

UNIVERSITY OF KOTA KOTA

Faculty Profile

| Title | Dr. | First Name | Sushil Kumar | Last Name | Sharma | Photograph | |
|--|--|---|---|-----------------------------|--------------------|--------------------|--|
| Designation | | Assistant Professor | | | | | |
| Address | | Department M.B.S Marg, Kota-324 005 | | | | | |
| Phone No. | | | 742 (Office), +919 | | lobile) | | |
| E-mail | | sushil@uok.ac | .in,skaharmauok@ | gmail.com | | | |
| Educationa | l Qualifi | cations: | | | | | |
| Degree | | Institution | | | | Year | |
| Ph.D. | | | Chemistry, Univer | rsity of Rajasth | an, Jaipur | 2011 | |
| Title of Ph.I Syntheses of | | | Using Eco-Friendly El | ectrochemical and | Microbial Techniq | lues | |
| M.Sc. (Cher | nistry) | Department of | Chemistry, Unive | rsity of Rajastł | nan, Jaipur | 2004 | |
| Career Prof | | | | | | | |
| -Assistant P - CSIR Junic -Lecturer, A | Professor, or Researce Agrawal P | Govt. Engineeri ch Fellow from M .G.College, Jaip | ota, Kota from Aug ng College, Jhalaw larch 2006 to Augus ur from July, 2005 | ar from Sep.01, at 2007. | | , 2012 | |
| Job Respon | | | | | | | |
| At Universi | • | | 11 0010 10 0010 | 1.4 | | | |
| • | | | ell-2012-13,2013- | | | | |
| • | | | mittees during UC | | • | | |
| • | | | mittees of LAHA | | | | |
| • | | er-Dean, Studen er -Counselling | nt Welfare's 2012- | -13,2013-14,20 | 14-13,2013-10,2 | 2010-17 | |
| • | | 0 | ommittee during (| Jultural Dragray | $mm_{2} 2012 2014$ | 2015 | |
| • | | | or revaluation wor | | | | |
| • | | | printing paper con | | | | |
| • | | er-Poshak and | | | | vocation-2013,III- | |
| | | ocation-2016 | | | | | |
| • | Memb | er- Counting Te | eam-Students' Uni | on Election-20 | 13,2014,2015 | | |
| • | Memb | er-Prize distrib | ution committee, A | Annual Function | n-2013 | | |
| • | Memb | er-University F | lying Squad Com | nittee-2014 | | | |
| • | Memb | er-Ph.D course | work-2012 (sciend | ce) conducting | committee. | | |
| • | Memb | er-Alumni Asso | ociation Constituti | on Committee. | | | |
| • | Memb | er-NAAC cond | ucting Committee. | | | | |
| • | | inator, PhD Con iversity of Kota | | nme-2017 held | from 25 July to | o 31 August, 2017 | |

- Coordinator, PhD Course work programme-2016 held from 21 April to 20 May, 2016 at University of Kota, Kota.
- Coordinator, PhD Course work programme-2015 held from 09 March to 31 March, 2015 • at University of Kota, Kota.
- Member, Organizing Committee of 69th Annual Conference of ISAS during 14-16 December, 2015 at University of Kota, Kota.
- Member, Admission for Professional Courses-2016-17.
- Member, Admission for Professional Courses-2017-18.

At Departmental level:

- Member-Departmental Purchase Committee.
- Practical Incharge in the session 2012-13 •
- Member-M.Sc. Industrial Chemistry Semester Syllabus design committee.
- Faculty-Incharge-Water Analysis and Planetary Ball Mill in the Centre for Analytical • Instrumentation Facility (CAIF)
- Member-Verification of purchased items 2012-13 (Imprest, annual contract, Instrument) •
- Member-Department Inventory verification committee. •
- Member-Time Table Preparation Committee Session 2013-14,2014-15,2015-16 •
- Member-Chemical stores maintenance committee 2013-14 •
- Admission In charge Session-2015-16 •

Area of Research Interest/Specialization:

Electro-organic Synthesis, Green Chemistry, Bio-Catalysis, Corrosion

Subject/Papers Taught:

