

BADGUJAR HINA FAKIRBHAI

CONTACT INFORMATION	430, Meghna Nagar Society, Near, Sumin Park, Vastral Road, Ahmedabad Gujarat - 382418 (INDIA)	+91 94 2763 1952 heenabadgujar@gmail.com
RESEARCH INTERESTS	Materials characterization techniques, Raman spectroscopy and other spectroscopic techniques, Synthesis, modeling and simulations, Synthesis of magnetic nanomaterials for biosensing application.	
EDUCATION	<p>Central University of Gujarat, Gandhinagar, India PhD Scholar, Nanosciences (Pursuing)</p> <ul style="list-style-type: none">• Advisor: Umesh Kumar, PhD <p>Central University of Gujarat, Gandhinagar, India M.Phil, Nanosciences</p> <ul style="list-style-type: none">• Dissertation Title: <i>Plasmonics-based photonic sensors</i>• Advisors: Man Singh, PhD and Anuj K Sharma, PhD <p>Dr. Babasaheb Ambedkar Open University, Ahmedabad, India Certificate in Computer Concept, CCC</p> <p>The Maharaja Sayajirao University of Baroda, Vadodara, India M.Sc., Materials Science (Nanotechnology)</p> <ul style="list-style-type: none">• Dissertation Title: <i>Surface Modification and the Interaction of Metal Nanoparticles with Halloysite Nanotubes</i>• Advisors: Arup Kumar Raychaudhuri, PhD and Subhra Jana, PhD <p>Gujarat University, Ahmedabad, India B.Sc.(Hons.), Physics</p> <ul style="list-style-type: none">• with second-class <p>Bhavna Higher Secondary School, Ahmedabad, India Class XII (Science Stream)</p> <ul style="list-style-type: none">• with first class <p>Jyoti Vidhyalaya, Ahmedabad, India Class X</p> <ul style="list-style-type: none">• with distinction	<p>July 2017</p> <p>July 2014 - Dec 2016</p> <p>Jan - June 2014</p> <p>July 2011 - Aug 2013</p> <p>June 2008 - May 2011</p> <p>March 2008</p> <p>March 2006</p>
JOURNAL PUBLICATIONS	<p>Badgujar, H.F., Kumar, U., 2021. Green Approach Towards Morphology-Controlled Synthesis of Zein-Functionalized TiO₂ Nanoparticles for Cosmeceutical Application. Eur. J. Pharm. Sci. 167, 106010. https://doi.org/10.1016/j.ejps.2021.106010.</p> <p>Badgujar, H.F., Bora, S., Kumar, U., 2021. Eco-benevolent synthesis of ZnO nanoflowers using Oxalis corniculata leaf extract for potential antimicrobial application in agriculture and cosmeceutical. Biocatal. Agric. Biotechnol. 38, 102216. https://doi.org/10.1016/j.bcab.2021.102216.</p> <p>Badgujar, H.F., Sharma, A.K., 2016. Investigating the use of AlN substrate in plasmon-based optical sensor: performance evaluation. Opt. Quantum Electron. 48. https://doi.org/10.1007/s11082-016-0770-0.</p>	

CONFERENCE PROCEEDING	Badgujar, H., Sharma, A.K., Singh, M., 2014. AlN substrate based plasmonic sensor for saline water temperature determination, in: Optics InfoBase Conference Papers. https://doi.org/10.1364/PHOTONICS.2016.W3A.16 .	
BOOK CHAPTER	Badgujar, H. F.; Sharma, A. K. Advances in Magnetic Materials for Sensing and Biomedical Applications (Under Communication). Deshmukh, S. K.; Badgujar, H. F. and U. Kumar, Fungal Pigments research in India: An overview (Accepted-In Press). Shinde, P., Badgujar, H.F., Kumar, U., 2021. Strategies to Improve Oral Delivery of Natural Anticancer Molecules, in: Emerging Trends in Nanomedicine. Springer Singapore, pp. 25–50. https://doi.org/10.1007/978-981-15-9920-0_2 .	
SUMMER - PROJECT	M.Sc. Project Student Project Title: <i>Investigating the effect of Zinc precursors and solvent in the growth of ZnO nanoparticles</i> Supervisor: Kinnari Parekh, PhD	May - July 2012
SUMMER/WINTER PROGRAM	<ul style="list-style-type: none"> • Winter School (Tutorials included) on Ultra-cold atoms for fundamental science and enabling technologies - Organized by IISER Pune(IN) and University of Birmingham, MUARC(UK) • Short Term Experimental Training Program - Organized by Charotar University of Science and Technology, Gujarat(IN) • Advanced B.Sc.Physics Summer Program - Organized by Gujarat Science Academy, Gujarat Science City & VASCSC(IN) 	17 th - 21 st Dec 2012 21 st May - 2 nd June 2012 11 th -30 th May 2010
SCHOLASTIC ACHIEVEMENTS	<ul style="list-style-type: none"> • Third Prize in Frontiers in Sustainable Agriculture and Biological Sciences at Periyar University, Salem (IN) • Selected to presented in National Conference on Advances in spectroscopy: Molecules to materials at IITRAM, Ahmedabad(IN) • Selected to participate in the Student Conference on Optics and Photonics 2017(SCOP-17) at Physical Research Laboratory, Ahmedabad(IN) • Selected for the Summer Training Program in Electron Microscopy, organized by the Electron Microscope Facility, AIIMS Delhi(IN) • Selected to participate in the Inaugural Ceremony of Noble Prize Exhibition at Gujarat Science City, Ahmedabad(IN) • Selected for Short Term Training Program on Nonlinear Analysis, Computations using Matlab, Mathematica, Maple, LINGO and CPLEX with applications in Engineering & Science at SVNIT, Surat(IN) • Selected for the M.Phil. final semester research work under the supervision of Anuj K. Sharma, PhD at Applied Sciences Department, NIT Delhi(IN) • Selected for Visiting Student Research Program under the guidance of Prof. Arup K. Raychaudhuri and Dr. Subhra Jana at Department of Condensed Matter Physics and Material Sciences, SNBNCBS, Kolkata(IN) 	March 2019 October 2018 Sep 2017 May 2017 Jan 2017 Sep 2016 May 2015 Jan 2013
ORGANIZATIONAL SKILL	• Head of Registration Committee in INUP familiarization workshop on Nanofabrication Technologies at Central University of Gujarat, Gandhinagar (IN).	October 2018

- Elected as committee member for monitoring grievances of student from school of Nano Sciences, Central University of Gujarat, Gandhinagar (IN). January 2018
- Coordinator of Information and communications technology committee in National Conference on Nanotechnology in Agriculture, Energy & Medicine at Central University of Gujarat, Gandhinagar (IN). March 2016
- Event Organizer and active volunteer in [The Bindi Project](#) (NGO) in Ahmedabad region(IN). June 2016 Present

HARDWARE AND SOFTWARE SKILLS

- Computer Programming : Matlab, Mathematica, AutoDock, Comsol
- Markup Languages : HTML, LATEX, C++
- Operating Systems : Linux, Windows

TEACHING EXPERIENCE

M.Sc. Practical - Demonstration of characterization instruments (XRD, HRTEM, DLS, DSC) Bioactivity assay (Antimicrobial and Antioxidant) at Central University of Gujarat (IN).

B.Tech Practical - Diode Characteristics trainer, RLC Resonance Trainer, Planck's Constant Determination Using LED, Solar Energy at Applied Physics Department, National Institute of Technology Delhi (IN).

REFERENCES

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 Department of Physics
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 Delhi-110040 (IN)