

# Curriculum vitae

**Dr.P.N. Prashanth kumar**  
**Assistant Professor**  
**Dept.of Chemistry**  
**DRM Science College**  
**Davanagere**  
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## QUALIFICATION:

**Ph.D. Industrial Chemistry:** Dept. of Industrial Chemistry, Kuvempu University, INDIA

**Thesis Title:** “Design and development of Semiconducting oxide films; Studies on its applications”.

**Guide – Dr.H.S. Bhojya Naik,** Dept of Industrial Chemistry, Kuvempu University, Shankaraghatta- 577 451, Karnataka, India)

**M.Sc. Industrial Chemistry - (73.6%):** June – 2008, Dept. of Industrial Chemistry, Kuvempu University, INDIA.

**B.Sc. - (69.1%):** June – 2006 [Physics + Chemistry + Mathematics], Kuvempu University, INDIA.

## ADDITIONAL QUALIFICATION

### Project Undertaken in M.Sc (IC):

Synthesis, Characterization & Analgesic activity of some benzoxazoles derivatives.

**NRB Project undertaken in Ph.D:** Development of nano TiO<sub>2</sub> based transition metal compounds thin film for thermal sensors applications

### Computer Knowledge:

MS-office-Operating System : MS-DOS Windows 98, 2000 XP, Power point, Origin and Chemdraw.

## **SKILLS:**

- ❖ Good in Synthesis of Nanomaterials and optimization of reaction conditions.
- ❖ Strongly motivated team worker and quick learner.
- ❖ Social person and works with team and has good team building skills.
- ❖ ALL India Inter university chess tournament participated in Vellore (Tamil Nadu)

## **INSTRUMENTS KNOWN:**

- X-Ray Diffractometer
- Scanning Electron Microscopy
- UV-visible Spectrophotometer (Shimadzu)
- Fourier Transform Infrared Spectroscopy
- Energy Dispersive Spectroscopy.

## **Teaching Experience**

Three years teaching experience during 2014-2017 in the Dept. of chemistry at Davangare University, Four years teaching experience during 2017-2021 in Dept. of chemistry at NMKRV College for women, Bangalore and Three years teaching experience during 2021-2024 in Dept. of chemistry at DRM Science College, Davangere.

## **PUBLICATIONS:**

**Citations**      **615**  
**h-index**        **10**  
**i10-index**      **10**

1] H.R. Prakash Naik, H.S. Bhojya Naik, D.S. Lamani, T. Aravinda, B. VijayaKumar, B. Vinay Kumar, M. Yogesh, N. Sharath, **P.N. Prashanth Kumar**, “Benzoquinoline based Macrocyclic Copper(II), Cobalt(II) Complexes: Synthesis, Characterization and Light induced DNA Cleavage Studies”. *J. Macromol. Sci. Part A Pure. & Appl. Chem.*, **2009**, 46, 790–795. **Impact factor 0.963**

- 2] K.N. Harish, H.S. Bhojya Naik,\* **P.N. Prashanth Kumar** and R. Viswanath, Synthesis, enhanced optical and photocatalytic study of Cd–Zn ferrites under sunlight, *Catal. Sci. Technol.*, **2012**, 2, 1033–1039. **Impact factor 5.287**
- 3] **P.N. Prashanth Kumar**, H.S.Bhojya Naik,\* K.N. Harish and R. Viswanath “Studies on Optical and photocatalytic properties of surfactant assisted silver deposition on TiO<sub>2</sub> thin films prepared by microwave irradiation technique” *European Journal of Applied Engineering and Scientific Research*, **2013**, 2 (2):1-7.
- 4] **P.N. Prashanth Kumar**, H.S.Bhojya Naik,\* K. Narasimharao, K.N. Harish, R. Viswanath “Effect of optical and photocatalytic properties by silver deposition on polymeric precursor sol-gel derived TiO<sub>2</sub> thin films” *International Journal of Science Research* ,**2013**,1,308-313
- 5] **P. N. Prashanth Kumar**, H.S. Bhojya Naik,\* K.N. Harish and R.Viswanath, Effect of surfactant-assisted and pH dependent ZnO Nanoparticle-Catalyzed for the rapid Synthesis of Coumarin by Knoevenagel Condensation under microwave Irradiation, *Archives of Applied Science Research*, **2013**, 5 (2):132-137.
- 6] K.N. Harish, H.S. Bhojya Naik,\* **P.N. Prashanth Kumar** and R. Viswanath, Remarkable optical and photocatalytic properties of solar light active Nd substituted Ni Ferrite catalysts:For environment protection, *ACS Sustainable Chem. Eng.* **2013**, 1, 1143 – 1153. **Impact factor 5.287**
- 7] K.N. Harish, H.S. Bhojya Naik,\* **P.N. Prashanth Kumar** and R. Viswanath, Optical and photocatalytic properties of CdFe<sub>2</sub>O<sub>4</sub> nanocatalysts: Potential application in water treatment under solar light irradiation, *Archives of Applied Science Research*, **2013**, 5(2):42-51.
- 8] **P.N. Prashanth Kumar**, H.S. Bhojya Naik\*, H.R. Ravi, R. viswanath, H.R. Sreepad, Enhanced photovoltaic cell incorporating a dye-sensitized ZnS/ZnO composite thin films, *Environmental Science: An Indian Journal* 9(8):**2014** [285-293]. **Impact factor 0.45**