- **Organic Reaction Mechanism**
- Chromatography
 - **Electro-analytical Techniques**

- Polymer ٠
- **Organic Synthesis** • **Disconnection Approach** •

- **Research Guidance:** Supervisor of DST, Rajasthan funded students project **Research Projects: 01 Funding Agency** S. No. **Title of Project** Amount Duration (in INR) Baker's Yeast Mediated Synthesis of 1. 06 lakh UGC, New Delhi 02 Years Some Bioactive Chiral Alcohols

Publication Profile:

(a) Research Papers published in Refereed/Peer Reviews Journals:

1. "Eco-friendly synthesis of *p*-aminobenzyl alcohol using electrochemical techniques"; Shilpi Kaushik, Hemlat Agarwal, Sushil Kumar Sharma, P.S.Verma, I. K. Sharma Int. J. chem. Sci. 6(4), 2008, 2207-2213.

2. "Electrochemical Reduction of p-Nitro benzoic acid at Glassy Carbon and Stainless Steel (SS-316) Electrode at Different pH; Sushil Kumar Sharma, Devkishan Chhimpa I.K.Sharma and P.S. Verma Asian J. Chem., Vol. 21, No. 5, 2009, 3976-3980.

3. "Voltammetric behaviour of o-nitro benzoic acid in aqueous-methanol medium" Sushil Kr.Sharma, Nidhi Jain, Hemlata Agarwal, I.K.Sharma and P.S.Verma Int.J. Chem. Sci. 7(2), 2009, 1353-1360.

4. "Chemo Selective Reduction Of Aromatic Nitro Compounds to Aromatic Amines By Baker's

Yeast in Basic Solution" Sushil Kumar Sharma, I. K. Sharma and P.S.Verma *Int. J. App. chemistry.8*(1), 2012, 1-4.

5. "Electrochemical reduction of *m*-Nitro benzoic acid at various electrode and pH" Sushil Kumar Sharma, I. K. Sharma and P.S.Verma, *Res. J. of Pharma.l,Bio and Chemical Sciences* 2013, 4(1), 635-641.

6. "Electrochemical Reduction of *p*-Nitrobenzamide at Stainless (SS-316) Electrode in Basic Media" Sushil Kumar Sharma, I. K. Sharma and P.S.Verma, *Res. J. of Chemical Sciences*, 2013, 3(3), 1-4.

7. "Synthesis of 3-Hydroxy cyclohexanone by Electrochemical and Microbial techniques" Sushil Kumar Sharma, Geeta Wadhvani, P.S. Verma and I.K. Sharma, *Int. J. of ChemTech Res.*, 2014, 6(2), 1462-1469.

8. "Electrochemical Reduction of 2-Methylcyclohexane-1, 3-Dione at Stainless Steel (SS-316) Electrode in Basic Media" Sushil Kumar Sharma, Geeta Wadhvani, P.S. Verma and I.K. Sharma, *Int .J. of Innovative Res, in Sci, Engg. & Tech*, 2014, 3(12), 17837-17840.

9. "Baker's Yeast: A green chemical method for the enantioselective reduction of carbonyl compounds" Sushil Kumar Sharma, *Indian Journal of Applied Research*, 2016, 1, 9-10.

10. "Bio-transformation of Prochiral Ketones to pharmaceutically used Chiral Alcohols by Baker's Yeast" Sushil Kumar Sharma, Ankit Sharma, Int .J. of Innovative Res, in Sci, Engg. & Tech,2016, 5(12),20660-20663.

