

# Curriculum Vitae

1. **Name and full correspondence address**

**Dr. Pawan Kumar**

House no.17, Near Gurudwara  
Harbanspura Colony  
Yamuna Nagar-135001  
Haryana (India)



2. **Email and contact number**

Email: [pawankk299@gmail.com](mailto:pawankk299@gmail.com)

Mobile: 9354273489

3. **Date of Birth**

29-09-1983

4. **Gender**

Male

5. **Father/Mother name**

Sh. Rajinder Kumar/Smt. Prema Devi

6. **Nationality/Category**

Indian/OBC

7. **Google scholar link:**

n0jrKTgAAAAJ

8. **Marital Status**

Married

**ORCID ID:**

0000-0002-4962-4004

**Scopus ID:**

57241562600

**Vidwan ID:**

238055

**Web of Science (Publons ID):** 4775100

9. **Specialization/Research Interest:**

Design and develop chemical sensors/probes by the organic and inorganic synthesis for molecular & ions recognitions and their applications. Chemical and isotopic studies of Groundwater properties.

10. *Ph.D. thesis title:* **Chemical Probes for the Detection of Moisture in Organic Solvents and their Possible Applications.**

- Supervisor Name:* **Dr. Amilan Jose. D** (National Institute of Technology, Kurukshetra. Kurukshetra -Haryana, India)
- Year of Award:* February-2021

11. *M.Phil. Dissertation title:* **Polarography Studies of Complexes of 6-Aminohexanoate ions with some Metal Ions.**

- Supervisor Name:* **Dr. S.K. Bhasin** (Maharishi Markandeshwar University (MMU) Mullana, Ambala -Haryana, India)
- Year of Award:* May-2009

12. *Research project title:* **Study of Groundwater along Bhakra Main Line - Hansi Branch- Butana Branch -Multipurpose Link Channel using Isotopic and Chemical Approaches.**

- PI and Co-PIs:* **Dr. K. K. Singh** (NIT-KKR), **Dr. Unnikrishna Warriar C** (CWRDM-Kozhikode. Kerala), **Dr. Mahesh Pal** (NIT-KKR) and **Dr. Dhoop Singh** (HIRMI-KKR, Haryana).
- Funding Agency:* DST, New Delhi through CWRDM, Kozhikode (Kerala).

13. **Training**

National Level Training on **“Isotope Tracer Techniques for Water Resources Development and Management”** organized by Centre for Water Resources Development and Management (CWRDM), Kozhikode Kerala under the aegis of Department of Science and Technology, Government of India during 11-16 July, 2011.

14. **Academic Qualification (10<sup>th</sup> class onwards)**

<b>Class/Degree /Diploma</b>	<b>Year</b>	<b>Subject</b>	<b>University/Institution/Board</b>	<b>CGPA/ Mark (%)</b>
Ph.D.	2021	Chemistry	National Institute of Technology (NIT), Kurukshetra (Haryana), India	CGPA- 8.75 (Course work)
M.Phil.	2009	Physical Chemistry	Maharishi Markandeshwar University (MMU) Mullana, Ambala (Haryana), India	CGPA- 9.30 Grade A
M.Sc.	2008	Physical Chemistry	Kurukshetra University, Kurukshetra (KUK) (Haryana), India	60.00
Diploma in Reasoning	2006	Principles of logic, Applied reasoning	Kurukshetra University, Kurukshetra (KUK) (Haryana), India	84.00
B.Sc.	2004	Chemistry, Physics, Mathematics, English, Sanskrit	Mukand Lal National College, Yamuna Nagar. Kurukshetra University, Kurukshetra (KUK) (Haryana), India	60.89
12 <sup>th</sup> (intermediate)	2000	Chemistry, Physics, Mathematics, Hindi, English	Govt. senior secondary School, Jagadhari-Workshop, Yamuna-Nagar. (Board of School Education Haryana), India	61.50
10 <sup>th</sup> (Matriculation)	1998	Hindi, English, Science, Mathematics, Social-Studies, Physical & Health Education	Mukand Lal National senior secondary School, Yamuna-Nagar (Board of School Education Haryana), India	68.83

15. **Work experience (in Chronological Order).**

S. No.	Position held	Organization	From	To
1.	Assistant Professor	Chemistry Department, School of Sciences, IFTM University, Moradabad (U.P)	11-10-2021	Till now
2.	CSIR-SRF	Chemistry Department, National Institute of Technology (NIT), Kurukshetra. Haryana India.	1-04-2019	29-12-2020
3.	Research Fellow	Chemistry Department, National Institute of Technology (NIT), Kurukshetra. Haryana India.	14-07-2016	31-03-2019
4.	JRF (Research project)	Research Project funded by DST, New Delhi through CWRDM Kozhikode, Kerala at Civil Engg. Department (NIT, Kurukshetra), Haryana, India	25-08-2010	27-05-2013
5.	Lecturer in Chemistry	Seth Jai Prakash Mukand Lal Institute of Engineering & Technology (JMIT) Radaur, Yamuna-Nagar, Haryana, India	19-08-2009	31-05-2010

