DEPARTMENT OF APPLIED SCIENCES & HUMANITIES, GNDEC, BIDAR

PROFILE:

Name	: Dr. AJAI KUMAR MOLAKERI
Father Name	: SOMANNA MOLAKERI
Date of birth	: 30-05-1970
Nationality	: Indian.
Languages known	: Kannada, English and Hindi.
Address for communication	: H. No. 9-8-201, "Vijay Nivas", Basava Nagar, BVB College Road, BIDAR - 585403 Cell: 8050972805, 8660782631. Email: ajaymolakeri@gmail.com

PRESENT ORGANISATION:

Present Organization: Department of Physics,
Guru Nanak Dev Engineering College,
BIDAR- 585403, District: Bidar, Karnataka State

Present Designation: Associate Professor.

Qualification : M.Sc., Ph. D (Physics).

TEACHING EXPERIENCE:

- **August 2019 – till date** Associate Professor in Physics Department
- **October 2009 – 31 July 2019**: Assistant Professor in Physics Department
- **June 2008 – September 2009**: Post-Graduate Teacher of Physics at Greenvalley International School, Madanapalle, Chittoor Dist (AP).
- **July 2001 – May2008**: Post-Graduate Teacher of Physics at Vasishta School (ICSE & ISC), Madanapalle, Chittoor Dist (AP).
- **June1999 – June2000**: Post-Graduate Teacher of Physics at Aadarsh Vidyalaya, Zaheerabad, Medak Dist (AP).
- **July 1997- May 1999:** Part - Time Lecturer at Nittur Polytechnic College, Bidar.
- **June 1996 – May 1998:** Part – Time Lecturer at AIIME's Degree College, Bidar.
- **June 1996 – March 1997:** Part – Time Lecturer at Al-Ameen Composite Junior College, Bidar.

RESPONSIBILITY AT COLLEGE LEVEL:

- NBA, ISO & EMS Coordinator.
- Physics Lab In-charge.
- Class Coordinator and Mentor.
- Coordinator for various Technical and Cultural events at College.

RESPONSIBILITY AT UNIVERSITY LEVEL:

- Deputy Chief Superintendent and Squad Member for VTU Theory examinations

ACADEMIC QUALIFICATION: M.Sc. PhD

Course	Name of the University	Year of passing	Subject	Percentage
Ph.D.	Visvesvaraya Technological University	2018	Physics	-
M.Sc.	BAMU, Aurangabad	1996	Physics	65.08
B.Sc.	Gulbarga University	1993	Physics, Mathematics & Electronics	52.63

SUBJECT INTEREST:

Subjects taught (Titles): 1) Engineering Physics, 2) Laser & Optical Fibers 3) Quantum Mechanics, 4) Classical Mechanics, 5) Materials Science, 6) Radiation Physics, 7) Energy Physics, 8) Mathematical & Computational Methods, 9) Nuclear Physics.

Research fields: 1) Conducting Polymers Composites 2) Ceramics 3) Ferrites.

RESEARCH SKILLS:

Material Preparations	Conducting Polymer Composites & Nanocomposites and Ceramic materials by different techniques.
Material Characterization	XRD, FT-IR, TGA/DTA, SEM, TEM, DC/AC Conductivity & Dielectric measurement and Magnetic loop tracers

Papers Published in International Journals:

1. **Md Ashfaq Hussain, S Sindhu, B, Raghunanda, Ajai Kumar S. Molakeri*** – Synthesis, Characterization and Electrical Properties of $ZnFe_2O_4$ Nanoparticles, *Journal of Nanoscience and Technology*, Vol. 7, Issue. 2, pp. 946-948, 2021, doi.org/10.30799/jnst.323.21070201

2. **Molakeri A S, Kalyane S, Kulkarni A B and Mathad S N –** Structural Analysis of Nano Ferrites Synthesized by Combustion and Microwave Methods, 2018, *International Journal of Self-Propagating High-Temperature Synthesis*, Vol. 27, No. 1, 44–50.

3. **Ajai Kumar S. Molakeri, Sangshetty Kalyane, Akshay B. Kulkarni & Shridhar N.Mathad** - Elastic Properties of Nickel Ferrite Synthesized by Combustion and Microwave Method using FT-IR Spectra, 2017, *Int. J. Adv. Sci. Eng.* Vol.3 No.4, 422-427.

4. **Ajai Kumar S. Molakeri and Sangshetty Kalyane** – Electrical and Magnetic Properties of Polyaniline-Zinc Ferrite Nanocomposites, 2017, *Journal of Advanced Physics*, Vol. 6, 223-228.

5. **Ajai Kumar S. Molakeri and Sangshetty Kalyane** – Preparation, Structural and Dielectric Properties of Polyaniline – Nickel Ferrite Composites, 2017, *International Journal of Materials Sciences*, Vol. 12, No. 1, 47-56.

6. **Ajai Kumar S. Molakeri, Sangshetty Kalyane, Sindhu S and Shilpa Kodge** – Synthesis, Characterization and Transport Properties of Polyaniline/Nickel ferrite Nanocomposites, 2016, *International Journal of Research in Engineering and Applied Sciences (IJREAS)*, Vol. 6, Issue 3, 211-223.