| (b)Boo | (b)Book Edited: | | | | | | | | |
|--------|---------------------|---------------------------------------|------------------|------|-------------|--|--|--|--|
| S. No. | Name of all Authors | Name of all Authors Title of the book | | Year | ISBN | | | | |
| | | | Publisher | | | | | | |
| 1. | Prof.P.S.Verma, | Synthetic Organic Chemistry | Vardhman | 2015 | 818496544-3 | | | | |
| | Dr.Sushil Kr.Sharma | | Mahaveer Open | | | | | | |
| | | | University, Kota | | | | | | |
| 2. | Dr.Sushil Kr.Sharma | Natural Products, | Vardhman | 2015 | 818496545-1 | | | | |
| | Mr.Ankit Sharma | Heterocycles, | Mahaveer Open | | | | | | |
| | | Biogenesis and | University, Kota | | | | | | |
| | | Spectroscopy | - | | | | | | |
| 3. | Dr.Sushil Kr.Sharma | Drug and Pharmaceuticals | Vardhman | 2015 | 818496546-X | | | | |
| | Dr.M.P.Khinchi | | Mahaveer Open | | | | | | |
| | | | University, Kota | | | | | | |
| 4. | Dr.Sushil Kr.Sharma | Practical Chemistry-II | Vardhman | 2015 | 818496547-8 | | | | |
| | | | Mahaveer Open | | | | | | |
| | | | University, Kota | | | | | | |

(c)Books Chapters:

| S. | Title of the | Name of all | Title of the | Name of the | Year | ISBN | |
|-----------|--------------|-------------|----------------|-------------|------|---------|--|
| No. | Chapter | Authors | book | Publisher | | | |
| 1. | Polymer | Avneesh | Engineering | Vayu | 2010 | 978-93- | |
| | | Gaur, Renu | Chemistry-I | Education, | | 80712- | |
| | | Sharma, | A textbook for | New Delhi | | 50-5 | |
| | | Satyal, | B. Tech I | | | | |
| | | Rajeev | Semester | | | | |
| | | Mehta and | by Vayu | | | | |
| | | Sushil | Education of | | | | |
| | | Kumar | India, New | | | | |
| | | Sharma | Delhi | | | | |
| 2. | Ecology | Kanupriya | Environmental | Vayu | 2010 | 978-93- | |

| | | Sharma,Pra | Engineering and | | | 80712- |
|----|--|---|---|---|------|-----------------|
| | | deep Yadav, Avneesh Gaur, Sushil Kumar Sharma and Harpeet Singh | Disaster Management by Vayu Education of India, New Delhi | New Delhi | | 15-4 |
| 3. | Five and six membered heterocycles containing one hetro atom- Pyrrole, Furan, Thiophene, Pyridine, Indole, Quinoline and Isoquinoline. | Sushil Kr.Sharma | M.Sc. (Pre.) Organic Chemistry (CH- 02) Vardhaman Mahaveer University Open University ,Kota | Vardhman Mahaveer Open University, Kota | 2015 | 8184964 62-5 |
| 4. | Reaction Intermediates - I:Formation,St ability,Structur e and reaction of carbonium ions, carbanions and free radicals | Sushil Kr.Sharma | M.Sc. (Final.) Organic Chemistry (CH- 06) Vardhaman Mahaveer University Open University ,Kota | Vardhman Mahaveer Open University, Kota | 2015 | 8184965 43-5 |
| 5. | ReactionIntermediates-II: Formation,Stability,Structure andreaction ofcarbenes ,nitrenes andarynes | Sushil Kr.Sharma | M.Sc. (Final.) Organic Chemistry (CH- 06) Vardhaman Mahaveer University Open University ,Kota | Vardhman Mahaveer Open University, Kota | 2015 | 8184965 43-5 |
| 6. | Analysis of electrocyclic reactions: | Sushil Kr.Sharma | M.Sc. (Final.) Organic Chemistry (CH- 06) Vardhaman Mahaveer University Open University ,Kota | Vardhman Mahaveer Open University, Kota | 2015 | 8184965 43-5 |
| 7. | Photochemist ry of alkenes and dienes: | Sushil Kr.Sharma | M.Sc. (Final.) Organic Chemistry (CH- 06) Vardhaman | Vardhman Mahaveer Open University, | 2015 | 8184965 43-5 |

