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| **Title** | Dr (Mrs) | **Name** | UMA SHARMA | **Photograph** |
| **Affilliation** | School of Studies in Chemistry & Biochemistry, Vikram University, Ujjain (M.P.) 456 010INDIA |  |
| **Designation** | Professor physical chemistry |  |
| **Address (Residence)** | F-2/33, University Qtrs., Vikram University Campus,Kothi Rd Ujjain (M.P.) |
| **Phone- Office** | +91 734 2511321 |
| **Residence** | +91 734 2511703 |
| **Mobile** | +91 9826840614 |
| **E-Mail** | umasharma10@rediffmail.com |
| **Educational Qualifications** |
| **Degree** | **Institution** | **Year** |
| Ph.D. | UTD,VikramUniversity,Ujjain | 1985 guided by Prof.V.W. Bhagwat |
| M.Phil.M.Sc. | UTD,VikramUniversity,UjjainUTD, VikramUniversity,Ujjain | 19821981 |
| B.Sc. | Govt. Girl ‘s Degree College, Ujjain, | 1979 |
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| **Carrear Profile** |
| **S.No.** | **Organization** | **Designation** | **From** | **To** | **Duty Performed** |
| 01 | Govt. College Mahidpur | Lecturer | 1984 | 1986 | Taught UG |

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| 02 | School of Studies in Chemistry & Biochemistry, Vikram University, Ujjain (M.P.) | Lecturer | 1986 | 1991 | Teaching PG (Chemistry,Biochemistry) guiding M.Phil.,Ph.D. Research |
| 03 | Sr. Lecturer | 1991 | 1994 |
| 04 | Reader | 1994 | 2002 |
| 05 | Professor | 2004 | till date |
|  |  | Chairman Board of Studies Chemistry | 2012 |  |  |
| **ResearchInterests** |
| **Supramolecular Chemistry - Design and synthesis of podands, Quinone derived switched ionophores.****Membrane Technology- Carrier facilitated transport of biologically important cations,aminoacidsetc Nanotechnology- Biocompatibility of fullerenes and drug encapsulation.** |
| **Topics Taught in M.Sc. & M.Phil. course** |
| 1. Spectroscopy – IR & Raman, NMR, NQR, ESR, UV-Visible spectroscopy, Mössbauerand Photoelectronspectroscopy.
2. Supramolecular Chemistry & Nanotechnology - Ion Selective Electrodes, Chemical Sensors /Biosensors, Molecular Devices and smartmaterials
3. Physical Chemistry- X- ray Diffraction, Electron Diffraction , Surface chemistry, Electrochemistry, Polymer Chemistry, Photophysical Chemistry ,LASERs
4. Biochemistry -Enzymology, Biomimetic Chemistry, BioanalyticalChemistry.
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| **Awards and Distinctions** |
| **III M.P. Young Scientists Award,1988****Indian Science Congress Young Scientists Award,1989****Indian National Science Academy Visiting Fellowship 1994 (worked at BARC,Mumbai)****UGC awarded Indo-Hungarian Fellowship for 2005-06 ( worked on FullernesBiocompatibilty with Professor Tibor Braun ) at Pec s Medical University ,Hungary in2005****DrD.S.Bhakuni Award 2013 by Indian Chemical Society,Kolkata** |
| Publications – 81 publications in referred journals 569 citations. |
| Ph.D. awarded under supervision – 23 awarded and 8 students are working. |
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| Research Projects completed – five sponsored by UGC, AICTE, MPCST etc. |
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| **Association with Professional Bodies** |
| Committees and BoardsMemberships**Life member of Indian Science CongressAssociation,Kolkata Life member of Indian Council of Chemists,Agra****Life member of Indian Membrane Society,Vadodara** |
| ***Popular Articles –*** |
| 1.Application perspectives of extraction and membrane technology for separation of metal ions in Chemistry Education, (1998)UGC, New Delhi 2.Chapter on Infrared Spectroscopy for manual of INGNOU ,NewDelhi***Invited Lectures delivered at***Symposium on Membrane Science applications at **Convention of Chemists Rewa1992**21st Conference, **Indian Council of Chemists** at **Jabalpur,2002.**22nd Conference **Indian Council of Chemists** at **Roorkee,**2003.Lecture on **Supramolecular Chemistry** at Govt P G College Neemuch2003National seminar on **“Modern trends in Nanotechnology & Supramolecular Assemblies**” at Ahmedabad, 2007Lecture on **Mossbauer Spectroscopy** at P M GujratiCollege,Indore2007National seminar lecture **Nanotechnology-a biomimetic approach** at Khalsa College Indore2008Academic Workshop lecture on **Nanotechnology &Supramolecular Chemistry** at Kota UniversityRaj.2009Invited talk on **Molecular Recognition – a link between Supramolecular Chemistry & Nanotechnologyat****NationalseminaronConfluenceofSupramolecularChemistry&NanoscienceatGujratUniversity2010**Invited lecture on **Liquid membrane transport studies of anthraquinone derived lariat ethers at IIT MUMBAI Apr.2010**Invited talk at **NSRAC -2011** at Department of Pure and Applied Chemistrty University of KotaRaj.2011 Invited lecture on **Recent trends in Chemistry** at Pacific University **Udaipur**. Jan.2012Invited lecture at **Symposium on Rerearch methodology** on **Science day 2013 at MPCST Bhopal**. Invited lecture on **Membrane Separation Techniques at SGSITS ,Indore 2013**Invited lecture on **Supramolecular Chemistry & Nanotechnology** at MohanlalSukhadiaUniversity,Udaipur Rajasthan 2014Invited talk on **Supramolecular Chemistry - an approach to Molecular engineering and soft matter.at MANIT Bhopal May2015*** Invited lecture in International Conference on “Recent Trends in Chemical Sciences” at Jiwaji University, Gwalior 2018
* Invited talk in UGC-SAP(DRS-II) National Conference on “Advances in Environmental and Chemical Sciences” at Pt. Ravishankar Shukla University, Raipur 2018
* Invited talk at the 3rd International Conference on “Emerging Advanced Nanomaterials” held in Newcastle, Australia 2018.
* Delivered invited lecture in International Conference on “Role of Spectroscopy in Chemical Sciences” at Jiwaji University, Gwalior 2019.
* Delivered lecture on “Discovery of New Elements in Periodic Table” organised by MHRD & Dept. of Higher Education at Maharaja Ranjit Singh College, Indore in 2019.
* Invited talk at National Academic workshop-2020 on “Facet of Synthetic and analytical approach in Chemical Science” at Deptt. Pure & applied Chemistry,University of Kota from 12th -16th Mar.2020

 ***Forthcoming Researchplans***1. Molecular modeling &biomodeling Synthesis of new supermolecules (rotaxanes, Molecular Tweezers, Molecular clips) for specific purpose i.e. sensors and molecular devices , new supermolecules (Cucurbituril and rotaxanes) 2.Inorganic and organc hybrid materials n their applications Biocompatibility of fullerenes.3. Membrane transport studies- Biomodelling and use of vesicles as carrier. Soft matter etc. |