7. **Ajai Kumar S. Molakeri and Sangshetty Kalyane** – Synthesis, Characterization and DC Conductivity of PANI/$ZnFe_2O_4$ Composites, 2015, *International Journal of Innovative Research in Science, Engineering and Technology, (IJIRSET)*, Vol. 4, Issue 7, 5728-5737. DOI:10.15680/IJIRSET.2015.0407050 5728.

8. **Anil S. Jadhav, B. Raghunanda, Ashok D. Shetkar, Ajai Kumar S. Molakeri*** - Characterization and Magnetic Properties of Zinc Ferrite Synthesized by Combustion Route, 2018, J. Nanosci. Tech. - Volume 4, Issue 5, 536–538

Papers Presented & Published in National and International Conferences:

1. **Ajai Kumar S. Molakeri, Shivalingayya Math, Sangappa K Ganiger, Eknath Nivrtirao** – dielectric Spectroscopy of Polyaniline-$ZnFe_2O_4$ Composites, Proc. of KSTA Sponsored International Conference on Physics and Allied Sciences (ICPAS-2020), ISBN: 978-93

2. **Ajai Kumar S. Molakeri, Ashok D Shetkar, Raghunanda B and Sangshetty Kalyane** – Electrical and Magnetic Properties of Polyaniline-Nickel Ferrite Composites, 2016, *International Journal on Emerging Technologies* (Special Issue on ICRIET-2016), Vol. 7, Issue. 2, 164-168.

3. **Ajai Kumar S. Molakeri and Sangshetty Kalyane** – Synthesis and Characterization of Nano Crystalline Nickel Ferrite, 2016, *International Journal for Scientific Research and Development (IJSRD)* (Conference 8: NCACC-2016), 250-253.

4. **Ajai Kumar S Molakeri, Sangshetty Kalyane, Raghunanda B and Ashok D Shetkar** – Synthesis, Characterization and DC conductivity of PANI/$ZnFe_2O_4$ Nanocomposites, 2016, *International Journal of Advancement in Engineering Technology, Management & Applied Science, (IJEATMAS)*, (Special Issue on NCICT-2016), Vol. 3, Issue. 2, 74-83.

5. **Ajai Kumar S. Molakeri, Sangshetty Kalyane, Chakradhar B. Sridhar and Jakeer Husain** – Synthesis, Characterization and DC conductivity of Pani/$NiFe_2O_4$ Nanocomposites, 2015, *International Journal on Emerging Technologies* (Special Issue on NCRIET-2015), Vol. 6, Issue. 2, 105-109.

CONFERENCE/WORKSHOP/SEMINAR ATTENDED:

1. Two-Day National Level Webinar on "Accreditation, Quality, rankings, Benchmarking and Roadmap for Excellence in Higher and Technical Education: Part I and Part II" organized by Guru Nanak Dev Engineering College, Bidar on 8th & 9th June 2021

2. Two Days Workshop on "APPLICATONS OF PROBABILITY AND STATISTICS FOR MANAGEMENT & ENGINEERING" organized by Guru Nanak Dev Engineering College, Bidar ISTE CHAPTER on 6th & 7th January 2021.

3. Workshop on Universal human values on the theme " Including Universal Human Values in Technical Education" conducted by All India Council for Technical Education, New Delhi from 21st to 25th September 2020.

4. KSTA Sponsored International Conference on Physics and Allied Sciences (ICPAS-2020) conducted by B V Bhoomaraddi College of Arts, Science and Commerce, Bidar from 11th – 13th March 2020.

5. Three Days Workshop on Technology & Innovations conducted by Guru Nanak Dev Engineering College, Bidar ISTE CHAPTER on 7th, 8th & 9th March 2020.

6. Two-week ISTE Short Term Training Programme on Engineering Physics conducted by Indian Institute of Technology Bombay from December 8-18, 2015.

7. State level seminar on "Advances in Nanodevices and Applications" sponsored by UGC, New Delhi, on 11th and 12th September 2014 organized by Department of Physics, JSS Banashankari Arts, Commerce and S.K.Gubbi Science college, Vidyagiri, Dharwad.

8. One day Workshop on Basic Sciences Syllabus (Physics) for BE Programme of VTU on 18th August, 2014 at UBDT College of Engineering, Davangere.

9. Four Days VTU-VGST sponsored Faculty Development Program on "Role of Teachers: Challenges and Opportunities in Technology" from 7-5-2014 to 10-5-2014 organized by development of P.G. Studies, VTU Regional Office, Gulbarga.

10. Two Days KSTA Regional Conference on Science & Technology for Development on 30th and 31st January, 2014 Organized by School of Earth Sciences, Central University of Karnataka, Gulbarga.

11. One Week VTU – VGST Faculty Development Program on MICRO AND NANOELECTRONICS (MAN) 2013-14 from 06-08-2013 to 09-08-2013 organized by Department of Electronics and Communication Engineering, Guru Nanak Dev Engineering College, Bidar.

12. Two Days National Level Faculty Development Program on "Innovative Ideas of Teaching & Learning Skills" (FDP-IITLS) organized by Department of Applied Sciences and Humanities held at BKIT, Bhalki on 23rd and 24th February 2013.

13. National Workshop on "POLYMER MATRIX COMPOSITES (PMCs)", held during 16-18 March-2012 at Guru Nanak Dev Engineering College, BIDAR.

14. ISTE Two Days National Workshop on "ENHANCING TEACHING SKILLS" on 13th and 14th May, 2010 at Rural Engineering College, Bhalki – 585328.

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