

FACULTY PROFILE



NAME: Dr. H N CHANDRAKALA

Designation: Professor & HOD

Department of Chemistry

Date of Joining:	17-02-1997
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Length of Professional & Research Experience:	28 years
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Personal and Contact Details

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Mobile: +91 6363584050

ORCID: -----

Google Scholar: <https://scholar.google.com/citations?user=P5rQnkIAAAJ&hl=en>

Research: Polymer Science, Material Science

Academic Details

Ph.D. degree in Visvesvaraya Technological University, Belgaum in the field *Polymer Nanocomposites*, in 2014.

Master of Science degree specialization in Organic Chemistry in Bangalore University in the Year 1996.

Research and Article Publications

H. N. Chandrakala, B. Ramaraj, Shivakumaraiah, G. M. Madhu and Siddaramaiah, The Influence of zinc oxide-cerium oxide nanoparticles on the structural characteristics and electrical properties of polyvinyl alcohol films, *J. Mater. Sci.*, 47, 2012, pp 8076-8084, [doi10.1007/S10853-012-6701-Y](https://doi.org/10.1007/S10853-012-6701-Y)

H. N. Chandrakala, B. Ramaraj, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Investigation on the influence of sodium zirconate nanoparticles (Na_2ZrO_3) on the structural characteristics and electrical properties of polyvinyl alcohol nanocomposite films, *J. Alloy. Compd.*, 551, 2013, pp 531-538, [dx.doi.org/10.1016/j.jallcom.2012.10.188](https://doi.org/10.1016/j.jallcom.2012.10.188)

H. N. Chandrakala, B. Ramaraj, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Preparation of polyvinyl alcohol – lithium zirconate nanocomposite films and analysis of transmission, absorption, emission features and electrical properties, *J. Phys. Chem. C.*, 117, 2013, pp 4771–4781, [dx.doi.org/10.1021/jp311828n](https://doi.org/10.1021/jp311828n)

H. N. Chandrakala, B. Ramaraj, Shivakumaraiah, Joong Hee Lee and Siddaramaiah, Polyvinyl alcohol/carbon coated zinc oxide nanocomposites: Electrical, optical, structural and morphological characteristics, *J. Alloy. Compd.*, 580, 2013, pp 392-400, [dx.doi.org/10.1016/j.jallcom.2013.06.091](https://doi.org/10.1016/j.jallcom.2013.06.091)

H. N. Chandrakala, B. Ramaraj, Shivakumaraiah and Siddaramaiah, Optical properties and structural characteristics of zinc oxide-cerium oxide doped polyvinyl alcohol films, *J. Alloy. Compd.*, 586, 2014, pp 333-342

H. N. Chandrakala, B. Ramaraj, Shivakumaraiah and Siddaramaiah, Influence of lithium potassium zirconate nanoparticles on the electrical properties and structural characteristics of poly(vinyl alcohol) films, *J. Phys. Chem. Solids*, 75, 2014, pp 252- 258, [dx.doi.org/10.1016/j.jpcs.2013.2013.09.025](https://doi.org/10.1016/j.jpcs.2013.2013.09.025)

H. N. Chandrakala^{1,2}, Shivakumaraiah, h. Somashekarappa, R.Somashekar, S.Chinmayee and Siddaramaiah, poly(vinyl alcohol)/ zinc oxide-cerium oxide nanocomposites: Electrical, optical, structural and morphological characteristics. *Indian Journal of Advances in Chemical Science* 2(2014) 103-106.

Papers presented in National/International Conferences

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Mechanical, thermal and morphological behaviors of polyvinyl alcohol/sodium zirconate nanocomposites, *Natl. Conf., on Chemistry of Materials* (NCCM-2011), Tumkur University, Tumkur, 28th Sept., 2011, OP-08, pp 19

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Mechanical, thermal and morphological behaviors of polyvinyl alcohol/lithium zirconate nanocomposites, *Natl. Conf., on Recent Trends in Materials Chemistry and Engg* (RTMCE-2011), RNSIT, Bangalore, India, Sept., 29th - 30th, 2011, OP-19, pp 110

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Optical, mechanical, thermal and structural properties of polyvinyl alcohol films embedded with zinc oxide-ceriumoxide nanoparticle, *Intl. Conf., on Synthetic and Structural Chemistry*, Mangalore University, Mangalore, 8th-10th Dec., 2011, PP-105, pp, 110.

