

SANDHYA PATHAK

Personal Detail

Permanent Address	Sagar (M.P.)
Languages Known	English, Hindi
Marital Status	Married
Nationality	Indian
Email-Id	Sandhyapathak935@gmail.com

Qualification

- | | |
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| ➤ High School
M.P. Board, M.P. | I st division – 76 % |
| ➤ Higher Secondary School
M.P. Board, M.P. | I st division – 74.8 % |
| ➤ B.Sc (CBZ)
Dr.H.S. Gour Uni. Sagar | I st division – 70.3 % |
| ➤ M.Sc (Chemistry)
Dr.H.S. Gour Uni. Sagar | I st division – 66.9 % |
| ➤ B.Ed
Dr.H.S. Gour Uni. Sagar | I st division – 69.1 % |
| ➤ M.Ed
Dr.H.S. Gour Uni. Sagar | I st division – 72.12 % |
| ➤ Ph.D.(Chemistry)
Dr.H.S. Gour Uni. Sagar | |

Extra Qualification

- PGDCA From **AISECT** Computer Center, Sagar (M.P.)
- Certificate in **Word Processing & Operating System** From Bhoj Open University
- **N.C.C. "C"** Certificate

Experience

- 2 Years Research Experience in **CSIR (Advanced Material Processing Research Institute) AMPRI ,Bhopal** as "Project Assistant. Project entitled ,“ **Oxidative destruction of organic species in effluent water and voltammetric investigation of Phenols, amines and their derivatives at various catalytic electrodes**” and “**Recycling of anode mud in Zinc industry**”.
- At present working as Guest faculty of **Engineering Chemistry** in **Insitute of Engineering and Technology (IoET), Dr.H.S. Gour University, Sagar(M.P.)**

Project Reports

- On the Topic of “**Ceramic Material, Characteristics and Structure Determination by X-ray Diffraction Method**”
- Cyclic Voltametric destruction of Phenolic Compounds at different Electrodes (**Glassy Carbon Electrode, Gold Electrode, Graphite Electrode & Glassy carbon electrode**)

Research Experience

Ph.D. Topic : “Development and Characterization of drug(s) loaded nanoparticles for Osteoporosis and Evaluation for Drug Release Kinetics”.

Name of Supervisor : **Prof. (Smt.) Archna Pandey**

Department of Chemistry, DHSGVV Sagar (M.P.)

Name of Co- Supervisor : **Prof. S P. Vyas**

Department of Pharmaceutical Sciences,

DHSGVV, Sagar (M.P.)

PUBLICATIONS

1. **S. Pathak***, S.Tripathi, S. Shukla, A. Pandey: Nanotechnology: an Emerging Field of Osteoporosis Treatment and Kinetic Models for Drug Release Studies – A Review. SIPN: 2020. 40 (68).
2. **S. Pathak***, S. P. Vyas, A. Pandey,, Development, characterization and in-vitro release kinetics studies of Ibandronate loaded chitosan for effective management of Osteoporosis, IJAP: 2021, 13(6).
3. **S. Pathak***,, S. Tripathi, B. Patel, C. Pachouri, S. Shukla, A. Pandey. Development and Characterization of Raloxifene Loaded Soy Lecithin- Chitosan Nanoparticles for Osteoporosis Treatment. Journal of Oxidation Communication.(2021).
4. **S. Pathak***, Satyendra Kumar Tripathi and Archna Pandey. Efficacy of Alendronate Functionalized Solid Lipid Nanoparticles for Osteoporosis Treatment- Development and Release Kinetics Study. IJARST: 2021, 12(4) 229-236.
5. **Sandhya Pathak***, Satyendra Kumar Tripathi, Chandni Pachouri and Archna Pandey, Encapsulation of Alendronate in Chitosan based Polymeric Nanoparticles for Effective Management of Osteoporosis – Development to Release Kinetic Study. Int J Med Nano Res 2022, 9:036
6. **S. Pathak***, S. Tripathi, S. Shukla, A. Pandey, Natural Immunomodulators: Boon In Fight Against Pandemic Covid-19 – A Review, Oxidation Communications 44, No 2, 273–284 (2021)
7. **Sandhya Pathak ***, Sandeep Shukla , Bharat Patel ,Satyendra Kumar Tripathi and Archna Pandey, Alendronate functionalized PLGA based nanoparticles for the effective treatment of osteoporosis-formulation to in-vitro release kinetic studies. European Journal of Chemistry 13 (4) (2022) 407-414.
8. **Sandhya Pathak ***, Sandeep Shukla , Bharat Patel , Satyendra Kumar Tripathi and Archna Pandey. Alendronate functionalized PLGA based nanoparticles for the

effective treatment of osteoporosis-Formulation to in-vitro release kinetic studies, European Journal of Chemistry 13 (4) (2022) 407-414.