16. **Award/Fellowship received**

S.No	Name of Award/Fellowship	Awarding Agency/Conference programme	Month/Year
1.	CSIR-Senior Research Fellow (SRF)	CSIR, New Delhi (India) File no. 09/1050(0012)2019-EMR-I	04/2019
2.	TEQIP-II & III Fellowship	MHRD, Govt of India	07/2016 & 04/2018
3.	Best Poster Award (in international conference)	MMAD, NIT- Kurukshetra (Haryana)	01/2018
4.	Best Poster Award (in national conference)	NICS, SLIET-Longowal (Punjab)	10/2016

17. **Publications (In descending order)**

11. Srushti Gadiyaram,; **Kumar, P.**; Singh, A.; and Jose, D. A. “Detection and discrimination of water (H<sub>2</sub>O) and heavy water (D<sub>2</sub>O) by an off-the-shelf fluorescent probe” **Microchemical Journal** **2022**, 176, 107244, ISSN:0026-265X, doi.org/10.1016/j.microc.2022.107244, **Impact Factor = 4.821.**
10. **Kumar, P.**; Ghosh, A.; and Jose, D. A. “Chemical Sensors for Water Detection in Organic Solvents and their Applications” **ChemistrySelect** **2021**, 6(4), 820-842, ISSN: 2365-6549, doi.org/10.1002/slct.202003920, **Impact Factor = 2.109.**

9. **Kumar, P.;** and Jose, D. A., “Naked Eye Detection of Moisture in Organic Solvents and Development of Alginate Polymer Beads and Test Cassettes as a Portable kit” *Analytica Chimica Acta* **2020**, 1136, 178-186, ISSN: 0003-2670, doi.org/10.1016/j.aca.2020.09.058, **Impact Factor = 6.558.**
8. **Kumar, P.;** Srushti Gadiyaram and Jose, D. A., “Simple Iron (III) Complex Based Highly Sensitive Fluorescent Off-On Sensor for the Detection of Trace Amount of Water in Organic solvents and Edible Oilseeds” *ChemistrySelect* **2020**, 5(34), 10648-10655, ISSN: 2365-6549, doi.org/10.1002/slct.202002530, **Impact Factor = 2.109.**
7. **Kumar, P.;** Ghosh, A.; Jose, D. A., “A simple colorimetric sensor for the detection of moisture in organic solvents and building materials: applications in rewritable paper and fingerprint imaging” *Analyst* **2019**, 144 (2), 594-601, ISSN: 1364-5528, doi.org/10.1039/C8AN01042K, **Impact Factor = 4.616.**
6. **Kumar, P.;** Sakla, R.; Ghosh, A.; Jose, D. A., “Reversible Colorimetric Sensor for Moisture Detection in Organic Solvents and Application in Inkless Writing” *ACS Applied Materials & Interfaces* **2017**, 9 (30), 25600-25605, ISSN: 1944-8252, doi.org/10.1021/acsami.7b05335, **Impact Factor = 9.229.**
5. **Kumar, P.;** Kaushik, R.; Ghosh, A.; Jose, D. A., “Detection of Moisture by Fluorescent OFF-ON Sensor in Organic Solvents and Raw Food Products” *Analytical Chemistry* **2016**, 88 (23), 11314-11318, ISSN: 1520-6882, doi.org/10.1021/acs.analchem.6b03949, **Impact Factor = 6.986.**
4. Sakla, R.; Singh, A.; Kaushik, R.; **Kumar, P.;** Jose, D. A., “Allosteric Regulation in Carbon Monoxide (CO) Release: Anion Responsive CO-Releasing Molecule (CORM) Derived from (Terpyridine)phenol Manganese Tricarbonyl Complex with Colorimetric and Fluorescence Monitoring” *Inorganic Chemistry* **2019**, 58 (16), 10761-10768. ISSN: 1520-510X, doi: 10.1021/acs.inorgchem.9b00984, **Impact Factor = 5.165.**
3. **Kumar, P.;** Arya, D.; Nain, D.; Singh, A.; Ghosh, A.; Jose, D. A., “Dual Colorimetric Sensor for Picric acid and Pyrophosphate: Practical Application for Molecular Logic Gates” *Dyes and Pigments* **2019**, 166, 443-450, ISSN: 0143-7208, doi.org/10.1016/j.dyepig.2019.03.058, **Impact Factor = 4.889.**
2. Kaushik, R.; **Kumar, P.;** Ghosh, A.; Gupta, N.; Kaur, D.; Arora, S.; Jose, D. A., “Alizarin red S-zinc(ii) fluorescent ensemble for selective detection of hydrogen sulphide and assay with an H<sub>2</sub>S donor”. *RSC Advances* **2015**, 5 (97), 79309-79316, ISSN: 2046-2069, doi.org/10.1039/C5RA11901D, **Impact Factor = 3.361.**
1. Singh, K K.; **Kumar, P.;** Warriar, C.U.; Singh, D.; “Assessment of Groundwater Quality Along Bhakra Main Line- Hansi Branch- Butana Branch- Multipurpose Link Channel (MPL) in Haryana, India for Domestic and Agriculture Purposes” *International Journal of Advance Research in Science and Engineering*, **2015**, 4(07), 289-299, ISSN: 2319-8354, **Impact Factor = 6.1.**

