UMESH SANKPAL, Associate Professor,

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Academic Qualifications:

Ph.D. (Materials Chemistry) **Shivaji University, Kolhapur** Synthesis and Characterization of some mixed -metal oxides systems for their catalytic applications.	2011	-----
Master of Science (Organic Chemistry) **Shivaji University, Kolhapur**	2005	First Class
Bachelor of Science (Chemistry) **Shivaji University, Kolhapur**	2003	Distinction

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 # Research Experience: 15 Years

@ Research Paper Published: 36 (Appendix I)

@ **Scopus Based Citation: 797, *h*-index: 13 and *i -10* index: 16**

@ Participation in International / National Conferences / Seminar / Symposia: 21 (Appendix II)

@ Book Chapters – 04 & Editor of One International Book

@ Utility Indian Patent Publication: 01 entitled **'**METHOD FOR SOLUBILITY ENHANCEMENT OF PHARMACEUTICAL COMPOUNDS IN TABLET AND CAPSULE DOSAGE FORMS' (Application No. 202541016721 A)

@ Completed one Minor Research Project of Rs. 25000/- from University of Mumbai, Mumbai

Participated in Special Winter School in Chemistry (**01**), Refresher Courses (**02**), Short Term Course (**02**) & Faculty Development Course (**06**) in various academic fields.

Awarded 'UGC - SAP Meritorious Fellowship' from UGC, New Delhi for Ph. D. research work.

The Member of 'The Indian Science Congress Association' Kolkata, India.

Life Member of Marathi Vidnyan Parishad, Mumbai (NGO).

Appendix: I

Sr. No.	Research publications	Status
1.	Synthesis and characterization of $CoCr_xFe_{2-x}O_4$ nanoparticles. P. P. Hankare, ***U. B. Sankpal***, R. P. Patil, I. S. Mulla, P. D. Lokhane, N. S. Gajbhiye	Journal of Alloys and Compounds, Volume 485, Issues 1-2, (2009) 798–801
2.	Synthesis and characterization of nanocrystalline zinc substituted nickel ferrites. P. P. Hankare, ***U. B. Sankpal***, R. P. Patil, I. S. Mulla, R. Sasikala, A. K. Tripathi, K. M. Garadkar	Journal of Alloys and Compounds Volume 496, Issues 1-2, (2010) 256 -260.
3.	Synthesis, characterization and studies on magnetic and electrical properties of Mg ferrite with Cr substitution. P.P. Hankare, V.T. Vader, N.M. Patil, S.D. Jadhav, ***U.B. Sankpal***, M.R. Kadam, B.K. Chougule, N.S. Gajbhiye	Materials Chemistry and Physics, Volume. 113, Issues 1, (2009) 233-238.
4.	Magnetic and dielectric properties of nanophase manganese-substituted lithium ferrite. P.P. Hankare, R.P. Patil, ***U.B. Sankpal***, S.D. Jadhav, I.S. Mulla, K.M. Jadhav, B.K. Chougule	Journal of Magnetism and Magnetic Materials, Volume 321, Issues 19, (2009) 3270-3273.
5.	Gas sensing Properties of Magnesium Ferrite prepared by Co-Precipitation Method. P.P. Hankare, S.D. Jadhav, ***U.B. Sankpal***, R.P. Patil, R. Sasikala, I.S. Mulla	Journal of Alloys and Compounds, Volume 488, Issue 1, (2009) 270-272.
6.	Investigation of structural and magnetic properties of nanocrystalline manganese substituted lithium ferrites. P.P. Hankare, R.P. Patil, ***U.B. Sankpal***, S.D. Jadhav, P.D. Lokhande, K.M. Jadhav, R. Sasikala	Journal of Solid State Chemistry, Volume. 182, Issue 12, (2009), 3217-3221.
7.	Synthesis, characterization and electrical properties of the system $LaMn_xFe_{1-x}O_3$. P.P. Hankare, M.R. Kadam, P.D. Kamble, S. D. Jadhav, ***U.B. Sankpal***, R.P. Patil, V. B. Helavi, N.S. Gajbhiye	Journal of Alloys and Compounds, Volume 489, Issue 1, 7 January 2010, Pages 233-236.
8.	Synthesis, characterization and effect of sintering temperature on magnetic properties of Mg-Ni ferrite prepared by co-precipitation method. P.P. Hankare, S.D. Jadhav, ***U.B. Sankpal***, S.S. Chavan, K.J. Waghmare, B.K. Chougule	Journal of Alloys and Compounds, Volume. 488, Issue 1-2, (2009) 926-929.
9.	Ferrospinels based on Cu and Co prepared via low temperature route as efficient catalyst for the selective oxidation of alcohol. P.P. Hankare, P.D. Kamble, S.P. Maradur, M.R. Kadam, ***U.B. Sankpal***, R.P. Patil, R.K. Nimat, P.D. Lokhande	Journal of Alloys and Compounds, Volume. 487, Issue 1-2, (2009) 730-734.

