

CV

1. Name : **Dr. Mahendra Yadav**
2. Designation : **Professor**
3. Department : **Chemistry and Chemical Biology Indian Institute of Technology (ISM) Dhanbad**
4. Educational Qualifications **Ph.D. (Applied Chemistry) IIT BHU Varanasi**
5. Research Area : **Electrochemistry, Hydrogen Energy, Corrosion Science**
6. Number of Ph.D. Guided : **22**
7. Number of M. Sc. Project Guided : **50**
8. Number of M. Phil. Guided : **05**
9. **Best researcher award by IIT (ISM) Dhanbad**
10. Number of R & D Project completed: **07**
11. Number of EDP courses conducted: **08**
12. Number of Research publications in reputed journals: **81**

LIST OF PUBLICATIONS

1. Arti Maurya, Nidhi Pradhan, **Mahendra Yadav*** Heteroatom doped MoO₃ efficiency towards Hydrogen Evolution Reaction (HER) in acidic as well as alkaline medium. Journal of Electroanalytical Chemistry, 977 (2025) 118827. **Impact Factor = 4.6 (Q1)**
2. A Agarwal, A Kumar, TK Sarkar, V Saraswat, **M Yadav**, IB Obot, AH Alamri, Amino acid-derived compounds as effective corrosion inhibitors for mild steel in hydrochloric acid: gravimetric, electrochemical and computational studies. Materials Today Communications,(2025) 112490. **Impact Factor = 3.7 (Q1)**
3. A Kumar, S Kumar, TK Sarkar, V Saraswat, **M Yadav**, IB Obot, AH Alamri. Experimental and Theoretical Insights into the Corrosion Mitigation Efficacy of Novel Quinoline-Based Pyrazole and Isoxazole Derivatives.. Colloids and Surfaces A: Physicochemical and Engineering Aspects, (2025)136241. **Impact Factor = 4.9 (Q1)**

4. V Saraswat, TK Sarkar, N Sandhu, S Kohli, M Rawat, K Keshar, **M Yadav**, Mechanistic Insights into the Corrosion Inhibition Performance of Eco-Friendly Nitrogen and Boron Co-Doped Carbon Dots for Mild Steel in a 15% HCl Solution. *Langmuir* 2025, 41, 3528–3540
Impact Factor = 3.7 (Q1)
5. K Keshar, RK Mitra, SK Gupta, P Kumari, I Ahmad, IB Obot, AH Alamri, **M Yadav**, Corrosion inhibition and adsorption behaviour of benzothiazole compounds on mild steel in an acidic environment: Experimental and theoretical approach. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, (2025)136318. **Impact Factor = 4.9 (Q1)**
6. Waris, Sayfa Bano , Moha Suhail Chaudhary, Saima Sultana, **Mahendra Yadav**, Mohammad Zain Khan. Synthesis and characterization of graphitic carbon Nitride/Cd₂SnO₄ nanostructures for high-performance flexible supercapacitors. *Solid State Sciences* 160 (2025) 107817. **Impact Factor = 3.4 (Q1)**
7. Arti Maurya, Vrinda TR, **Mahendra Yadav*** Multiwall carbon nanotubes supported rhenium doped Co₃O₄ as an efficient electrocatalyst for water oxidation in alkaline medium. *Journal of Alloys and Compounds* 996 (2024) 174751. **Impact Factor = 6.37 (Q1)**
8. Arti Maurya, **Mahendra Yadav***. Sphere shaped Mo-doped transition metal oxide as electrocatalyst for oxygen evolution reaction in alkaline medium. *Journal of Alloys and Compounds* 956 (2023) 170208. **Impact Factor = 6.37 (Q1)**
9. Arti Maurya, Nidhi Pradhan, Kumari Kasher, **Mahendra Yadav*** Marigold flower like B - Fe₃S₄ /Co₃S₄ decorated with multi-wall carbon nanotubes for Oxygen evolution in the alkaline media. *Journal of Environmental Chemical Engineering*, 12 (2024) 114709 .
Q1 Impact factor = 7.4
10. Tarun Kanti Sarkar, **Mahendra Yadav***, I.B. Obot b, Mechanistic evaluation of adsorption and corrosion inhibition capabilities of novel indoline compounds for oil well/tubing steel in 15% HCl, *Chemical Engineering Journal* 431 (2022) 133481.