| | | | Mahaveer | Kota | | |
|-----|---------------------------|--------------|------------------------------------|---------------------|------|-----------------|
| | | | University Open | NUIA | | |
| | | | University ,Kota | | | |
| 8. | Conformation | Sushil | - | Vardhman | 2015 | 0104065 |
| а. | Conformation s of some | | (/ | | 2013 | 8184965 43-5 |
| | | Kr.Sharma | Organic Chamister (CII | Mahaveer | | 43-3 |
| | acyclic | | Chemistry (CH- | Open | | |
| | molecules | | 06) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | | | |
| | | 0 1 1 | University ,Kota | X 7 11 | 2015 | 0104065 |
| 9. | Oxidation of – | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| | OH group | Kr.Sharma | Organic | Mahaveer | | 44-3 |
| | | | Chemistry (CH- | Open | | |
| | | | 07) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | | | |
| 10 | | 0.1.1 | University ,Kota | x 7 11 | 2015 | 0104065 |
| 10. | Reduction of | | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| | Nitrogen | Kr.Sharma | Organic | Mahaveer | | 44-3 |
| | containing | | Chemistry (CH- | Open | | |
| | groups | | 07) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | | | |
| 11 | | 0 1 1 | University ,Kota | X 7 11 | 2015 | 0104065 |
| 11. | Polycyclic | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| | Aromatic | Kr.Sharma | Organic Chamister (CII | Mahaveer | | 44-3 |
| | Compounds | | Chemistry (CH- | Open | | |
| | | | 07) Vardhaman Mahaveer | University, Kota | | |
| | | | | Nota | | |
| | | | University Open | | | |
| 12. | Ductosting | Sushil | University ,Kota M.Sc. (Final.) | Vardhman | 2015 | |
| 12. | Protecting Group I | Kr.Sharma | (| Mahaveer | 2015 | 8184965 |
| | Group I | KI.Silaillia | Organic Chemistry (CH- | Open | | 44-3 |
| | | | 07) Vardhaman | University, | | 44-3 |
| | | | Mahaveer | Kota | | |
| | | | University Open | Nota | | |
| | | | University ,Kota | | | |
| 13. | Prostaglandin | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| 13. | s | Kr.Sharma | Organic (Filial.) | Mahaveer | 2013 | 45-1 |
| | 3 | isi.onanna | Chemistry (CH- | Open | | TJ-1 |
| | | | 08) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | isota | | |
| | | | University ,Kota | | | |
| 14. | Small Ring | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| 14. | Hetrocycles | Kr.Sharma | Organic (Final.) | Mahaveer | 2013 | 45-1 |
| | neurocycles | M.Shahiia | Chemistry (CH- | Open | | 45-1 |
| | | | • | - | | |
| | | | 08) Vardhaman | University, | | |

| | | | Mahaveer | Kota | | |
|-----|-------------|-----------|------------------|-------------|------|---------|
| | | | University Open | | | |
| | | | University ,Kota | | | |
| 15. | Enzymes | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| | | Kr.Sharma | Organic | Mahaveer | | 45-1 |
| | | | Chemistry (CH- | Open | | |
| | | | 08) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | | | |
| | | | University,Kota | | | |
| 16. | Theory and | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| | Kinetics of | Kr.Sharma | Organic | Mahaveer | | 45-1 |
| | Enzymes | | Chemistry (CH- | Open | | |
| | | | 08) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | | | |
| | | | University,Kota | | | |
| 17. | Electronic | Sushil | M.Sc. (Final.) | Vardhman | 2015 | 8184965 |
| | Transitions | Kr.Sharma | Organic | Mahaveer | | 43-5 |
| | | | Chemistry (CH- | Open | | |
| | | | 06) Vardhaman | University, | | |
| | | | Mahaveer | Kota | | |
| | | | University Open | | | |
| | | | University,Kota | | | |

Conferences/Symposia/Workshops:

(a) Participation as Paper/Poster Presenter:

1. Eighth International Symposium on "Advances in Electrochemical Science and Technology (ISAEST-08)" conducted at National Institute of Oceanography, Goa from 28th -30th Nov. 2006. (Oral)

2. "44thAnnual Convention of Chemists 2007" organized by Indian Chemical Society at MGIAS, Jaipur from 23-27 Dec., 2007. (Oral)

3. U.G.C. Sponsored National Seminar on "Chemical Aspects of Environmental Challenges and Their Management (CAECM-07)" at Agarwal P.G. College, Jaipur on 27th – 28th Feb. 2007. (Poster)

