



## MANAV RACHNA UNIVERSITY, FARIDABAD

Sector 43, Aravalli Hills, Manav Rachna Campus Rd, Faridabad, Haryana 121004

### Dr. Sudhish Kumar Shukla

**Designation:** Associate Professor

**Qualifications:** B.Sc (H) Chem, M.Sc, PhD (Applied Chemistry) from IIT BHU  
Post Doc. From North West University South Africa

**Email:** sudhish@mru.edu.in

**Experience:** 12 Years

[Google Scholar Profile:](#)

<https://scholar.google.co.in/citations?user=L7O2nn8AAAAJ&hl=en>



**Research Interest:** Corrosion and its control, inhibitor development, Green Organic Synthesis: Microwave and Ultrasound assisted synthesis.

#### + Journal Publication Details:

Abhishek Dwivedi, P.K. Bharti, **Sudhish Kumar Shukla**, *Surface assimilation and corrosion inhibition characteristic of water soluble Polyvinyl Alcohol on mild steel surface in 0.5M HCl solution* **Journal of The Turkish Chemical Society Section A: Chemistry**, 8 (2021)217-228.

Abhishek Dwivedi, P.K. Bharti, **Sudhish Kumar Shukla**, *Interaction of water soluble polyacrylic acid with mild steel / hydrochloric acid interface*, **Materials Science and Engineering: IOP Publications** 404(2018) 012044 doi:10.1088/1757-899X/404/1/012044

**Sudhish Kumar Shukla**, *Corrosion inhibitive effect of N-(6-methoxy quinolin-8-yl)-pentane-1,4-diamine on mild steel / sulphuric acid solution interface*, **Journal of Materilas and environmental Science** 6(2015)1779-1786

Gopal Ji, **Sudhish Kumar Shukla**, Eno E. Ebenso, Rajiv Prakash, *Argemone mexicana leaf extract for inhibition of mild steel corrosion in sulfuric acid solutions*, **International Journal of electrochemical Sciences** 8 (2013) 10878.

E.E. Ebenso; M.M. Kabanda; T. Arslan; M. Saracoglu; F. Kandemirli; L.C. Murulana; A.K. Singh; **Sudhish Kumar Shukla**; B. Hammouti; K.F. Khaled; *Quantum Chemical Investigations on Quinoline Derivatives as Effective Corrosion Inhibitors for Mild Steel in Acidic Medium*, **International Journal of Electrochemical Science**, 7 (2012) 5643

L.C. Murulana; A.K. Singh; **Sudhish Kumar Shukla**; M.M. Kabanda; E.E. Ebenso; *Experimental and Quantum Chemical Studies of Some Bis(Trifluoromethyl-Sulfonyl) Imideimidazolium-Based Ionic Liquids as Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Solution*, **Industrial & Engineering Chemistry Research**, 51 (2012) 13282.

E.E. Ebenso; M. Kabanda; L.C. Murulana; A.K. Singh; **Sudhish Kumar Shukla**; *Electrochemical and Quantum Chemical Investigation of Some Azine and Thiazine Dyes as Potential Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Solution*, **Industrial & Engineering Chemistry Research**, 51 (2012) 12940

M.M. Kabanda; **Sudhish Kumar Shukla**; A.K. Singh; L.C. Murulana; E.E. Ebenso; *Electrochemical and Quantum Chemical Studies on Calmagite and Fast Sulphone Black F dyes as Corrosion Inhibitors for Mild Steel in Hydrochloric Medium*, **International Journal of Electrochemical Science**, 7 (2012) 8813

G. Ji; **Sudhish Kumar Shukla**; P. Dwivedi; S. Sundaram; E.E. Ebenso; R. Prakash; *Green Capsicum Annum Fruit Extract for Inhibition of Mild Steel Corrosion in Hydrochloric Acid Solution*, **International Journal of Electrochemical Science**, 7 (2012) 12146