9] R. Viswanath, H.S. Bhojya Naik\*, G.S. Yashavanth Kumar, **P.N. Prashanth Kumar**, K.N. Harish and Prabhakara M.C. "Luminescence properties of blue-red emitting multilayer coated single structure ZnS/MnS/ZnS nanocomposites", *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 125C (2014) 222-227, <http://dx.doi.org/10.1016/j.saa.2014.01.022>. **impact factor 2.653**

10] R. Viswanath, H.S. Bhojya Naik\*, G.S. Yashavanth Kumar, **P.N. Prashanth Kumar**, K.N. Harish and Prabhakara M.C., "Studies on Characterization, Optical Absorption and Photoluminescence of Yttrium doped ZnS Nanoparticles", *Journal of Nanotechnology Hindawi publisher*, <http://dx.doi.org/10.1155/2014/924797>.(2014) **Impact factor 0**

11] R. Viswanath, H.S. Bhojya Naik\*, G.S. Yashavanth Kumar, **P.N. Prashanth Kumar**, K.N. Harish, M.C Prabhakara, R Praveen, "Synthesis and photoluminescence enhancement of PVA capped Mn<sup>2+</sup> doped ZnS nanoparticles and observation of tunable dual emission: A new approach", *Applied Surface Science*, <http://dx.doi.org/10.1016/j.apsusc.2014.02.013>. **Impact factor 3.150**

12] R. Viswanath, H.S. Bhojya Naik\*, G.S. Yashavanth Kumar, **P.N. Prashanth Kumar**, Arun Kumar G. and Praveen R, "EDTA-assisted hydrothermal synthesis, characterization and photoluminescent properties of Mn<sup>2+</sup>-doped ZnS", *Journal of Luminescence* 153 (2014) 446–452 **Impact factor 3.599**

13] <sup>1</sup> Ravi HR\* , <sup>2</sup> **Prashanth kumar PN**, <sup>3</sup> Naveenkumar P, <sup>4</sup> Devarajegowda HC and <sup>5</sup> Sreepad HR Photocatalytic degradation of pathogenic bacteria using Novel-composite ZnO nanofilms with 2-(2', 1, 3-dithiolan-2-ylidenemethanediyl) diquinoline-4- carboxylic acid. *International Journal of Chemical and Pharmaceutical Sciences* 2015, June., Vol. 6 (2) **Impact factor 0.684**

14] C.N.Sudamani, H.S.BhojyaNaik\* ,K.R.Sangeetha Gowda,M.Giridar.D,girija, **P.N.Prashanth Kumar** Synthesis ,DNA interactions and antibacterial PDT of Cu(ii)complexes of phenantroline based photosensitizers via singlet oxygen generation.Spectrochimica Acta Part A Molecular and Biomolecular Spectroscopy 138(2015)780=788 **Impact factor 2.653**