Q1 Impact factor = 16.74

11. V Saraswat, TK Sarkar, M Yadav, Evaluation on corrosion mitigation capabilities of nitrogen doped carbon dots as corrosion inhibitors for mild steel in descaling solution, *Materials Chemistry and Physics* 313 (2024) 128678. **Q1 Impact factor = 4.78**

12. R.K. Mehta, S. K. Gupta, **M. Yadav**, Studies on pyrimidine derivative as green corrosion inhibitor in acidic environment: Electrochemical and computational approach, *Journal of Environmental Chemical Engineering* 10 (2022) 108499.
Q1 Impact factor = 7.97

13. R. K. Mehta, **M.Yadav,*** I.B. Obot, Electrochemical and computational investigation of adsorption and corrosion inhibition behaviour of 2-aminobenzohydrazide derivatives at mild steel surface in 15% HCl, *Materials Chemistry and Physics* 290 (2022) 126666.
Q1 Impact factor = 4.78

14. **Sujata Kumari Gupta**, R. K. Mehta, M. Yadav, Schiff bases as corrosion inhibitors on mild steel in acidic medium: Gravimetric, electrochemical, surface morphological and computational studies, *Journal of Molecular Liquids*, 368(2022) 120747.
Q1 Impact factor = 6.63

15. **Sujata Kumari Gupta**, R. K. Mehta, M. Yadav, O. Dagdag, V. Mehmeti, A. Berisha, E. E. Ebenso, Diazenyl derivatives as efficient corrosion inhibitors for mild steel in HCl medium: Gravimetric, electrochemical and computational approach, *Journal of Molecular Liquids*, 382 (2023) 121976.
Q1 Impact factor = 6.63

16. R. K. Mehta, **Sujata Kumari Gupta**, M. Yadav, Synthesized novel carbon dots as green corrosion inhibitor for mild steel in hydrochloric acid: Gravimetric, electrochemical and morphological studies, *Diamond & Related Materials*, 136 (2023) 109992.
Q1 Impact factor = 4.1

17. **Sujata Kumari Gupta**, R. K. Mitra, M. Yadav, O. Dagdag, A. Berisha, E. E. Ebenso, Electrochemical, surface morphological, and computational evaluation on carbohydrazide Schiff bases as corrosion inhibitor for mild steel in acidic medium, *Scientific Reports*, 13 (2023) 15108. **Q1 Impact factor = 4.6**

18. **Sujata Kumari Gupta**, R. K. Mehta, N. Kumari, I. B Obot, M. Yadav, Study on benzyldine derivatives as corrosion inhibitors for mild steel in 15% HCl medium:

- Experimental & theoretical investigation, *Journal of Physics and Chemistry of Solids*, 183 (2023) 111632. . **Q1 Impact factor = 4.38**
19. RK Mehta, M Yadav, Corrosion inhibition properties of expired Broclear medicine and its carbon dot as eco-friendly inhibitors for mild steel in 15% HCl, *Materials Science and Engineering: B* 295 (2023), 116566. **Q1 Impact factor = 3.6**
 20. B Kumari, RK Tiwary, M Yadav, Effect of poly-aniline coated iron ore mining waste (PANI@ IOMW) as efficient adsorbent on mitigation of Cr (VI) from aqueous solution: Experimental and statistical investigation, *Chemical Engineering Research and Design* 190 (2023) 434-450. **Q1 Impact factor = 3.9**
 21. A. Maurya, K. C. Majhi, M. Yadav, Template-directed shape control synthesis of rare earth sulfide for oxygen evolution reaction, *Journal of Physics and Chemistry of Solids* 170 (2022) 110891. **Q1 Impact factor = 4.38**
 22. B. Kumari , R.K. Tiwary, **M. Yadav**, Non linear regression analysis and RSM modeling for removal of Cr (VI) from aqueous solution using PANI@WH composites, *Materials Chemistry and Physics* 290 (2022) 126457. **Q1 Impact factor = 4.78**
 23. Kartick Chandra Majhi, **Mahendra Yadav**, Neodymium oxide doped neodymium phosphate as efficient electrocatalyst towards hydrogen evolution reaction in acidic medium. *Journal of Environmental Chemical Engineering*, 2022, 10, 107416. **Q1 Impact factor = 7.4**
 24. Kartick Chandra Majhi, **Mahendra Yadav**, Facile Hydrothermal Synthesis of Rare Earth Phosphate for Boosting Hydrogen Evolution Reaction. *International Journal Hydrogen Energy*, 2022, 47, 14092-14103. **Q1 Impact factor = 8.1**
 25. Priya Kumari Paul, Raj Kumar Mehta, **Mahendra Yadav**, I.B. Obot, Theoretical, electrochemical and computational inspection for anti-corrosion activity of triazepine derivatives on mild steel in HCl medium. *Journal of Molecular Liquids* 348 (2022) 118075. **Q1 Impact factor = 6.63**
 26. Binu Kumari , R.K. Tiwary , M. Yadav * Non linear regression analysis and response surface modeling for Cr (VI) removal from aqueous solution using poly-aniline coated