10.	Effect of sintering temperature and thermoelectric power studies of the system $MgFe_{2-x}Cr_xO_4$. P.P. Hankare, V.T. Vader, ***U.B. Sankpal***, L.V. Gavali, R. Sasikala, I.S. Mulla	Solid State Sciences, Volume. 11, Issue 12, (2009) 2075-2079.
11.	Magnetic, dielectric and complex impedance spectroscopic studies of nanocrystalline Cr substituted Li-ferrite. P.P. Hankare, R.P. Patil, ***U.B. Sankpal***, K.M. Garadkar, R. Sasikala, A.K. Tripathi, I.S. Mulla	Journal of Magnetism and Magnetic Materials, Volume 322, Issue (2010), 2629-2633.
12.	Magnetic and dielectric studies of nanorystalline zinc substituted Cu-Mn ferrites. P. P. Hankare , ***U.B. Sankpal***, R. P. Patil, K.M. Garadkar, A. V. Jadhav, B.K. Chougule	Journal of Magnetism and Magnetic Materials, Volume 323, Issue 5, (2011), 389-393.
13	Synthesis, characterization and catalytic activity of chromium substituted cobalt ferrospinels. P.P. Hankare, ***U.B. Sankpal***, R.P. Patil, P.D. Lokhande, R. Sasikala	Materials Science and Engineering B: Solid-State Materials for Advanced Technology, Volume 176 Issue 2, (2011), 103-109
14	Synthesis and morphological study of chromium substituted Zn–Mn ferrites nanostructures via sol–gel method. P.P. Hankare, R.P. Patil, ***U.B. Sankpal***, S.D. Jadhav, K.M. Garadkar, S.N. Achary	Journal of Alloys and Compounds, Volume 509, Issue 2, (2011), 276-280.
15	Synthesis and characterization of cobalt substituted zinc ferri-chromites prepared by sol–gel auto-combustion Method. P.P. Hankare, V.T. Vader, ***U.B. Sankpal***, R.P. Patil, A. V. Jadhav, I S. Mulla	Journal of Materials Science: Materials in Electronics, Volume 22, (2011), 1109 –1115. https://doi.org/10.1007/s10854-010-0268-7.
16	Structural, composition, thermoelectrical and photoelectrochemical properties of CdSe thin films. P. A. Chate, D. J. Sathe, P. P. Hankare, ***U.B. Sankpal***	Journal of Materials Science: Materials in Electronics, Volume 24, Issue 06, (2013), 2000-2004 DOI 10.1007/s10854-012-1048-3.
17	Structural, opto-electronic and photoelectrochemical properties of tungsten diselenide thin films. D. J. Sathe, P. A. Chate, P. P. Hankare, A. H. Manikshete, ***U.B. Sankpal***, V. M. Bhuse	Applied Nanoscience (Switzerland) Volume 06, Issue 2, (2016), Pages 191-196.
18	Studies on Characterisation of Nanocrystalline Molybdenum diselenide thin films deposited by chemical deposition. P. A. Chate, D. J. Sathe, ***U.B. Sankpal***, V. M. Bhuse, S. B. Sargar	Bionanofrontier J. Science and Technology, Volume 08 Issue 03, (2015) 186-191.
19	Comprehensive structural investigations of nanocrystalline MoO_3 thin films. S. V. Kite, P. A. Chate, K. M. Garadkar, ***U. B. Sankpal***, Z. D. Sande, D. J. Sathe	Aarhat Multidisciplinary International Education Research Journal Volume – VIII, Special Issue - IX (2018) 173-178.