G. Ji; <b>Sudhish Kumar Shukla</b> ; P. Dwivedi; S. Sundaram; E.E. Ebenso; R. Prakash; <i>Pathenium Hysteophorus Plant Extract as an Efficient Green Corrosion Inhibitor for Mild Steel in Acidic Environment</i> , <b>International Journal of Electrochemical Science</b> , 7 (2012) 9933
<b>Sudhish Kumar Shukla</b> ; E.E. Ebenso; <i>Inhibitive Effect of N'-(7-Chloroquinolin-4-Yl)-N,N-Diethyl-Pentane-1,4-Diamine Towards Mild Steel / Sulphuric Acid Solution Interface</i> , <b>International Journal of Electrochemical Science</b> , 7 (2012) 12134
<b>Sudhish Kumar Shukla</b> ; E.E. Ebenso; <i>Effect of Condensation Product of Thio-Semicarbazide and Phenyl-Isothiocyante on Corrosion of Mild Steel in Sulphuric Acid Medium</i> , <b>International Journal of Electrochemical Science</b> , 7 (2012) 12121
<b>Sudhish Kumar Shukla</b> ; A.K. Singh; L.C. Murulana; M.M. Kabanda; E.E. Ebenso; <i>Inhibitive Effect of Azorubine Dye on the Corrosion of MildSteel in Hydrochloric Acid Medium and Synergistic Iodide Additive</i> , <b>International Journal of Electrochemical Science</b> , 7 (2012) 5057
<b>Sudhish Kumar Shukla</b> ; M.A. Quraishi; <i>Effect of Some Substituted Anilines-Formaldehyde Polymers on Mild Steel Corrosion In Hydrochloric Acid Medium</i> , <b>Journal of Applied Polymer Science</b> , 124 (2012) 5130
<b>Sudhish Kumar Shukla</b> , A.K. Singh, M.A. Quraishi, <i>Triazines: Efficient Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Solution</i> , <b>International Journal of Electrochemical Science</b> , 7 (2012) 3371-3389
A.K. Singh, <b>Sudhish Kumar Shukla</b> , M. A. Quraishi, Eno E. Ebenso, <i>Investigation of adsorption characteristics of N, N'-[(methylimino)dimethylidyne]di-2,4-xylidine as corrosion inhibitor at mild steel / sulphuric acid interface</i> , <b>Journal of Taiwan Institute of Chemical Engineers</b> , (2012)463-472
G. Ji, <b>Sudhish Kumar Shukla</b> , P. Dwivedi, S. Sundaram, R. Prakash, <i>Inhibitive effect of Argemone mexicana plant extract on the acid corrosion of mild steel</i> , <b>Industrial and Engineering Chemistry Research</b> 50 (2011) 11954-11959
A.K. Singh, <b>Sudhish Kumar Shukla</b> , E.E. Ebenso, <i>Cefacetrile as corrosion inhibitor for mild steel in acidic media</i> , <b>International Journal of Electrochemical Science</b> 6 (2011) 5689-5700
<b>Sudhish Kumar Shukla</b> , A.K. Singh, M.A. Quraishi, <i>Corrosion inhibition and adsorption properties of N-phenylhydrazine-1,2-dicarbothioamide on mild steel in hydrochloric acid</i> , <b>International Journal of Electrochemical Science</b> 6 (2011) 5779-5791
A.K. Singh, <b>Sudhish Kumar Shukla</b> , M.A. Quraishi, <i>Corrosion behaviour of mild steel in Sulphuric acid solution in presence of ceftazidime</i> , <b>International Journal of Electrochemical Science</b> 6 (2011) 5802-5814.
A.K. Singh, <b>Sudhish Kumar Shukla</b> , M.A. Quraishi, <i>Ultrasound mediated Green Synthesis of Hexa-hydro Triazines</i> , <b>Journal of Materials and Environment Science</b> , 2 (2011) 403-406
<b>Sudhish Kumar Shukla</b> , L.C. Murulana, E.E. Ebenso <i>Inhibitive Effect of Imidazolium Based Aprotic Ionic Liquids on Mild Steel Corrosion in Hydrochloric Acid Medium</i> , <b>International Journal of Electrochemical Science</b> 6 (2011) 4286-4295
<b>Sudhish Kumar Shukla</b> , A.K. Singh, E.E. Ebenso, <i>Pharmaceutically Active Compound as Corrosion Inhibitor for Mild Steel in Acidic Medium</i> , <b>International Journal of Electrochemical Science</b> 6 (2011) 4276-4285
<b>Sudhish Kumar Shukla</b> , E.E. Ebenso, <i>Corrosion inhibition, adsorption behavior and thermodynamic properties of streptomycin on mild steel in hydrochloric acid medium</i> . <b>International Journal of Electrochemical Science</b> 6 (2011) 3277-3291
<b>Sudhish Kumar Shukla</b> ; M.A. Quraishi; E.E. Ebenso; <i>Adsorption and corrosion inhibition properties of cefadroxil on mild steel in hydrochloric acid</i> , <b>International Journal of Electrochemical Science</b> 6 (2011) 2912-2931
A.K. Singh; <b>Sudhish Kumar Shukla</b> ; M. Singh; M.A. Quraishi; <i>Inhibitive effect of ceftazidime on corrosion of mild steel in hydrochloric acid solution</i> , <b>Materials Chemistry and Physics</b> 129 (2011) 68-76
<b>Sudhish Kumar Shukla</b> ; M.A. Quraishi; <i>Cefalexin drug: A new and efficient commercially available drug as corrosion inhibitor for mild steel in hydrochloric acid medium</i> , <b>Materials Chemistry and Physics</b> 120 (2010) 142-147