15] K.N. Harish, H.S. Bhojya Naik,\* **P.N. Prashanth Kumar** and R. Viswanath, Solar light active ZnFe<sub>2-x</sub>Al<sub>x</sub>O<sub>4</sub> materials for optical and photocatalytic activity an efficient photocatalyst *International Journal of Science Research* ,2013,1,301-304 **Impact factor 1.23**

**16]** Iron Phenanthroline based photosensitization for antibacterial PDT: synthesis, DNA binding and photo-induced DNA cleavage activity. C.N. Sudamani, H.S. Bhojya Naik\* , K.R. Sangeetha Gowda, M. Giridar .D, Girija ,**P.N. Prashanth Kumar**, *Novel Med Chem Res*(2017) 26: 1160-1169 **Impact factor 1.965**

**17]** Influence of calcination temperature for optical and photocatalytic properties of TiO<sub>2</sub> thin films prepared by EB gun and Sol-gel method **Prashanth kumar PN** , Ravi HR , H.S Bhojya Naik\*, K.N. Harish (Accepted) **Impact factor 0.84**

18] Comparison of optical and photocatalytic properties of TiO<sub>2</sub> thin films modified with Ag nanoparticles **Prashanth kumar PN** , Ravi HR , H.S Bhojya Naik\*, H.R. Sreepad, *Material science (Indian journal)* Vol 14,2,2016 **Impact factor 0.5**

19] Influence of Ni (II) oxime complex coupled with the combination of Diverse sized ZnO Nanoparticles on Photovoltaic Performance. **Prashanth Kumar P.N.**<sup>1</sup>, Sajan Ponnappa Chimmikuttanda <sup>2\*</sup>, Ravi Hethgowdanally Rajegowda<sup>3</sup>, Amol Naik <sup>2</sup>, Maxwell Selase Akple<sup>4</sup>, *European journal of Engineering Science and technology.* 3(2):41-57,2020. DOI:[10.33422/ejest.v3i2.349](https://doi.org/10.33422/ejest.v3i2.349).

20] Photocatalytic degradation of pathogenic bacteria using functionalized different sized ZnO nano films with 1-[(E)-1,3-benzothiazol-2-ylidiazonyl]naphthalen-2-ol, H.R. Ravi, **P.N. Prashanth kumar**, H.R. Sreepad, *ChemXpress* 9(1), 080-090, (2016).

21] Synthesis and application of a 0D/2D nanocomposite for the nanomolar level detection of an antiandrogen drug†, S. Santhosh,\*a K. M. Sahana, b S. Sandeep, \*b **P. N. Prashanth Kumar**,c Norah Salem Alsaiani,d Khadijah Mohammedsaleh Katubi, d Khamael M. Abualnajaie and J. R.

Rajabathar f ,Accepted 19th July 2022, New journal of chemistry, RSC. DOI: 10.1039/d2nj01967a.

23.Prashanth Kumar PN\*, Pramod KS, Shivarudrappa H Pattanashetty,Vasantha Kumar BC, Arun Aravindakshan KV, Annu Laya Abraham,Fibin Varghese TV and Areej Al Bahir, An efficient ZnO and Ag/ZnO honeycomb nanosheets for catalytic green one-pot synthesis of coumarins through Knoevenagel condensation and antibacterial activity. <https://doi.org/10.1515/zpch-2024-0607>,Received February 6, 2024; accepted May 8, 2024; published online May 29, 2024. Impact Factor - 3

24. Cadmium-doped titanium dioxide material for electrochemical sensing of  $\square$ chloramphenicol in diverse real-world samples: a DFT analysis, Srujan Basavapura Ravikumar<sup>1</sup> Sirisha Subbareddy<sup>2</sup> Arehalli Shivamurthy Santhosh<sup>3</sup>, Prashanth Kumar Pasupaleti Neelanjeneyalu<sup>4</sup>, Jothi Ramalingam Rajabathar<sup>5</sup>, Khalid Mashay Al-Anazi<sup>6</sup>,Mohammad Abul Farah<sup>6</sup>, Sandeep Shadakshari<sup>1</sup>,Received: 19 June 2024 / Revised: 4 September 2024 / Accepted: 16 September 2024, Springer Nature 2024. Impact factor. 2.6