20	Influence of diamagnetic Zn^{2+} substitution on the electrical resistivity of NiFeAlO4 ferrites. synthesized by sol-gel auto combustion technique. ***U.B. Sankpal***	International Journal of Research and Analytical review Volume 5, Issue 2 (2018) 80-87.
21	Synthesis, structural elucidation and thermo-kinetic study of Ni-Zn –ferrites-citrate-precursor. ***U.B. Sankpal***, P.P. Kulkarni	Review of Research Volume 7, Issue 10 (2018) 01 - 06.
22	Nanostructured composite in photodegradation of benzidine-derived dye. ***U.B. Sankpal***, K. V. Sukhatankar. P. P. Kulkarni, M. G. Salvi, P. P. Shinde, D. J. Sathe	International Journal of Research and Analytical Reviews Special Issue (2019) 303-306.
23	Chemical Deposition of Polycrystalline Znse Thin Films from Malonic Acid Solution: Nucleation and Growth Mechanism, Structural, Optical and Electrical Studies. P. A. Chate, D. J. Sathe, ***U.B. Sankpal***	International Journal of Thin Films Science and Technology Volume 9, Issue 1 (2020) 31-35.
24	Nanostructural, magnetic and electronic transport properties of Cu-Zn mixed ferrimagnetite ***U.B. Sankpal***, K. V. Sukhatankar, P. A. Chate, D. J. Sathe,	Chemical Physics Letters, Volume Volume 739 (2020) 13703.
25	National Education Policy 2020 and Higher. Education: A brief review R. G. Sawant, ***U.B. Sankpal***	International Journal of creative Research Thoughts Volume 9, Issue 1 (2021) 3456-3460.
26	Extraction and Isolation of Vasicine Alkaloids from Adulsa Leaves. P. P. Kulkarni, ***U.B. Sankpal***, A. A. Surve	International Journal of Research and Analytical Reviews Volume 8, Issue 1 (2021) 32-39.
27	Structural and dc electrical transport properties of Cu-Zn ferrialuminates synthesized by citrate-gel auto-combustion method. ***U.B. Sankpal***, A. M. Kulkarni, K. V. Sukhatankar, P. P. Kulkarni, D. J. Sathe	IOP Conference Series: Material Science and Engineering. Volume 1166 (2021) 012011.
28	Immobilization of diastase on PVA- $CoFe_2O_4$ nanocomposite film for improving stability and recycling. A. M. Kulkarni, ***U.B. Sankpal***, V. A. Ghadyale, N. N. Bhatkar, S. S. Waghdhare, S. V. Pathare,	IOP Conference Series: Material Science and Engineering. Volume 1166 (2021) 012012.
29	Metal Oxide Doped Egg Shell-Fly Ash Composite: An Effective Catalyst for Transesterification of Waste Oil. Seema Devasthali , Aparna Kulkarni , Neha Bhatkar , ***Umesh Sankpal***	ECS Transactions, ECS Trans. Volume 107 (2022) 13103.

30	Thermal decomposition and structural elucidation of Cobalt-Iron-Chromium citrate precursor. ***Umesh Sankpal***, Swaminath Bhattar	Journal of Emerging Technologies and Innovative Research (JETIR) Volume 9 Issue 11 , November-2022,748 -755.
31	Effective Remediation of Crystal Violet Dye using $CoFe_2O_4$/ Eggshell Nano composite – H_2O_2. Shruti Waghadhare , Aparna Kulkarni, ***Umesh Sankpal*** , Neha Bhatkar and Seema Devasthali	Indian Journal of Natural Sciences Vol.14, Issue 82, Feb / 2024, 69027-69034.
32	Thermal study of citrate precursor of Cu-Zn-Fe-Mn ions: TG – DTA & XRD studies. ***Umesh Sankpal***	International Journal of All Research Education and Scientific Methods (IJARESM), Volume 12, Issue 5, May-2024, 4313-4318.
33	Structural & dc electrical transport study of chemical synthesised Co-Zn ferrialuminates. ***Umesh Sankpal***	International Journal of Research and Analytical Reviews (IJRAR) Volume 12, Issue 1, March 2025 774-778.
34	Magnetic Elucidation of Copper-Zinc-Iron-Manganese Ferrospinels. ***Umesh Sankpal***	International Journal of Scientific Research and Engineering Development Volume 8, Issue 2, Mar. – Apr. 2025, 2151-2153.
35	Synthesis, Anticancer, and Molecular Docking Studies of Quinolone-Thiosemicarbazones Using Fe_3O_4@gly-SO_3H as a Magnetically Separable Nanocatalysts. Govind Salunke, Pradeep Patil, Nippu B. N., N. D. Satyanarayan, Reshma Yadav, ***Umesh Sankpal***, Shankar Hangirgekar, and Sandeep Sankpal	Chemistry Select 2025, 10, e01861, 1 -15. doi.org/10.1002/slct.202501861.
36	Fe_3O_4@SiO2@CPTMS-PADETA nanocomposites-catalysed one-pot three-component synthesis of spiroindoloquinazolines: a combined biological and computational profiling. Ramesh Zond, Nagesh Birajdar, Savalieram Ghane, Pravin Dongare, D. Satynarayan, ***Umesh Sankpal***, Shankar Hangirgekar and Sandeep Sankpal	Journal of Molecular Structure Volume 1348, Part 1, 25 December, 143368.