18. **National/International Conferences/Workshops attended (In descending order)**

12. Participated in one-week National Faculty Development Programme on “Recent Innovations and Research Breakthroughs in Science” organized by School of Sciences, IFTM University, Moradabad (U.P) from February 21-25, 2022.
11. Participated in workshop on “*Research Methodology and applications in Science and Engineering*” organized by Department of Mathematics, School of Sciences, IFTM University, Moradabad (U.P) on February 04, 2022.
10. Poster presented on “*Quinizarin based colorimetric moisture sensor and application in fingerprint imaging*” in **International** Conference on Recent Trends in Material Science and Technology (ICMST-2018) jointly organized by Indian Institute of Space Science and Technology, Thiruvananthapuram and Materials Research Society of India, Thiruvananthapuram, Kerala from October 10-13, 2018.
9. Attended two-day workshop on “*NMR Operation, Handling of Hardware and Software Processing*” organized by CSIR- Institute of Microbial Technology, Chandigarh on August 20-21, 2018.
8. Oral presentation on “*Colorimetric sensor for the detection of moisture in organic solvents and application in inkless writing*” in **International** Conference on Advances in Analytical Sciences (ICAAS -2018) jointly organized by Indian Society of Analytical Scientist, Delhi Chapter & CSIR- Indian Institute of Petroleum, Dehradun, Uttarakhand from March 15-17, 2018.
7. Poster presented on “*Fluorescent and Colorimetric Sensors for Recognition of Trace level water in Organic solvents*” in **National** Conference on Molecules and Materials (MMT -2018) organized by Department of Chemistry, NIT Kurukshetra, Haryana on February 17, 2018.
6. Poster presented on “*Dansyl Based-Copper complex: A Versatile Fluorescent OFF-ON Anions Sensor*” in **International** Conference on Multifunctional Materials: Analytical Techniques and Diverse Applications (MMAD -2018) organized by Department of Chemistry, NIT Kurukshetra, Haryana on January 20, 2018 (**Best Poster Award**).
5. Attended five-days GIAN course on “Vibrational Spectroscopy and Molecular Vibrations” organized by Department of Chemistry, NIT Kurukshetra, Haryana from January 15-19, 2018.
4. Attended one-week workshop on “*Molecules & Materials Technology: Interface with R&D and industries (MMT-2017)*” organized by Department of Chemistry from March 21-26, 2017 at NIT Kurukshetra, Haryana.
3. Poster presented on “*Copper Complex Based Fluorescent OFF-ON Sensor for the Detection of Anions*” in **National** Conference on Nascent Innovation in Chemical Sciences (NICS -2016) organized by Department of Chemistry, SLIET, Longowal (Distt. Sangrur), Punjab on October 21-22, 2016. (**Best Poster Award**).

2. Oral presentation on “*Dansyl Based Fluorescent off-on Sensor for the Detection of Anions*” in **National** Conference on Analytical Chemistry and Molecular Spectroscopy (ACMS-2016) organized by Department of Chemistry, NIT Hamirpur, Himachal Pradesh on October 13-14, 2016.
1. Poster presented on “*Groundwater studies using Chemical & Isotopic Approaches and its Application in Discrimination of pollutants sources*” in **National** conference on Environmental pollution - challenges ahead and their solutions (EPCAS-2012), Global Research Institute of Management & Technology Radaur, Yamuna-Nagar, Haryana on April 21-22, 2012.

19. **Others Activity**

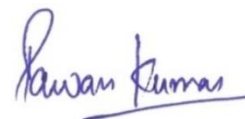
- Performed duty of Stage decoration in “Science Conclave -2019” Organized by NIT Kurukshetra and DST Haryana on 28 February – 01 March, 2019.
- Participated in seminar on “Role of Women Achievers in Science, Technology and Management in Sustainable Green Energy in India” on International Women’s Day 8 March 2018 held at NIT Kurukshetra.
- Basic Youth Leadership Training Camp at “Nainital” from Department of Youth & Cultural Affair from K.U.K. from 27 June 2007 to 04 July 2007.
- Youth Leadership Training Programme at “Pipli (Kurukshetra)” from Nehru Yuva Kendra Sangathan (Haryana) from 11 Dec. 2006 to 20 Dec. 2006.
- Advance Youth Leadership Training Camp at “Dalhousie” from Department Youth & Cultural affair from K.U.K. from 28 June 2006 to 05 July 2006.
- Attended combined N.C.C Annual Training camp at Chandigarh from 23 Dec 1995 to 1 January 1996.

20. **Declaration**

I hereby that the information given above is true & correct to the best of my knowledge & belief and nothing has been either concealed/hidden or misrepresented by me therein.

Date: 04-05-2022

Place: Yamuna Nagar



**Dr. Pawan Kumar**