Associate Professor Dr. Hari Om

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Academic Societies/Associations affiliated

Life Member of Indian Science Congress Association (ISCA)

Active in Research fields: Thin films Thermodynamics Corrosion studies

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A) Educational qualifications

| Degree | Year of passing | University/ Institute | | |
|--------|-----------------|-----------------------------------|--|--|
| Ph.D | 2007 | M. D. University, Rohtak, Haryana | | |
| M.Sc. | 2000 | M. D. University, Rohtak, Haryana | | |
| B.Sc | 1996 | M. D. University, Rohtak, Haryana | | |
| | | | | |

| B) | Career profile | | | | | | | |
|-----------------------|--------------------|-----------------------------|-------|----------------|------------|-----------|-------------|--|
| | Designation | Institute served | | | | D | Duration | |
| | | | | | From | | То | |
| | Lecturer | NC college of Engine | eeri | ng & | Sept., 20 |)04 | Jan, 2007 | |
| | (Assistant | Technology, Israna, Panipat | | | | | | |
| Pro | ofessor) | | | | | | | |
| | | Haryana Institute of | | | July, 20 | 07 | May, 2008 | |
| | | Engineering & Technology, | | | | | | |
| | | Asodha, Jhajjar | | | | | | |
| | | MERI, Engineering (| Colle | ege, | July, 20 | 80 | Nov., 2008 | |
| | | Sampla, Rohtak | | | | | | |
| | | Vaish College, Bhiwa | ani | | Nov., 20 | 80 | April, 2010 | |
| | | Department of Chemistry, | | у, | May, 2010 | | Till now | |
| | | M.D. University, Roh | ntak | | | | | |
| C) | Project undertaken | | | | | | | |
| Title of the project | | Duration | | Fundi | ing agency | | Status | |
| Anodic oxide films on | | 2011-2014 | | UGC, New Delhi | | Completed | | |
| me | tals and alloys | | | | | | | |

D) PUBLICATIONS

Research papers: 32

Awards and distinctions

University Research fellowship, (2001-2004) of M. D. University, Rohtak.

Assignment outside the M.D. University, Rohtak.

- 1. Visited Valencia, Spain under international project A New Generation of CIGS-Based Solar Cell(MC-IRSES) in 2012
- 2. Visited Warshaw University of Technology, Faculty of Physics, Koszykowa, Poland in 2014

RESEARCH PAPER:

- Characterization and photoluminescence properties of some CaO, SrO and CaSrO2 phosphors co-doped with Eu3+ and alkali metal ions, B. Marí K.C. Singh, Monica Moya, Ishwar Singh, Hari Om, Subhash Chand, Optical Materials, 34, 2012, 1267–1271
- Excess Molar Enthalpies of mixing of sec- or tert- butyl chloride with aromatic hydrocarbons at temperature 308.15 K, Journal of Chemical, Biological and Physical science, Naveen Verma, Hari Om, Krishan Chander Singh, Journal of Chemical, Biological and Physical science, Vol.2, 2012, Sec A, No. 4, 1736-46
- High field ionic conduction in anodic oxide films on tantalum in aqueous electrolytes, Hari om, Naveen Verma, Krishan Chander Singh, European Journal of Applied Engineering and Scientific Research, 2, 2013, 25-35
- 4. Preparation and luminescence properties of MZrO3:Eu3+, A (M=Ca2+, Ba2+; A=Li+,Na+, K+) phosphors with perovskite structure, Marí, B., Cembrero-Coca, P., Singh, K.C., Kaushik, R.D., **Om, H,** ActaPhysico Chimica Sinica, 29, **2013**, 1357-1362
- Ultrasonic studies of molecular interactions in binary mixtures of formamide with some isomers of butanol at 298.15K and 308.15K, Manju Rani, Suman Gahlyan, Hari Om, Naveen Verma, Sanjeev Makin, Journal of Molecular Liquids, 194, 2014, 100-109.
- Fabrication of Porous Anodic Alumina by Two Step Anodic Oxidation and Photo Luminescent Properties of doped and undoped Alumina, Naveen Verma, Krishan Chander Singh, Bernabe Mari, Hari Om, Jitender Jindal, Chem Sci Rev Lett, 3, 2014, 597-602
- Hexamine as Corrosion Inhibitor for Mild Steel in Acidic Medium, Harish Kumar, Hariom, Pradeep Kumar, Vikas and Anjoo, Elixir Corrosion & Dye ,97, 2016, 42060-42065