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Studies on nano Li₂ZrO₃ incorporated PVA/PVP nanocomposites, *Natl. Conf., on Green and Sustainable Chemistry*, Tumkur University, Tumkur, 25th Feb, 2012, PP-22, pp 49.

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Experimental investigation on the influence of lithium potassium zirconate (LiKZrO₃) on optical and dielectric properties of polyvinyl alcohol nanocomposites, *Natl. Sem. on Advances in Polymeric Materials*, Anantapur, Andhra Pradesh, 16th – 17th March, 2012, OP-19, pp 56.

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah, Studies on nano carboncoated-ZnO incorporated polyvinyl alcohol nanocomposites, *Natl. Conf., on Emerging Trends in Materials for Adv. Technology*, KVG College of Engg., Sullia, Dhakshina Kannada, 20th - 21st March, 2012, OP-204, pp 8.

H. N. Chandrakala, Shivakumaraiah, G. M. Madhu and Siddaramaiah Investigation on optical and dielectric behaviors of PVA/Li₂ZrO₃ nanocomposites, *Intl. Conf., on Recent Trends in Material Science* (RAMS), Karnataka State Higher Education Council, Bangalore, 6th – 8th Nov., 2012, pp 92,

H. N. Chandrakala, Shivakumaraiah, Siddaramaiah and V. Uday Kumar, Investigation on thermal and dielectric behavior of lithium potassium zirconate reinforced polyvinyl alcohol nanocomposites, *Intl. Conf. on Recent Advances in Material Science & Technology* (ICRAMST) held at NITK, Surathkal, Mangalore, 17th – 19th Jan., 2013, pp 65 .

H. N. Chandrakala, Shivakumaraiah, H. Somashekarappa, R. Somashekar and Siddaramaiah, Microcrystalline behaviours of polyvinyl alcohol – Lithium potassium zirconate nanocomposites, *Indo-Canadian Symp. on Nano-Sci. and Tech.*, NIE, Mysore, 20th -22nd, Feb., 2013, pp105-111.

H. N. Chandrakala, P. Mahadeva Prasad, H. Somashekarappa, S., Chinmayee, R. Somashekar and Siddaramaiah, Investigation on opto-electric and microcrystalline behaviors of polyvinyl alcohol/lithium zirconate nanocomposite films, *All India Seminar on Nanotechnology for Energy, Environment and Health*, The Institution of Engineers (India), Mysore, 19th-20th, Oct., 2013.

H.N.Chandrakala, Shivakumaraiah, H. Somashekarappa, R.Somashekar and Chinmayee S., Understanding the optical, microcrystalline and mechanical properties of nano lithium potassium zirconate reinforced polyvinyl alcohol composites, *Natl.Conf. On Advances in polymeric materials* (Energy, Environment and Health) (NCAPM), SJ College of Engg., 25th- 26th, April, 2014, OP-23, PP-77.

H. N. Chandrakala, Shivakumaraiah, Siddaramaiah, G.M.Madhu, H. Somashekarappa and R.Somashekar, Optical and microstructural properties of nanosodium zirconate reinforced polyvinyl alcohol composites,

Intl. Conf. on Polymers and Allied Materials, Dept. of Material Science and Engg, Indian Institute of Techonology, Patna (IITP), 30th- 31st, May, 2014.