- sugarcane bagasse (PANI@SB) composites as an adsorbent, *Surfaces and Interfaces* 29 (2022) 101729. **Q1 Impact factor = 6.14**
27. Vandana Saraswat, [Mahendra Yadav](#)* Improved corrosion resistant performance of mild steel under acid environment by novel carbon dots as green corrosion inhibitor *Colloids and Surfaces A* 627 (2021) 127172. **Impact Factor = 5.52 (Q2).**
 28. Vandana Saraswat, Rinki Kumari, [Mahendra Yadav](#)* Novel carbon dots as efficient green corrosion inhibitor for mild steel in HCl solution: Electrochemical, gravimetric and XPS studies *Journal of Physics and Chemistry of Solids* 160 (2022) 110341 **Impact Factor = 4.38 (Q2).**
 29. Kartick Chandra Majhi and **Mahendra Yadav*** Sphere-Shaped Bimetallic Sulphoselenide: An Efficient Electrocatalyst for Hydrogen Evolution Reaction. *Energy & Fuels* 2021, 35, 15, 12473-12481. **Impact Factor = 4.65 (Q2).**
 30. Binu Kumari , Rajani Kant Tiwary , **Mahendra Yadav** , and Krishna Murari Prasad Singh, Nonlinear regression analysis and response surface modeling of Cr (VI) removal from synthetic wastewater by an agro-waste Cocos Nucifera: Box-Behnken Design, *International Journal of Phytoremediation*, 23 (8), 791-808. **Impact Factor = 3.21 (Q2).**
 31. [Priya Kumari Paul](#), [Mahendra Yadav](#)*, [Ime Obot](#), Potential of dibenzo-18-crown-6 derivatives as corrosion inhibitor on mild steel in HCl medium: Electrochemical and Computational approach. *New J. Chem.*, 2021, (Accepted) doi.org/10.1039/D1NJ00869B. **Impact Factor = 3.93 (Q2)**
 32. Kartick Chandra Majhi , **Mahendra Yadav***, Palladium Oxide Decorated Transition Metal Nitride as Efficient Electrocatalyst for Hydrogen Evolution Reaction. *Journal of Alloys and Compounds* 855 (2021) 157511. **Impact Factor = 6.37 (Q1)**
 33. Nidhi Tiwari, Ranjeet Kumar Mitra, **Mahendra Yadav*** Mitigation of corrosion in petroleum oil well/tubing steel using thiadiazolines as efficient corrosion inhibitor: Experimental and theoretical investigation. *Surfaces and Interfaces*. 22 (2021) 100770. **Impact Factor = 6.14 (Q1)**
 34. Priya Kumari Paul, **Mahendra Yadav***, I.B. Obot, Investigation on corrosion protection behavior and adsorption of carbohydrazide-pyrazole compounds on mild steel in 15% HCl