- 8. Corrosion inhibition of mild steel by using Hexylamine as corrosion inhibitor in acidic medium, **Hariom**, Harish Kumar, Pradeep Kumar, Vikas and Anjoo Bala, Der Pharma Chemica, 8, **2016**, 268-278
- Corrosion Inhibition of carbon steel by an Isatin Schiff base in acidic medium, Hariom, Anjoo Bala, Harish Kumar, Vikas and Pradeep Kumar, Der Pharma Chemica, 2016, 8(12):149-156
- 10. Inhibition of Mild Steel Corrosion in 1.0M HCl Solution by Octadecylamine as Corrosion Inhibitor, Pradeep Kumar, Harish Kumar, Vikas, **Hariom**, Der Pharma Chemica, 9, **2017**, 100-108.
- 11. Corrosion Inhibition for Mild Steel in Acidic Medium by Using Hexadecylamine as Corrosion Inhibitor, Pradeep Kumar, Vikas Kalia, Harish Kumar, **Hariom Dahiya**, Chemical Science Transactions, 6, **2017**, 2278-3458.
- 12. Isatin Schiff Base as an Eco friendly Corrosion Inhibitor for Carbon Steel in 1M HCl, Anjoo Bala, Pradeep Kumar, Vikas, **Hariom**, Der Pharma Chemica, 9, **2017**, 92-99
- Synthesis, biological evaluation and corrosion inhibition studies of transition metal complexes of Schiff base, Chemistry Central Journal, Chemistry Central Journal, 2018, 117
- Corrosion Inhibition Study of Dodecylamine as long Chain Amine Corrosion Inhibitor for Mild Steel in Hydrochloric Acid Solution, IJSRSET Vikas, Pradeep Kumar, Gobind Goyat, Suresh Kumar, Hari Om, 3 (2018), 732-743
- 15. Schiff base as green corrosion inhibitor for carbon steel in 1M Hydrochloric acid solutions, International Journal of Advance Science and Research Anjoo Bala, Vikas, Gobind Goyat, Suresh Kumar, * Hari Om, 3 (2018), 115-122
- 16. Experimental Investigation of Isatin Schiff base as Corrosion Inhibitor for Carbon Steel in 1MHCl, IJSRSET, Anjoo Bala*, Vikas, Gobind Goyat, Suresh Kumar, Hari Om, 4 (2018), 744-754
- 17. Study of corrosion inhibition properties of Tetradecylamine for mild steel in 1.0 M HCl solution, International Journal of Advance Science and Research Vikas, Pradeep Kumar, Anju Malik, Suresh Kumar, Anjoo Bala,* Hariom, 3 (2018), 129-136
- Synthesis, characterization and anticorrosive effect of 2-(phenoxy methyl)-5-phenyl-1, 3,
 4-oxadiazole for mild steel in 1 M HCl: A combined experimental and computational demonstrations, May 2022, 100421.
- Synthesized oxadiazole derivatives as benign agents for controlling mild steel dissolution: Experimental and theoretical approach, VikasKalia, PradeepKumar, SureshKumar, Priti Pahuja GauravJhaa, SumanLata, HariomDahiya, Journal of Molecular Liquid, 313 (2020) 113601
- Corrosion inhibition and adsorption studies of Ammonium oxalate for mild steel by computational and experimental techniques: A sustainable approach, December 2021, 100785.
- 21. Newly synthesized oxadiazole derivatives as corrosion inhibitors for mild steel in acidic medium: Experimental and theoretical approaches, **Suresh Kumar**, Vikas Kalia,

Madhusudan Goyal, Gaurav Jhaa, Sudershan Kumar, Hemlata Vashisht, Hariom Dahiya, M. A. Quraishi, Chandrabhan Verma, Journal of Molecular Liquid. Journal of Molecular Liquids 357 (**2022**) 119077