### **Organization of Seminars/workshops/Course Work**

- 1.Dr.P.N.PrashanthKumar, Coordinator, organizing online short term course on “Intellectual property rights” Sponsored by UGC Stride under component-1 organized by Department of Chemistry collaborated with RV legal studies from 4<sup>th</sup> to 13<sup>th</sup> November 2020.
2. Dr.P.N.PrashanthKumar, Coordinator, organizing one day workshop on “Technical Writing and Plagiarism policies” Sponsored by UGC Stride under component-1 organized by Department of Chemistry from 10<sup>th</sup> March 2021.
3. Dr.P.N.Prashanth Kumar, Convener, organized one day International Seminar entitled “Present and future trends in Batteries and Fuel cell “ Dated on 27<sup>th</sup> June 2024.

**Paper Presented / Participated at National and International Conferences and workshops during Research:**

- 1] Paper presented at International Conference on **“Recent advances in material science (RAMS-2012)**, Bangalore from 6th-8th November 2012
- 2] Paper presented at National Symposium on **“Frontier Areas in Chemical Science And Nanotechnology”** Kuvempu University, Shankaraghatta on 1st& 2nd May-2010.
- 3] Participated at National workshop on **“usage of instruments for nanotechnology applications”**Kuvempu University, Shankaraghatta On 25thApril 2011.
- 4] Participated at National workshop on **“Elements of nanoscience and technology”**Kuvempu University, Shankaraghatta, during Oct 12-13 2012.
- 5] Participated in one day national conference on **‘RECENT TRENDS AND FUTURE APPLICATIONS OF CHEMICAL SCIENCES (RTFACS-2016)’** Devanagare University during 5th Nov 2016.
- 6] Participated in one day national conference on **‘CLIMATE IS CHANGING, FOOD AND AGRICULTURE MUST TOO’** Davangere University during 25th Oct 2016.
- 7] Participated in one day national conference on **“RECENT ADVANCES IN PHYSICAL SCIENCES- AN INTERDICIPLINARY APPROCH (RAPS-IA-2017)** Govt. Science College, Hassan during 25th MARCH 2017.
- 8] Paper presented at two day National conference on **“Recent Advances in chemical Biology and Material Science for Industry and society”** Kuvempu University, Shankaraghatta on 9<sup>th</sup> & 10<sup>th</sup> Feb 2018.
- 9] Poster presenter at international conference on **“International conference on advances in materials research”** Ramaiah University of Applied sciences, Banglore on 25<sup>th</sup> to 27<sup>th</sup> July 2019. Paper presented at international conference on **“International conference on life, chemical and health ”** Ramaiah University of Applied sciences, Bangalore.

10] Dr P N Prashanth Kumar P N Assistant Professor in Chemistry D R M Science College, Davangere, poster presented in International conference on chemical sciences: Academia, Industry and Society interface (ICCS 2022) Presented a paper on 23 rd -25th June 2022 in JYOTHI NIVAS COLLEGE Autonomous, Bangalore in collaboration with KSTA.

11]Dr P N Prashanth Kumar P N Assistant Professor in Chemistry D R M Science College, Davangere, A one day workshop participated on NEP-Physics for UG College teachers of Physics, Davangere on 22nd December-2021.

12]Dr P N Prashanth Kumar P N Assistant Professor in Chemistry D R M Science College, Davangere, Seven days' workshop participated From NOV 14th to NOV 20th 2022, Hands-on training for sophisticated instruments for materials and device fabrication and characterization was organized by Department of Physics, Calicut, kerala.

13]Emerging materials for sustainable energy and environment has presented a poster at the international symposium on emerging materials for sustainable energy and environment held at SJSE,JSSSTU MYSORE, organized dept. of chemistry, on 15th July 2023.

14]International conference on Advances in functional materials and coatings (ICAMFC) organized by the department of physics of MES Ponnani College in Association with Kerala state council for Science and technology and CSIR held at MES Poonami College Ponnani, Malappuram, Kerala, on 14 Feb 2024 presented a paper titled "An efficient ZnO and Ag/ZnO honeycomb nanosheets for catalytic green one-pot synthesis of coumarins through Knoevenagel condensation and antibacterial activity"

**Sd/-**

**(P. N. Prashanth kumar)**