Curriculum Vitae

Name	: Dr. Anuja Katariya Jain
Corresponding Address	: 203, Kasturi CHS, Tilak Road, Opp. Roshan Automobiles Near Brahman Sabha, Dombivli (E), 421201, Thane, Maharashtra.
Gender	: Female
Category	: General
Date of Birth	: 11th July, 1980
Marital Status	: Married
Contact Email	: anujakatariya@yahoo.com
Contact No.	: 91-9004810410
Institute Name & Address	: Institute of Chemical Technology Nathalal Parekh Marg, Near Khalsa College, Matunga, Mumbai, Maharashtra 400019
Qualification	: Ph.D. (Physics)
Topic of Ph.D.	: Electro-optic and Dielectric Properties of Dichroic Dyes and Nanomaterials Dispersed Liquid Crystal-Polymer Composites.
Degree awarded on	: 8th, February 2017
Degree awarded by	: Institute Of Chemical Technology, Mumbai

Other Qualification Details:

Degree	Year of Passing	University/ Board	Class/Grade
B.Sc.	2000	Vikram University, Ujjain	First
M.Sc.	2002	Vikram University, Ujjain	First
Ph.D.	2017	Institute of Chemical Technology, Mumbai	-
Post-Doctoral	2021	Institute of Chemical Technology, Mumbai	-

Publication List:

1. Mhatre, M. M. Katariya-Jain A. and Deshmukh, R. R. "Enhancing morphological, electro-optical, and dielectric properties of polymer-dispersed liquid crystal by doping of disperse orange 25 dye in LC E7." (Accepted Manuscript).

2. Katariya-Jain, A; Deshmukh, R. R. "An overview of HPDLC films and their applications." DOI: 10.1080/02678292.2021.2000052

3. Katariya-Jain A. and Deshmukh, R. R. "Effects of dye doping on electro-optical, thermo-electro-optical and dielectric properties of polymer dispersed liquid crystal films." Journal of Physics and Chemistry of Solids. 160 (2022). DOI: 110363. 10.1016/j.jpcs.2021.110363.

4. Katariya-Jain A. and Deshmukh, R. R. An overview of polymer-dispersed liquid crystals composite films and their applications. in *Liquid Crystals and Display Technology*, edited by M. Sasani Ghamsari and I. Carlescu (IntechOpen, London, **2020)**, p. 13. DOI: 10.5772/intechopen.91889

5. Katariya-Jain, A.; Deshmukh, R. R. Electro-optical and dielectric study of multi-walled carbon nanotube doped polymer dispersed liquid crystal films. *Liq. Cryst.* **2019**, *46*, 1191-1202. DOI: 10.1080/02678292.2018.1545264

6. Deshmukh, R. R.; Katariya-Jain, A. Effect of anti-parallel and twisted alignment Techniques on various properties of Polymer Stabilized Liquid Crystal (PSLC) films. *Liq. Cryst.* **2016**, *43*, 436-447. DOI: 10.1080/02678292.2015.1117147.

7. Deshmukh R. R.; Katariya-Jain, A novel techniques of PDLC film preparation furnishing manifold properties in a single device. *Liq. Cryst.* **2016**, *42*, 256-267. DOI: 10.1080/02678292.2015.1105314

8. Katariya-Jain, A.; Deshmukh R. R. Influence of a guest dichroic azo dye on a host liquid crystal dispersed in polymer matrix. *Int. J. of ChemTech Research* **2014**, *6*, 1813-1816.

9. Deshmukh R. R.; Katariya-Jain, A. The complete morphological, electro-optical and dielectric study of dichroic dye doped polymer dispersed liquid crystal. *Liq. Cryst*. **2014**, *41*, 960-975. DOI:10.1080/02678292.2014.896051

List of Research Papers/Posters Presented in National/International Symposia:

1. Participated in Webinar on "International Conference on Nanomaterials & Nanotechnology" Dept. of Physics, University of Mumbai, Mumbai on 25th to 27th March, 2021.

2. Participated in Webinar on "Role of Liquid Crystal in Day to Day Life Style" Dept. of Science and Humanities-Physics, Velalar College of Engineering and Technology, Erode on 30th September, 2020

3. Participated in Webinar on "Supercapacitors: A Futuristic Energy Storage Device" Dept. of Physics, Sri Sathya Sai College for Women, Bhopal on 20th August, 2020.