**Sudhish Kumar Shukla**; M.A. Quraishi, *Doxycycline: A pharmaceutical compound as efficient corrosion inhibitor for mild steel in hydrochloric acid solution*, **Corrosion Science** 52 (2010) 314-321

**Sudhish Kumar Shukla**; M. A. Quraishi; *4-substituted anilinomethylpropionate: New and efficient corrosion inhibitors for mild steel in hydrochloric acid solution*, **Corrosion Science** 51 (2009) 1990-1997.

**Sudhish Kumar Shukla**; M. A. Quraishi, *Cefotaxime Sodium: A new and efficient corrosion inhibitor for mild steel in hydrochloric acid solution*, **Corrosion Science** 51 (2009) 1007-1011

Ashish Kumar Singh, **Sudhish Kumar Shukla**, Ishtiaque Ahamad, M. A. Quraishi, *Solvent free Microwave-Assisted Synthesis of 1-H-indole-2, 3-dione derivatives*, **Journal of Heterocyclic Chemistry** 46 (2009) 571-574

**Sudhish Kumar Shukla**; M. A. Quraishi; *Ceftriaxone: A novel corrosion inhibitor for mild steel in hydrochloric acid*, **Jounal of Applied Electrochemistry** 39 (2009) 1517-1523

**Sudhish Kumar Shukla**; Ashish Kumar Singh; Ishtiaque Ahamad, M. A. Quraishi, *Streptomycin: A commercially available drug as corrosion inhibitor for mild steel in hydrochloric acid solution*, **Materials Letters** 63 (2009) 819-822

M.A. Quraishi; **Sudhish Kumar Shukla**, *Poly(aniline-formaldehyde): A new and effective corrosion inhibitor for mild steel in hydrochloric acid*, **Materials Chemistry and Physics** 113 (2009) 685-689

M.A. Quraishi; Ishtiaque Ahamad; Ashish Kumar Singh; **Sudhish Kumar Shukla**, Basant Lal; Wakil Singh; *N-(Piperidinomethyl)-3-[(pyridylidene) amino] isatin: A new and effective acid corrosion inhibitor for mild steel*, **Materials Chemistry and Physics**, 112 (2008) 1035-1039