4. National Seminar on "**Integrated Water Management and Sustainable Water Pricing**" organized by Civil Engineering Department, Rajasthan Technical University, Kota on Feb. 8-9, 2008. (Oral)

5. National Symposium on "**Emerging Trends in Advanced Chemistry** (**ETAC-08**)" conducted at Centre for Advanced Studies (CAS), Department of Chemistry, University of Rajasthan, Jaipur from $8_{th} - 10_{th}$ Mar. 2008. (Poster)

6.Multidisciplinary International Conference on **"Emerging Issues and Global Economics Scenario"** organized by Aishwarya College, Udaipur on Aug.21st-24th, 2009. (Oral)

7. National Seminar on **"Analytical Electrochemistry 2010 (NSAE)"** organized by Department of Chemistry, Jai NarayanVyas University, Jodhpur on Feb., 8th-10th 2010. (Oral)

8. National Symposium on **New Frontiers In Chemical Sciences (NFCS-10)** conducted at Centre for Advanced Studies (CAS), Department of Chemistry, University of Rajasthan, Jaipur on Feb., 25th, 2010. (Poster)

9. All India Seminar On "New Strategies For Reducing Carbon Foot Prints And Its Impact On Global Warming (CFIGW-2010)" conducted by Rajasthan College Of Engineering For Women, Jaipur on 20th-21th, August 2010. (Poster)

10. UGC sponsored national workshop on **"Recent Advances in Spectroscopy through experimental and theoretical tools"** organized by Deptt. Of chemistry Govt. P. G. College Tonk. Dated 22-23 Dec., 2011. (Poster).

11. Indian Chemical Society sponsored National Conference**51**st **Convention of Chemist** organized by Department of Chemistry, Krukashetra University, Krukashetra, Haryana. Dated 09-12 Dec., 2014. (Poster).

12. Nation Conference on **Frontiers at the Chemistry-Allied Sciences Interface** organized by Center of Advanced Study, Department of Chemistry, University of Rajasthan ,Jaipur dated 13-14 March,2015.(Poster)

13. UGC-Sponsored National Conference on **Modern Trends in Chemical Sciences** organized by Department of Chemistry, Mohan Lal Sukhadia University, Udaipur dated 03-31 Jan., 2016. (Poster)

14. National Seminar on **Recent Trends in Chemical Research** organized by Department of Chemistry, Jai Narayan Vyas University, Jodhpur dated 05-07 Feb., 2016.(Poster)

15. Third Rashtriya Hindi Vigyan Sammalen Jointly organized by Vigyan Bharti Jaipur and University of Rajasthan, Jaipur & Board of Secondary Education, Ajmer

(b) **Participation Only:**

1. 2nd International Conference on **"Heterocyclic Chemistry**" conducted at Department of Chemistry, University of Rajasthan, Jaipur from 16th – 19th Dec. 2006.(attended)

2. Indo-Swedish Symposium on "Strategic Knowledge on Climate Change" organized by Department of Pure & Applied Chemistry, UOK, Kota and Center for Climate Science & Policy Research, Linkoping University, Sweden on 09-10-2012.

3. Socio-Legal Issues and Challenges of Female Foeticide and Infanticide in India organizes by Women Cell, University of Kota, Kota from 4 -10-2013 to 5-10-13.

4. Workshop on Intellectual Property Rights organized by Department of Commerce & Management, University of Kota, Kota on 20-11-2013.

5. Symposium on E-Resources organized by Department of Library and Information Science, University of Kota, Kota 16-12-2013 &17-12-13.

6. Symposium on "Drug Abuse Prevention Awareness" jointly organized by National Service Scheme, University of Kota, Kota and Sponsored by National Institute of Social Defense on March 03,2017.