- solution: Electrochemical and computational approach. *Journal of Molecular Liquids* 314 (2020) 113513. **Q1 Impact factor = 6.63**
35. Priya Kumari Paul, **Mahendra Yadav***, Investigation on corrosion inhibition and adsorption mechanism of triazine-thiourea derivatives at mild steel / HCl solution interface: Electrochemical, XPS, DFT and Monte Carlo simulation approach. *Journal of Electroanalytical Chemistry* 877 (2020) 114599. doi.org/10.1016/j.jelechem.2020.114599 **Impact Factor = 4.60 (Q1)**
36. Kartick Chandra Majhi , **Mahendra Yadav***, Bimetallic chalcogenide nanocrystallites as efficient electrocatalyst for overall water splitting. *Journal of Alloys and Compounds* 852 (2021) 156736. doi.org/10.1016/j.jallcom.2020.156736 **Impact Factor = 6.37 (Q1)**
37. Kartick Chandra Majhi, **Mahendra Yadav***, Transition metal chalcogenides based nanocomposites as efficient electrocatalyst for hydrogen evolution reaction over the entire pH Range. *International Journal of Hydrogen Energy*, 45(2020) 24219-24231.
Q1 Impact factor = 7.14
38. Vandana Saraswat, **MahendraYadav***, Carbon Dots as Green Corrosion Inhibitor for Mild Steel in HCl Solution. *ChemistrySelect* 2020, 5, 7347–7357. **Impact Factor = 2.31 (Q3)**
39. Vandana Saraswata, **Mahendra Yadav***, I.B. Obot, Investigations on eco-friendly corrosion inhibitors for mild steel in acid environment: Electrochemical, DFT and Monte Carlo Simulation approach, *Colloids and Surfaces A* 599 (2020) 124881. **Impact Factor = 5.52 (Q2)**
40. Vandana Saraswat , **M. Yadav***, Computational and electrochemical analysis on quinoxalines as corrosion inhibitors for mild steel in acidic medium, *Journal of Molecular Liquids* 297 (2020) 111883. **Q1 Impact factor = 6.63**
41. T. K. Sarkar , V. Saraswat , R. K. Mitra, I.B. Obot, **Mahendra Yadav*** , Mitigation of corrosion in petroleum oil well/tubing steel using pyrimidines as efficient corrosion inhibitor: Experimental and theoretical investigation, *Materials Today Communications*. (2020) /doi.org/10.1016/j.mtcomm.2020.101862 **SCI Impact Factor = 3.66 (Q2)**
42. Parinita Shaw, I. B. Obot, **M. Yadav***, Functionalized 2-hydrazinobenzothiazole with carbohydrates as a corrosion inhibitor:electrochemical, XPS, DFT and Monte Carlo

- simulation studies, *Mater. Chem. Front.*, 2019, 3, 931. **SCI Impact Factor = 8.68 (Q1) RSC Journal**
43. [Nilam Kumari](#), [Priya Kumari Paul](#), [Laldeep Gope](#), [Mahendra Yadav*](#), Studies on anticorrosive action of synthesized indolines on mild steel in 15% HCl solution. *Journal of Adhesion Science and Technology* **2017**, 31(14), 1524-1544. **Impact Factor = 2.08 (Q3)**
 44. **M. Yadav***, T. K. Sarkar, I. B. Obot, Carbohydrate compounds as green corrosion inhibitor: Electrochemical, XPS, DFT and molecular dynamics simulation studies. *RSC Advances* **2016**, 6, 110056–110069. **SCI Impact Factor = 4.04 (Q2)**
 45. **Mahendra Yadav***, Laldeep Gope, Nilam Kumari, Premanand Yadav, Corrosion inhibition performance of pyranopyrazole derivatives for mild steel in HCl solution: Gravimetric, electrochemical and DFT studies. *Journal of Molecular Liquids* **2016**, 216, 78–86. **SCI Impact Factor = 6.63 (Q1)**
 46. **M. Yadav***, S. Kumar, Taniya Purkait, I. Bahadur, E.E. Ebenso, Electrochemical, thermodynamic and quantum chemical studies of synthesized benzimidazole derivatives as corrosion inhibitors for N80 steel in hydrochloric acid. *Journal of Molecular Liquids*. **2016**, 213, 122-138. **Q1 Impact factor = 6.63**
 47. **Mahendra Yadav***, Laldeep Gope, Tarun Kanti Sarkar, Synthesized amino acid compounds as eco-friendly corrosion inhibitors for mild steel in hydrochloric acid solution: electrochemical and quantum studies. *Res Chem Intermed*, **2016**, 42, 2641-2660. **SCI Impact Factor = 3.13 (Q3)**
 48. **M. Yadav***, D. Behera, U. Sharma, Nontoxic corrosion inhibitors for N80 steel in hydrochloric acid. *Arabian Journal of Chemistry* **2016**, S1487-S1495. **SCI Impact Factor = 6.21 (Q2)**
 49. **M. Yadav***, R. R. Sinha, Sumit Kumar, T. K. Sarkar, Corrosion inhibition effect of spiropyrimidinethiones on mild steel in 15% HCl solution: insight from electrochemical and quantum studies. *RSC Adv.*, **2015**, 5, 70832–70848. **SCI Impact Factor = 4.04 (Q2)**
 50. **Mahendra Yadav***, Tarun Kanti Sarkar, Taniya Purkait, Amino acid compounds as eco-friendly corrosion inhibitor for N80 steel in HCl solution: Electrochemical and theoretical approach. *Journal of Molecular Liquids*. **2015**, 212, 731-738. **Q1 Impact factor = 6.63**