- 22. Synthesis, characterization and corrosion inhibition potential ofoxadiazole derivatives for mild steel in 1M HCl: Electrochemical and computational studies, Vikas Kalia, Pradeep Kumar, Suresh Kumar, Madhusudan Goyal, Priti Pahuja, Gaurav Jhaa, Suman Lata, Hariom Dahiya Sudershan Kumar, Anita Kumari, Chandrabhan Verma. Journal of Molecular Liquid, <u>348</u> (**2022**), 118021
- Corrosion Inhibitive Properties of 5-(4-Aminophenyl)-1,3,4-oxadiazole-2-thiol and 5-(4-Methylphenyl)-1,3,4-oxadiazole-2-thiol on Mild Steel in 1.0 M HCl Solution, Vikas Kalia , Pradeep Kumar , Suresh Kumar and Hariom Dahiya, Asian Journal of Chemistry; Vol. 33, No. 12 (2021), 2953-2964
- Newly synthesized oxadiazole derivatives as corrosion inhibitors for mild steel in acidic medium: Experimental and theoretical approaches, Suresh Kumar, Vikas Kalia, Madhusudan Goyal, Gaurav Jhaa, Sudershan Kumar, Hemlata Vashisht, Hariom Dahiya, M. A. Quraishi, Chandrabhan Verma, Journal of Molecular Liquid. (2022)
- 25. Study of anticorrosive action and synthesis of 2-(phenoxymethyl)-5-p-tolyl-1,3,4oxadiazole a in 1M Hydrochloric acid medium for mild steel, Suresh kumar, Vikas Kalia, Hariom Dahiya, Asian Journal of Chemistry, 34 (2022), 597-606
- 26. Evaluating the adsorption and corrosion inhibition capabilities of Pyridinium P -Toluene Sulphonate on MS in 1 M HCl medium: An experimental and theoretical study Humira Assada, Suresh Kumarb, Sourav Kr. Sahac, Namhyun Kangc, Ishrat Fatmaa, Hariom Dahiyad, Praveen Kumar Sharmaa, Abhinay Thakura, Shveta Sharmaa, Richika Ganjooa, Ashish Kumare, InorganicChemistryCommunications, 153 (**2023**)110817
- 27. Highly efficient green corrosion inhibitor for mild steel in sulfuric acid: Experimental and DFT approach Harish Kumara,*, Pooja Yadava, Rajni Kumaria, Rahul Sharmaa, Saloni Sharmaa, Devender Singhb, Hariom Dahiyab, Parvin Kumarc, Santosh Bhardwajd, Pawanvir Kaur, Colloidsand Surfaces A: Physicochemical and Engineering Aspects 675 (2023) 132039.
- 28. Effective corrosion inhibition of mild steel using novel 1,3,4-oxadiazole-- pyridine hybrids: Synthesis, electrochemical, morphological, and computational insights Deepak Sharmaa, Abhinay Thakurb, Manish Kumar Sharmaa, Renu Sharmac, Suresh Kumard, Ashish Sihmard, Hariom Dahiyad, Gaurav Jhaae, Ashish Kumarf, Ashok Kumar Sharmaa,**, Hari Oma,* Environmental Research 234 (**2023**) 116555.

- 29. Comprehensive investigations of the synergistic effect of chalcone on the anticorrosion activity of environmentally benign triazole hybrid, Manish Kumar Sharma a, Sonia Parashar b, Deepak Sharma a, Kranti Jakhar a, Ashish Sihmar c, Anand Bhardwaj d, Hariom Dahiya c, Hari Om a.
- **30.** Synergistic experimental and computational approaches for evaluating pyrazole Schiff bases as corrosion inhibitor for mild steel in acidic medium. Renu Khanna, Vikas Kalia, Raj Kumar, Ravi Kumar, Pradeep Kumar, Hariom Dahiya, Priti Pahuja, Gaurav Jhaa, Harish Kumar, Synergistic experimental and computational approaches for evaluating pyrazole Schiff bases as corrosion inhibitor for mild steel in acidic medium, Journal of Molecular Structure, Volume 1297, Part 1, 2024
- **31.** Electrochemical and computational insights into the utilization of 2, 2- dithio bisbenzothiazole as a sustainable corrosion inhibitor for mild steel in low pH medium. Humira Assad, Sourav Kr. Saha, Namhyun Kang, Suresh Kumar, Praveen Kumar Sharma, Hariom Dahiya, Abhinay Thakur, Shveta Sharma, Richika Ganjoo, Ashish Kumar, Electrochemical and computational insights into the utilization of 2, 2- dithio bisbenzothiazole as a sustainable corrosion inhibitor for mild steel in low pH medium, Environmental Research, Volume 242, 2024, 117640.
- **32.** A research combined experimental and computational approaches of Succinylsulfathiazole Hydrate as potent corrosion inhibitor for mild steel in acidic medium. Humira Assad, Suresh Kumar, Sourav Kr. Saha, Namhyun Kang, Hariom Dahiya, Abhinay Thakur, Shveta Sharma, Richika Ganjoo, Ashish Kumar, Journal of Molecular Liquids, Volume 388.

Conference Attended: 15