7. Author Workshop jointly organized by Springer Nature and University of Kota, Kota on March 02,2017

8.A Workshop on "Academic Ethics and Integrity" organized by Internal Quality Assurance Cell, University of Kota, Kota on July 27,2017

Conferences/Symposia/Other activities Organized:

Member, Organizing Committee of the UGC sponsored 5th National Academic Workshop on "Organic Reaction Mechanisms & Analytical Techniques used in Chemical Sciences" during October 21-25, 2013 in the Department of Pure & Applied Chemistry, University of Kota, Kota.

- Member, Organizing Committee of the ICSSR sponsored National Seminar on "Administrative Culture in India : Transparency and Accountability" during Feb., 20-21, 2015 in the Department of Social Science, University of Kota, Kota.
- Coordinator, Ph.D Course work programme-2017 held from 25, July to 31, August, 2017 at University of Kota, Kota.
- Coordinator, Ph.D Course work programme-2016 held from 21,April to 20, May, 2016 at University of Kota, Kota.
- Coordinator, Ph.D Course work programme-2015 held from 09 March to 31 March, 2015 at University of Kota, Kota.
- Member, Organizing Committee of 69th Annual Conference of ISAS during 14-16 December, 2015 at University of Kota, Kota.

Invited Lecture Delivered:

- Invited lecture delivered in the seminar on "Disaster risk reduction in development: From risk to resilience" on **Nov.23**, **2013** at DCM SHRIRAM organized by PHD Chamber, Jaipur.
- Invited lecture delivered in the "Ph.D. Course work **2013**" on the topic "Impact Factor of Journals" at the University of Kota, Kota (Rajasthan).
- Resource Person in the workshop on "Question Repository for Chemistry." On Feb.,08-10th, 2014 organized by School of Science & Technology, Vardhman Mahaveer Open University, Kota, (Raj.)
- Invited lecture delivered in the "Ph.D. Course work **2015**" at the University of Kota, Kota (Rajasthan).
- Invited lecture delivered in the "Ph.D. Course work **2016**" at the University of Kota, Kota (Rajasthan).

Orientation/Refresher Courses Attended:

- General Orientation Course (GOC-87) Organized by Academic Staff College, University of Rajasthan, Jaipur from May,13 to June,8 2013.
- Refresher Course in Chemistry, Organized by the Department of Chemistry, Guru Jambheshwar University of Science and Technology, Hisar, Haryana from April ,24 to May 14,2014.
- A Short Term Training Programme on "Sustainable Environment Management" Organized by Department of Chemistry, Jaipur Engineering College, Jaipur from Feb., 21 to 25, 2009.
- A Quality Improvement Programme on "The Essentials of Nanophase and Nanostructured Materials" Organized by Department of Physics, IIT Roorkee from Feb.,21to 25, 2011.
- A Short Term Training Programme on "Smart Nanoceramics & Nanoscience Research"

Organized by Department of Physics, IIT Roorkee from July,13 to 17, 2011.

- A Short Term Training Programme on "A Primer in Administration and Management for Scientists and Technologists Training Course" Organized by Centre for Disaster Management, NIAR, LBSNAA, Mussoorie from December, 3 to 7, 2012.
- 5th National Academic Workshop-2013 on "Organic Reaction Mechanisms and Analytical Techniques used in Chemical Sciences" Organized by the Department of Pure & Applied Chemistry, University of Kota, Kota, from October 21to 25, 2013.
- School and Workshop on Electroanalytical Techniques (SWET-2013) organized by School of Chemical Science and Pharmacy, Central University of Rajasthan, from Nov.,25 to Dec.,1,2013.
- Workshop on Question Repository (Chemistry), Organized by Vardhaman Mahaveer Open University, Kota from February 08 to 10, 2014.
- A Short Term Training Programme on "Separation Techniques and Instrumental Methods of Analysis" Organized by Human Resource Development Centre, M.D.S.University ,Ajmer at University of Kota, Kota from January 30,2017, to February 4, 2017.

Award/Fellowship:

• CSIR-Junior Research Fellowship

Memberships of Academic/ Professional bodies:

- Life Member of Indian Society for Technical Education (ISTE), New Delhi. (LM-64424)
- Life Member of Indian Chemical Society, Kolkata. (LM2013 F/7498)
- Life Member of Indian Science Congress, Kolkata.(LM 21485)