51. **M. Yadav***, T. K. Sarkar, Taniya Purkait, Studies on Adsorption and Corrosion Inhibitive Properties of Indoline Compounds on N80 Steel in Hydrochloric Acid. *Journal of Materials Engineering and Performance*, 2015, 24, 4975-4984. **SCI Impact Factor = 2.04 (Q3)**
52. **M. Yadav***, S. Kumar, N. Tiwari, I. Bahadur, E.E. Ebenso, Experimental and quantum chemical studies of synthesized triazine derivatives as an efficient corrosion inhibitor for N80 steel in acidic medium, *Journal of Molecular Liquids*, 2015, 212 151–167. **Q1 Impact factor = 6.63**
53. **M. Yadav***, S. Kumar, R.R. Sinha, I. Bahadur, E.E. Ebenso, New pyrimidine derivatives as efficient organic inhibitors on mild steel corrosion in acidic medium: Electrochemical, SEM, EDX, AFM and DFT studies. *Journal of Molecular Liquids*, 2015, 211 135–145. **Q1 Impact factor = 6.63**
54. **M. Yadav***, R.R. Sinha, T. K. Sarkar, I. Bahadur, E.E. Ebenso, Application of new isonicotinamides as a corrosion inhibitor on mild steel in acidic medium: Electrochemical, SEM, EDX, AFM and DFT investigations. *Journal of Molecular Liquids*, 2015, 212 686–698. **Q1 Impact factor = 6.63**
55. **M. Yadav***, R.R. Sinha, S. Kumar, I. Bahadur, E.E. Ebenso, Synthesis and application of new acetohydrazide derivatives as a corrosion inhibition of mild steel in acidic medium: Insight from electrochemical and theoretical studies. *Journal of Molecular Liquids* 2015, 208 322–332. **Q1 Impact factor = 6.63**
56. **M. Yadav***, **Dipti Sharma**, **T. K. Sarkar**, Adsorption and corrosion inhibitive properties of synthesized hydrazine compounds on N80 steel/hydrochloric acid interface: Electrochemical and DFT studies. *Journal of Molecular Liquids*. 2015, 212, 451-460. **Q1 Impact factor = 6.63**
57. **Mahendra Yadav***, Rajesh Ranjan Sinha, Tarun Kanti Sarkar & Nidhi Tiwari, Corrosion inhibition effect of pyrazole derivatives on mild steel in hydrochloric acid solution. *Journal of Adhesion Science and Technology* 2015, 29, 1690-1713. **Impact Factor = 2.08 (Q3)**
58. **M. Yadav***, D. Behera, S. Kumar, and P. Yadav, Experimental and Quantum Chemical Studies on Corrosion Inhibition Performance of Thiazolidinedione Derivatives for Mild Steel in HCl, *Chem. Eng. Comm.* 2015, 202, 303-315. **SCI Impact Factor = 2.50 (Q3)**

