference on 'Recent Trends in Fabrication of Nanomaterials and Their Applications (ICRTFNA-2023) organized by Department of Physics and IQAC, Rajarshi Chhatrapati Shahu College, Kolhapur. Maharashtra.

Invited Talk

2017-18

14.1 NIUS HBCSE TIFR

Mumbai

2018-19	<p>» Participated as Resource person and mentor in the National Initiative on Undergraduate Sciences camp 14.1, NIUS, HBCSE, TIFR, Mumbai.Maharashtra.</p> <p>» Conducted Six Laboratory sessions on training in experimental physics during 16/06/2017 to 24/06/2017. (14.1 NIUS HBCSE TIFR)</p>	Karmaveer Bhaurao Patil College,Vashi	New Mumbai.
2019-20	<p>» Conducted theory lectures of Statistical Mechanics for M.Sc.(Physics) at Karmaveer Bhaurao Patil College,Vashi during the Third and Second Semester of the academic year 2018-19.</p>	Sir Sitaram and Lady Shantabai Patkar College of Arts and Science	Goregaon, Mumbai.
2021-22	<p>» Delivered a lecture come demonstration on "Statistical mechanics",MSC-II at the Department of Physics, Patkar-Varde College, Goregaon on 22/02/2020</p>	K.J.Somaiya College of Science and Commerce,Vidyavihar(E).	Mumbai.
<p>» Invited as Resource person to deliver a lecture on "Introduction to the Sky" during a national webinar organized by The Astronomy Club of KJSSC on 16/07/2021</p> <p>» Invited as Resource person to deliver a lecture on "Introduction to the Sky" during a national webinar organized by The Astronomy Club of KJSSC on 01/08/2021</p> <p>» Invited as Resource person to deliver a lecture on "Galaxies" during an International webinar organized by The Astronomy Club of KJSSC on 27/08/2021</p> <p>» Invited as Resource person to deliver a lecture on "The Earth in Space" during an International webinar organized by The Astronomy Club of KJSSC on 12/09/2021</p>			
<p>» » » Orientation Course/Refresher Course/Induction Programme/Faculty Development Programme.</p>			
2019-20		Faculty Induction Programme	IISER,PUNE
2019-20	<p>» Successfully completed MHRD, PMMMNMTT Sponsored Fourth Faculty Induction Programme organized by CoSME,IISER,Pune during 30/10/2019 to 23/11/2019</p>	Refresher Course	SWAYAM Platform
2019-20	<p>» Successfully completed MHRD Sponsored Annual Refresher Programme in Teaching (ARPIT) co-ordinated by, AICTE Subject: Introduction to Quantum Physics and its Applications during February-2020</p>	Faculty Development Programme	Pune
2020-21	<p>» Successfully completed MHRD, PMMMNMTT Sponsored Seven Days Faculty Development Programme on, "Holistic Teacher Training in Innovative Skills of Cooperative Learning and Development of E- content for Teaching Pedagogies in Higher Education" during 25/11/19 to 01/12/19 organized by Modern College of Arts, Science and Commerce, Ganeshkhind, Pune.</p>	Faculty Development Programme	
2020-21	<p>» Successfully completed MHRD, PMMMNMTT sponsored Two weeks Faculty Development Programme on, "Managing Online Classes and Co- creating MOOCS" during 20/04/2020 To 06/05/2020 organized by Ramanujan College, University of Delhi.</p> <p>» Successfully completed ONE WEEK FACULTY DEVELOPMENT PROGRAMME on "ACADEMIC WRITING" from 18 February, 2021 - 24 February, 2021 organized by Ramanujan College, University of Delhi.</p> <p>» Successfully completed One Week Faculty Development Programme on "Entrepreneurship, Incubation and Innovation" from June 23 - June 29, 2020 organized by Ramanujan College, University of Delhi.</p> <p>» Successfully completed One Week Faculty Development Programme on "Open Source Tools for Research" from June 08 - June 14, 2020 organized by Ramanujan College, University of Delhi.</p> <p>» Successfully completed Online Short Term Faculty Development Programme on "Nanomaterials Characterization Techniques And Result Analysis Methodology: Ideas, Innovations and Initiatives(Physical Sciences)" of five days from 27/07/2020 to 31/07/2020 under the scheme of PMMMNMTT UGC HRDC SPPU.</p>	Short Term Course	Gujarat University
	<p>» Successfully completed Online 38th Online Short Term Course On E-content Development during 28/05/2020 to 03/06/2020 organized by UGC-HRDC, GUJARAT UNIVERSITY, Ahmedabad.</p>		

2020-21

Refresher CourseTLC,Ramanujan College,
Delhi

» Successfully completed Two-Week Interdisciplinary Refresher Course/Faculty Development Programme for "Advanced Research Methodology Tools and Techniques" from 30/01/2021-14/02/2021 organized by Teaching Learning Center, Ramanujan College, University of Delhi under the edges of MINISTRY OF EDUCATION PANDIT MADAM MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

2022-23

Faculty Development Programme

» Successfully completed One-Week Faculty Development Programme on "Academic Research Writing" from 14/11/2022-20/11/2022 organized by Teaching Learning Center, Ramanujan College, University of Delhi under the edges of MINISTRY OF EDUCATION PANDIT MADAM MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