H.N.Chandrakala¹, Rajeshwari, Harshitha The paper titled “*Structural and electrical studies on PVA/PVP blends filled with zinc oxide- cerium oxide nanoparticles*” is selected for *Intl. Conf. on Advanced Material and Technology, (ICMAT-16), 26-28 May 2016, SJCE, Mysore.*

H.N.Chandrakala¹, Rajeshwari, Harshitha Published paper on “The effect of lithium zirconate nanoparticle on structural, mechanical and electrical behaviors on PVA/PVP nanocomposite films” in *Advanced Materials XXVI symposium, Korea on 18th July 2017.*

H.N.Chandrakala¹, Rajeshwari D.U, Harshitha Published paper on “Effect of zinc oxide-cerium oxide nanoparticles on the Structural and thermal properties of polyvinyl alcohol (PVA) and polvinyl prrolidone (PVP) nanocomposite films” in *National Conference on Novel Polymeric Materials (POLYCON-2017) organized by Department of Polymer Science and Technology, JSS Science & Technology University, Mysore on 15th September 2017.*

H.N.Chandrakala¹, Shivakumaraiah² and Siddaramaiah³ has presented paper as Invited Speaker on Comparative study of electrical, mechanical and thermal behavior of Polyvinyl alcohol (PVA) and blend of polyvinyl alcohol / polyvinyl pyrrolidone (PVA/PVP) reinforced Lithium zirconate, lithium potassium zirconate and zinc oxide-cerium oxide nanocomposites, in *International Conference on Advanced Materials and Technology (ICMAT-20) on 16th-18th January 2020, at Sri Jayachamarajendra College of Engineering, Mysuru.*

Universal Human Value (UHV) :

Universal Human Value (UHV) Faculty Development certification programme (UHV-1 & UHV-II and UHV-III) done.

Resuorce Person:

Dr. H N Chandrakala, as a participated as a delegate in the 9th International Conference on Human Values in Higher Education (ICHVHE 2024) **Value-based Education for Humane Society (including SDGs)** on 22nd to 24th November 2024.

Workshop Attended

Applied Chemistry and Nanotechnology, **Department of Chemistry, Sri Siddartha Institute of Technology, Tumkur, 14th - 15th, Feb, 2007.**

Advances in Chemical Sciences, Department of Chemistry, Sri Bhagawan Mahaveer Jain College of Engineering, Bengaluru, 22nd - 23rd, Jan, 2010.

Advanced materials and their applications, Department of Physics and Chemistry, BMSIT, Bangaluru on 26 th, March, 2011.

Recent advances in polymer science, Department of Applied Science, Shridevi Institute of Engineering and Technology, Tumkur, 31st, Aug, 2010.

Recent advances in polymer science, Department of Applied Science, Shridevi Institute of Engineering and Technology, Tumkur, 31st, Aug, 2010.

Research methodologies & Report writing, e-learning center, Mysore

Faculty Development Programme

MISSION 10 X Faculty Empowerment five days' Workshop, Shridevi Institute of Engineering and Technology, Tumkur, 5th - 9th, April, 2010.

Recent trends in Engineering Chemistry (RTEC-2011), Vidya Vikasa Institute of Technology, Mysore, 14th - 15th, Oct, 2011.

This is to certify that Dr. H N Chandrakala from Kalpataru Institute of Technology, Tiptur has participated and successfully completed the 5-day Online UHV-I FDP on the theme “Inculcating Universal Human

Values in Technical Education” organized by All India Council for Technical Education (AICTE) from 10th October to 14th October 2022.

This is to certify that Dr. H N Chandrakala from Kalpataru Institute of technology, Tiptur has participated and successfully completed the 6-day Online UHV-II FDP organized by All India Council for Technical Education (AICTE) from 13th February to 18th February 2023.

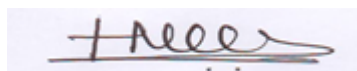
Other Responsibilities Handled

Warden, Kalpataru College Girls Hostel, Tiptur. March, 2007 – August 2023

Chairperson of College Internal Complaint Committee (CICC)/Anti Sexual Harassment Committee. February 2017.

Secretary of Science Forum - Since 2017

Member of Anti ragging Committee since 2017



(Dr. H N CHANDRAKALA)