59. **Mahendra Yadav***, Dipti Sharma, and Sumit Kumar, Azetidine Derivatives as Efficient Corrosion Inhibitor for N80 Steel in Hydrochloric Acid Solution. *Protection of Metals and Physical Chemistry of Surfaces*, **2015**, 51, 680–692. **SCI Impact Factor = 0.99 (Q3)**
60. **Mahendra Yadav***, Dipti Sharma, and Sumit Kumar, Thiazole derivatives as efficient corrosion inhibitor for oil-well tubular steel in hydrochloric acid solution, *Korean J. Chem. Eng.*, **2015**, 32(5), 993-1000. **SCI Impact Factor = 3.15 (Q2)**
61. **Mahendra Yadav***, Sumit Kumar, Dipti Sharma, Studies on Synthesized Nontoxic Corrosion Inhibitors for N80 Steel in Hydrochloric Acid. *Anti-corrosion Methods and Materials* **2014**, 61 (3), 129-138. **SCI Impact Factor = 1.20(Q3)**
62. **M Yadav***, Debasis Behera, Sumit Kumar, R. R. Sinha, Experimental and quantum chemical studies on corrosion inhibition performance of some Schiff bases for mild steel in 4M HCl. *Indian J. Chem. Technol.* **2014**, 21, 262-271. **SCI Impact Factor = 0.48 (Q4)**
63. **Mahendra Yadav**, Sushil Kumar, Indra Bahadur, Deresh Ramjugernath, Corrosion inhibitive effect of synthesized thiourea derivatives on mild steel in 15% HCl solution. *Int. J. Electrochem. Sci.* **2014**, 9, 6529-6550. **SCI Impact Factor = 1.57 (Q4)**
64. **Mahendra Yadav***, Dipti Sharma, Sumit Kumar, Sushil Kumar, Indra Bahadur, Eno E. Ebenso, Electrochemical and Theoretical Studies on Amino Phosphonates as Efficient Corrosion Inhibitor for N80 Steel in Hydrochloric Acid Solution. *Int. J. Electrochem. Sci.* **2014**, 9, 6580-6593. **SCI Impact Factor = 1.57 (Q4)**
65. **Mahendra Yadav***, Sushil Kumar¹, Neelam Kumari¹, Indra Bahadur, Eno E. Ebenso, Experimental and Theoretical Studies on Corrosion Inhibition Effect of Synthesized Benzothiazole Derivatives on Mild Steel in 15% HCl Solution. *Int. J. Electrochem. Sci.*, **2015**, 10, 602 – 624. **SCI Impact Factor = 1.57 (Q4)**
66. **Mahendra Yadav***, Sushil Kumar, Debasis Behera, Indra Bahadur, Deresh Ramjugernath, Electrochemical and Quantum Chemical Studies on Adsorption and Corrosion Inhibition Performance of Quinoline -Thiazole Derivatives on Mild Steel in Hydrochloric Acid Solution. *Int. J. Electrochem. Sci.* **2014**, 9, 5235-5237. **SCI Impact Factor = 1.57 (Q4)**
67. **M. Yadav***, D. Behera, Sumit Kumar Experimental and theoretical studies on corrosion inhibition of mild steel in hydrochloric acid by thiosemicarbazone of Schiff bases. *Canadian Metallurgical Quarterly*, **2014**, 53, 220-231. **SCI Impact Factor = 1.46 (Q2)**

68. **Mahendra Yadav***, Sushil Kumar, Laldeep Gope, Experimental and theoretical study on amino acid derivatives as eco-friendly corrosion inhibitor on mild steel in hydrochloric acid solution, *Journal of Adhesion Science and Technology* , **2014**, 28 (11) 1072 - 1089. **Impact Factor = 2.08 (Q3)**
69. **Mahendra Yadav***, Sumit Kumar, Experimental, thermodynamic and quantum chemical studies on adsorption and corrosion inhibition performance of synthesized pyridine derivatives on N80 steel in HCl solution. *Surface and Interface Analysis*, **2014**, 46, 254-268. **SCI Impact Factor = 1.70 (Q4)**
70. **Mahendra Yadav***, Debasis Behera, Sushil Kumar, Experimental and theoretical investigation on adsorption and corrosion inhibition properties of imidazopyridine derivatives on mild steel in hydrochloric acid solution. *Surface Interface Analysis*. **2014**, 46, 640-652. **SCI Impact Factor = 1.70 (Q4)**
71. **Mahendra Yadav***, Sushil Kumar, Rajesh Ranjan Sinha, **Sumit Kumar**, Experimental and Theoretical Studies on Synthesized Compounds as Corrosion Inhibitor for Mild Steel in Hydrochloric Acid Solution. *Journal of Dispersion Science and Technology*, **2014**, 35, 1751-1763. **SCI Impact Factor = 2.26 (Q4)**
72. **Mahendra Yadav***, Debasis Behera, Sumit Kumar, Experimental and Quantum Chemical Studies on the Corrosion Inhibition Performance of Benzimidazole Derivatives for Mild Steel in HCl. *Ind. Eng. Chem. Res.* **2013**, 52, 6318–6328. **SCI Impact Factor = 4.33 (Q2)**
73. **M. Yadav, S. Kumar***, Experimental and Quantum Chemical Studies on Corrosion Inhibition Effect of Synthesized Organic Compounds on N80 Steel in Hydrochloric Acid. *Ind. Eng. Chem. Res.* **2013**, 52, 14019-14029. **SCI Impact Factor = 4.33 (Q2)**
74. **M. Yadav***, D. Behera, U. Sharma, Corrosion protection of N80 steel in hydrochloric acid by substituted amino acids. [*Corrosion Engineering, Science and Technology*](#), **2013**, 48, 19-27. **SCI Impact Factor = 1.84 (Q2)**
75. **M. Yadav***, U. Sharma, Substituted imidazoles as corrosion inhibitors for N80 steel in hydrochloric acid. *Indian J. Chem. Technol.* **2013**, 20, 363-370. **SCI Impact Factor = 0.48 (Q4)**