9. S.K.Tripathi, **S. Pathak**, B.Patel, C.Pachouri ,S.Shukla,A.Pandey. Development evaluation and kinetic modelling of memantine loaded PLGA nanoparticles for Alzheimer disease. Journal of Oxidation communication, 2021, 44(2) 436-442.
10. Bharat Patel *, Satyendra Kumar Tripathi, **S. Pathak**, Sandeep Shukla and Archna Pandey. Synthesis and *in vitro* Drug Release Primaquine Phosphate loaded PLGA Nanoparticles. European Journal of Chemistry: 2021, 12 (4) 482-487.
11. Chandni Pachouri*, Bharat Patel, **S. Shrotri**, Sandeep Shukla and Archna Pandey. Recent Trends in Nanoparticles Based Drug Delivery for Tuberculosis Treatment. International Journal of Medical Nano Research: 2021, 8, 3-11.
12. B. Patel*, S. K. Tripathi, C. Pachouri, **S. Pathak**, S. Shukla, A. Pandey. Primaquine Phosphate-loaded Chitosan Nanoparticles: Formulation Optimisation in vitro Drug Release Kinetics Study. oxidation communications: 2021, 44(3), 603–614.
13. B. Patel*, S. Tripathi, **S. Shrotri**, S. Shukla, A. Pandey. Antimalarial Drugs and their Nanoparticles – a Societal Impact. Oxidation Communications: 2020, 43(3), 371–393.
14. S.K.Tripathi, B.Patel, **S Pathak**, C.Pachouri ,S.Shukla,A.Pandey. Donepezil loaded PLGA nanoparticles, from modified nano-precipitation, an advanced drug delivery system to treat Alzheimer disease, Journal of Physics, conference series,1849(2021)012001.
15. S. K. Tripathi*, **S. Pathak**, B. Patel, C. Pachouri, S. Shukla, A. Pandey. Development, Evaluation and Kinetic Modelling of Memantine-loaded PLGA Nanoparticles for Alzheimer Disease. Oxidation communications: 2021, 44 (2), 436–442.
16. S. K. Shukla*, R. P. Aharwal, S. K. Tripathi, **S. Pathak**, B. Patel, M. Dubey, A. Pandey. Nanocarrier drug delivery involves targeting central nervous system (CNS) drugs: a kinetic study. Oxidation Communications: 2021, 44(3), 556–565.
17. Shukla S, Jain R. **Pathak S.**, Pandey A. Nanocarrier Drug delivery involves targeting drug-A kinetic, Oxidation Communications, 202043(4), 617–640.
18. P. Kohli*, S. K. Shukla, S. Pathak, 4-Thiazolidinones: Conventional, Microwave, Synthesis And Their Docking Study, Antimicrobial And Antitubercular Activities, Oxidation Communications 45, No 3, 434–452 (2022)
19. **Pathak, S.**, Sahu, P., Begum, J. S., Kashaw, S. K., Pandey, A., Semwal, P., & Sharma, R. Formulation and assessment of penetration potential of Risedronate chitosan nanoparticles loaded transdermal gel in the management of osteoporosis: In vitro and ex vivo screening Formulation and assessment of penetration potential of Risedronate chitosan nanoparticles loaded transdermal gel in the management of osteoporosis: In vitro and ex vivo screening. Carbohydrate Polymer Technologies and

Applications, 7, 100440 (2024).

20. **Sandhya Pathak*** Chandi Pachouri ,Sandeep Shukla, ,Bharat Patel and Archna Pandey
Risedronate functionalized Chitosan based Polymeric Nanoparticles – Formulation to
in-vitro release kinetic study, Irish Journal of Medical Science, 415, 2023, 1-17.

BOOKS

1. Poonam Kohli & **Sandhya Pathak**, “Novel Bioactive Molecules” Nitya Publication,
Bhopal, India, ISBN: 978-93-948894-48-8

BOOK CHAPTERS

1. **Sandhya Pathak** , Archna Pandey, Bisphosphonate drug Ibandronate loaded
chitosan nanoparticles for effective management of osteoporosis –development to
relese kinetic study, Recent Advances in Pharmaceutical Sciences (Volume 7)
AJPCR. 2022.
2. **Sandhya Pathak** & Archana Pandey, Bisphosphonates-The Efficient Drug
Molecules For The Management of Osteoporosis Disease, Novel Bioactive
Molecules” Nitya Publication, Bhopal, India, ISBN: 978-93-948894-48-8

PATENT Published

1. Alendronate Nanoparticles and Preparation for treatment of Osteoporosis.2022
(202221038243A)
2. Ibandronate loaded Nanoparticles and Preparation method there of Osteoporosis
treatment, 2022 (202221038125A)

Place: Sagar, (M.P.)

[Dr. Sandhya Pathak]