Appendix: II

Sr. No.	Date(s)	Subject of Seminar / Symposia / Conferences and University / Institution	
1.	**15th – 17th Nov. 2007**	International Conference on Material Science. ICMS - 2007	Department of Physics, Shivaji University, **Kolhapur.**
3.	**1st & 2nd Feb. 2008**	National Seminar on Synthesis of New Materials for Industrial Applications.	Department of Chemistry, Shivaji University, **Kolhapur.**
3.	**9th - 11th Dec. 2008**	International Conference on Nanomaterials and Applications ICNA – 2008	Department of Chemistry and Department of Physics, Shivaji University, **Kolhapur**.
4	**9th - 11th Jul. 2009**	International Workshop on Nanotechnology and Advanced Functional Materials IWNAFM - 2009	National Chemical Laboratory, **Pune.**
5.	**23rd & 24th Dec. 2009**	National Seminar on advanced synthetic methodologies and Functional Materials.	Department of Chemistry, Shivaji University, **Kolhapur.**
6	**21st & 22nd Jan. 2011**	National Seminar on advanced synthetic methodologies and New Materials.	Department of Chemistry, Shivaji University, **Kolhapur.**
7	**18th – 21st Feb. 2013**	4th International Conference on Recent Advances in Composite Materials, ICRACM - 2013	IIT, BHU, **Varanasi.**
8	**8th – 10th Jan. 2015**	International Conference on Chemical, Materials and Bioscience for sustainable development ICCMBSD - 2015	Walchand College of Arts and Science, **Solapur.**
9	**6th & 7th Feb. 2015**	National Seminar on current trends in Organic Chemistry Research	Karmveer Bhaurao Patil College **Pandharpur**.

10	**22nd & 23rd April 2015**	International Conference on Contemporary Research in Chemical and Life Sciences ICCRCLS - 2015	Sant Gadage Maharaj College, **Karad.**
11	**24th Feb. 2018**	National Conference on Innovative Research in Physical, Chemical and Life Science	M. H. Shinde Mahavidyalaya, Tisangi, **Kolhapur.**
12	**05th & 06th Jan. 2019**	International Conference on Advances in Pure and Applied Science ICAPAS – 2019	Balwant College, Vita, **Sangli.**
13	**15th & 16th April 2021**	Third International Conference on Materials Science and Manufacturing Technology ICMSMT - 2021	IOP in association with Akshaya College of Engineering and Technology, **Coimbatore.**
14	**25th Sept. 2021**	International Conference on Advance Research in Applied Sciences ICARAS - 2021	Department of Chemistry, Mathematics and Physics, Bhagwan Parshu Ram College, **Kurukshetra** – 136 118, Haryana.
15	**29th & 30th Nov. 2021**	International Conference on Technologies for Smart Green Connected Societies 2021	Spast Foundation and Associated Partner Institutions, Yakamata University, **Japan.**
16	**28th May 2022**	National seminar on Advance in Chemistry and Materials Science	Prof. Dr. N. D. Patil, Mahavidyalaya, **Malakapur.**
17	**28th – 30th December 2023**	3rd International Conference ' Womens in Science and Technology' Creating Sustainable Career	Charutar Vidya Mandal's Birla Vishvakarma Mahavidyalaya, Vallabh Vidyanagar, Anand, , Gujarat, India – 388 120
18	**21st & 22nd February 2025**	National Conference on 'Sustainable Development and Scientific Synergies for the Future' NCSDSSF – 2025	Yashawantrao Chavan Warana Mahavidyalaya, **Warananagar.**
19	**22nd March 2025**	National Conference on 'Frontiers in Chemical Sciences' FICS - 2025	Anandbai Raorane Arts, Commerce and Science College, **Vaibhavwadi.**

20	**16th April, 2025**	International Conference on 'New Horizons in Humanities and Basic Sciences for Sustainable Development –II' ICNHHBSSD – II - 2025	Arts, Commerce and Science College **Onde**, Tal. :- Vikramgad, Dist. :- Palghar (M.S.) 401 605
21	**28th & 29th April, 2025**	International Conference on "Bridging Chemistry and Physics for a Sustainable Future" ICBCPSF - 2025	Loknete Gopinath Munde Arts, Commerce and Science College, **Mandangad.**