4. Poster presentation on work entitled "Study of morphological, electro-optic and dielectric properties." Anuja Katariya Jain, R. R. Deshmukh* at "International Conference on Photons: Multiple & Creative Solutions To challenges" NES Ratnam College of Arts, Science & Commerce, Mumbai, on 4th-5th Dec, 2015.

5. Participated in workshop on "Structure solving by powder X-ray diffraction" at Royal College of Arts and Science and Commerce, Mumbai on 27th -28th Oct, 2015.

6. Paper presentation on work entitled "Influence of a guest dichroic azo dye on a host liquid crystal dispersed in polymer matrix." Anuja Katariya Jain, R. R. Deshmukh* at "International conference on materials and characterization techniques" (ICMCT), Vellore Institute of Technology, Vellore, Tamil-nadu, on 10th-12th March, 2014.

7. Poster presentation on work entitled "Effect of doping of dichroic azo dye in nematic liquid crystal and photo-curable polymer." Anuja Katariya Jain, M. K. Malik, R. R. Deshmukh* "National conference on research trends in smart". Guru Nanak College of Arts, Science & Commerce, Mumbai-34, on 3rd & 4^{rth} January, 2014.

8. Participated in workshop on "INSIDE RAMAN" Dept. of Physics, Institute of Chemical Technology, Mumbai and REINSHAW on 8th -10th Oct, 2013.

9. Participated in workshop on "Modern Trends in Polymer Science and Technology" Dept. of Physics, Institute of Chemical Technology, Mumbai on 3rd to 4th April, 2013.

Experience Profile:

Teaching: Previously, I was recruited at Government Arts and Science College, Ratlam, MP. I joined as a guest faculty from 2004 onwards and was teaching there for 6 years in Physics. As a lecturer, I have taught various courses which include subjects like Mathematical Physics, Thermodynamics, and Classical Mechanics. I have also taught advanced courses like Electronics, Condensed Matter Physics, Quantum Mechanics and Nuclear Physics.

Later, after obtaining my PhD degree, I also worked as a guest faculty in physics department at B.K. Birla College of Arts, Science and Commerce, Mumbai in 2018-19.

Employer	Position held	Date of Joining	Date of Leaving
Government Arts & Science College, Ratlam, MP	Guest-Faculty	September 2004	April 2005
Government Arts & Science College, Ratlam, MP	Guest-Faculty	August 2005	April 2006
Government Arts & Science College, Ratlam, MP	Guest-Faculty	August 2006	April 2007
Government Arts & Science College, Ratlam, MP	Guest-Faculty	August 2007	April 2008
Government Arts & Science College, Ratlam, MP	Guest-Faculty	July 2008	May2009
Government Arts & Science College, Ratlam, MP	Guest-Faculty	July 2009	May 2010
B.K. Birla College of Arts, Science & Comm., Mumbai	Guest-Faculty	July 2018	Nov 2019

Research:

Till December 2021, I was working as a Woman Scientist on a DST sanctioned project entitled “Applications of Liquid Crystals: From Display (PDLC) Films to Non display (LC Lenses) devices” under DST-WOSA program at Institute of Chemical Technology, Mumbai. Under this project, I have doped Liquid Crystal (LC) material with dye, pure and functionalized carbon nanotubes and carbon nano particles. I have investigated morphological, electro-optical and dielectric properties of doped PDLC films and discovered that the doping of nanomaterials enhances the display properties of the composite film. Our findings have been published in form of a book chapter by Intech-Publication (London) and two original research articles in a Scopus indexed international journals. Apart from this, we have also published one review article in a peer reviewed international.

During my PhD research, I worked on one of the applications of liquid crystal: polymer dispersed liquid crystal (PDLC). I have studied thoroughly the electro-optic and dielectric properties of dye doped and nanomaterial doped PDLC films. As part of my teaching responsibilities and during PhD research, I have handled and worked with various scientific instruments like polarizing optical microscope, scanning electron microscope, precision impendence analyzer, UV/Visible spectrophotometers, DSO, laser source and other such instruments. I am fully aware of their operational capabilities and can handle them with ease.

Date: 10-04-2022

Place: Mumbai