76. R.B. Rastogi, **M.Yadav**, M.M. Singh, Thiosemicarbazide, phenyl isothiocyanate and their condensation product as inhibitors for corrosion of copper in aqueous chloride solution. *Materials Chemistry and Physics*. **80**(1) (2003) 283-293. **SCI Impact Factor = 4.78 (Q2)**
77. **M.Yadav***, D. Sharma, Synthesis, Characterization, and Biological Activity of Some 3d-Metal Complexes., *Synth. React. Inorg. Met.-Org. Nano-Met. Chem*, **2012**, **42**, 463–469, **SCI Impact Factor = 0.84 (Q4)**
78. **M.Yadav***, D. Sharma, Inhibition of corrosion of copper by 2,5-dimercapto-1,3,4-thiadiazole in 3.5%NaCl solution. *Indian Journal of Chemical Technology***2010**, **17**, 95-101. **SCI Impact Factor = 0.57 (Q4)**
79. R.B. Rastogi, **M.Yadav**, M.M. Singh, Molybdenum complexes as precursors of tribologically active substances under extreme pressure conditions. *Indian Journal of Chemical Technology***2004**, **11** 317-322. **SCI Impact Factor = 0.57 (Q4)**
80. R.B. Rastogi, **M.Yadav**, Suspension of molybdenum-sulphur complexes in paraffin oil as extreme pressure lubricants. *Triobology International*.**2003**, **36**(7), 511-516. **SCI Impact Factor = 5.62 (Q1)**
81. R.B. Rastogi, **M.Yadav**, M.M. Singh, Substituted thiobiurets and their molybdenum and tungsten complexes as corrosion inhibitors for mild steel in 1.0 N sulphuric acid. *Indian J. Engineering and Material Sciences*. **2003**), **10**, 155-160. **SCI Impact Factor = 0.62 (Q4)**
82. R.B. Rastogi, **M.Yadav**, M.M. Singh, Effect of substituents on corrosion inhibition efficiency of arylisothiocyanates and condensation with thiosemicarbazide for corrosion of copper in aqueous chloride solution. *Indian Journal of Chemical Technology*. **2003**, **10** , 414-419. **SCI Impact Factor = 0.48 (Q4)**
83. R.B. Rastogi, **M.Yadav**, Synthesis and spectroscopic studies of Molybdenum and Tungsten complexes of N-Isonicotinyl-N'-arylthiosemicarbazides. *Synth. React. Inorg. Met.-Org. Chem*.**2003**,**33**(9), 1585-1596. **SCI Impact Factor = 0.84 (Q4)**
84. R.B. Rastogi, **M.Yadav**, Application of molybdenum complexes of 1-aryl-2,5-dithiohydrazodi-carbonamines as extreme pressure lubricant additives. *Wear*. **2002**, **252** , 686-692. **SCI Impact Factor = 4.70 (Q1)**

85. R.B. Rastogi, **M.Yadav**, Synthesis and characterization of molybdenum and tungsten complexes of 1-aryl-2,4-dithiobiurets. *Synth. React. Inorg. Met.-Org. Chem.***2001**, **31**(6), 1011-1022. **SCI Impact Factor = 0.84 (Q4)**
86. R.B. Rastogi, **M.Yadav**, M.M. Singh, B.N. Upadhyay, Corrosion in inhibition of copper in aqueous chloride solution by diphenyl amine and cupric diphenyl dithiocarbamate. *Indian Journal of Chemical Technology*. **1999**, **6**, 93-99. **SCI Impact Factor = 0.57 (Q4)**