» Successfully completed One-Week Faculty Development Programme on "Data Analysis and Visualisation" from 30/11/2022-06/12/2022 organized by Teaching Learning Center, Ramanujan College, University of Delhi under the edges of MINISTRY OF EDUCATION PANDIT MADAM MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

2022-23

Refresher Course

» Successfully completed Two-Week Refresher Course in "Physics" from 31/10/2022-14/11/2022 organized by Teaching Learning Center, Ramanujan College, University of Delhi under the edges of MINISTRY OF EDUCATION PANDIT MADAM MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

» Successfully completed Two-Week Interdisciplinary Refresher Course in "Advanced Research Methodology" from 22/11/2022-06/12/2022 organized by Teaching Learning Center, Ramanujan College, University of Delhi under the edges of MINISTRY OF EDUCATION PANDIT MADAM MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

» Successfully completed Two-Week Refresher Course in "Physics" from 27/02/2023-13/03/2023 organized by Teaching Learning Center, Ramanujan College, University of Delhi under the edges of MINISTRY OF EDUCATION PANDIT MADAM MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

01/10/2015-
till date**Seminars/Workshops**

Attended

» International Workshop on "Frontiers in Electroweak Interactions of Leptons and Hadrons(EILH2016) held at the Department of Physics, Aligarh Muslim University, Aligarh, India during 02/11/2016 to 06/11/2016.

» 94 th National Workshop on "Radiochemistry and Applications of Radioisotopes "conducted jointly by DAE, BRNS, INCAS and K. J. Somaiya College of Science and Commerce, Mumbai during January16-23,2017

» 62 nd DAE Solid State Physics Symposium held in Bhabha Atomic Research Centre,Mumbai between 26 and 30 December,2017.

» One Day workshop on 'Nuts and Bolts of Research Methodology' organized by IQAC,K.J.Somaiya College of Science and Commerce,Mumbai on 31/01/2018

» Workshop on 4 th amendment-CAS-New Guidelines organized by IQAC of R.J.College on 23 rd June,2018

» 6-Day Train the trainer workshop on 'Flipped Learning'organized by Prof.Vashudha Kamat in collaboration with K.J.Somaiya College of Science and Commerce,Mumbai and connect dot consultancy and training, Pune during April23-26,May10-11,2018.

» One Day Workshop on CAS organized by IQAC,K.J.Somaiya College of Science and Commerce on 25/09/2018.

» Two-Day Induction Programme on Communication Skills organised by Department of Business Communication K.J.Somaiya College of Science and Commerce,Mumbai in association with Rambhau Mhalgi Prabodhini on 13-14 July,2019

» National Science Day-2019 conducted at Bhabha Atomic Research Centre, Trombay, Mumbai during 26 th February to 1 st March,2019

» One Day State Level Workshop on "Typesetting in LaTeX and Presentation using Beamer" organized by Department of Statistics,K.C.College in collaboration with Department of Statistics,University of Mumbai on March25,2019.

» IARP Workshop on, "Beneficial Effects of Radiation and Indian Nuclear Energy Programme" conducted by Indian Association for Radiation Protection,Mumbai and hosted by Department of Physics,K.J.Somaiya College of Science and Commerce,Mumbai on 01/02/2020.

» International webinar on, "How to write a research paper" organized by the Department of Mathematics and Physics, on 14 th May,2020.

- » International Workshop on, "Writing Project Proposals" (IW/WPP-2020) jointly organized by Research Foundation of India on 14 th May,2020.
- » An online Faculty awareness programme on, "Research Methodology" organized by Department of Mechanical Engineering, Rajgad Dyanpeeth's Shri Chhatrapati Shivajiraje College of Engineering, Pune on 20 th May,2020.
- » MHRD PMMMNMTT sponsored One Day Online workshop on, "Empowering effective scientific research by harnessing the power of web of science and managing references using Endnote" organized by School of Education,Guru Nanak Dev University, Amritsar, India in collaboration with Clarivate Analytics on 20 th May,2020.
- » Eight Day National level online workshop on, "E-content development (Educational Audio-Video Production) organized by Maharshi Dayanand College of Arts, Science and Commerce, Parel, Mumbai on 10 th to 17 th May,2020.
- » Virtual conference on, "Materials for Energy Harvesting and Catalysis" organized by TIFR, IISER Kolkata and ACS Chemistry for life on 1 st to 3 rd May,2020 via Zoom.
- » One Day International conference on, "Clean energy conversion and storage technologies" organized by Shri Pancham Khemraj Mahavidyalaya, Sawantwadi, Dist- Shindhudurg, India on 30 th April,2020.
- » MHRD PMMMNMTT sponsored One Day Online Workshop on, "Book and article publishing and springer link platform Demonstration" organized by Guru Nanak Dev University, Amritsar, India in collaboration with Springer Nature on 29 th April,2020.
- » Online national level workshop on, "Fine Tuning Research Planning using Elsevier Tools: Science Direct, Scopus and Mendeley" organized by K. J. Somaiya College of Science and Commerce, Mumbai in Collaboration with Elsevier on 25 th April,2020.
- » International E-conference on "Strategies and Challenges in Higher Education during COVID-19 Lockdown Period in India with reference to the World" organized by Government Vidarbha Institute of Science and Humanities, Amravati, India on 15 th -17 th May,2020

Life Member

IANCAS

- » Life Member of Indian Association of Nuclear Chemists and Allied Scientists (IANCAS) effective from 21/01/2017