**Sudhish Kumar Shukla**; M.A. Quraishi; Rajiv Prakash; *A Self Doped Conducting Polymer "Polyanthranilic Acid": An efficient corrosion inhibitor for mild steel in acidic solution*, **Corrosion Science**, 50 (2008) 2867-2872

#### + Presentations in International & National Conferences / Seminars

Abhishek Dwivedi, **Sudhish Kumar Shukla**, *Effect of water soluble polymeric materials on the mild steel corrosion in sulphuric acid medium*

**Presented in:** *GSCC-2019 (Green and Sustainable Chemistry Conference), Manav Rachna University Faridabad, India, 2019, Nov07 to 08, 2019.*

Somya Tanwar, **Sudhish Kumar Shukla**, *Effect of Cefotaxime Sodium on the mild steel surface corrosion in aqueous hydrochloric acid solution in hydrochloric acid solution*

**Presented in:** *GSCC-2019 (Green and Sustainable Chemistry Conference), Manav Rachna University Faridabad, India, 2019, Nov07 to 08, 2019.*

**Sudhish Kumar Shukla**, *Effect of Proguanil on the mild steel surface corrosion in aqueous hydrochloric acid solution*

**Presented in:** *GSCC-2019 (Green and Sustainable Chemistry Conference), Manav Rachna University Faridabad, India, 2019, Nov07 to 08, 2019.*

**Sudhish Kumar Shukla**, Somya Tanwar, Abhishek Dwivedi, *Effect of water soluble polymeric materials on the mild steel corrosion in acidic media*

**Presented in:** *IAC-2019 (International Analytical Conference), Amity University Noida, India, 2019, Dec12 to 14, 2019.*

Ashish Kumar Singh, **Sudhish Kumar Shukla**, Eno E. Ebenso, *Cefacetrile as corrosion inhibitor for mild steel in acidic media*,

**Poster presentation in:** *CORCON-2011, East Asia & Pacific Area, Corrosion Conference & Expo 2011, Sept. 28 to Oct, 01, 2011 Mumbai, India.*

**Sudhish Kumar Shukla**, Ashish K. Singh, Eno E. Ebenso *Pharmaceutically Active Compound as Corrosion Inhibitor for Mild Steel in Acidic Medium*

**Poster presentation in: CORCON-2011, East Asia & Pacific Area, Corrosion Conference & Expo 2011**, Sept. 28 to Oct, 01, 2011 Mumbai, India.

Ashish Kumar Singh, **Sudhish Kumar Shukla**, Eno E. Ebenso, *Cefacetrile as corrosion inhibitor for mild steel in acidic media*,

**Poster presentation in: CORCON-2011, East Asia & Pacific Area, Corrosion Conference & Expo 2011**, Sept. 28 to Oct, 01, 2011 Mumbai, India.

**Sudhish Kumar Shukla**, Ashish K. Singh, Eno E. Ebenso *Pharmaceutically Active Compound as Corrosion Inhibitor for Mild Steel in Acidic Medium*

**Poster presentation in: CORCON-2011, East Asia & Pacific Area, Corrosion Conference & Expo 2011**, Sept. 28 to Oct, 01, 2011 Mumbai, India.

**Sudhish Kumar Shukla**, Ishtiaque Ahamad, Ashish Kumar Singh and M. A. Quraishi, **Corrosion inhibition of mild steel in sulphuric acid by N-phenylhydrazine-1,2-dicarbothioamide**

**Oral Presentation in: National Conference on Advanced Materials (NCAM 2008)**, March 06-08, 2008, UPAC, Varanasi, India

Suparna Roy, Rajiv Prakash, **Sudhish Kumar Shukla**, M. A. Quraishi, *A self doped conducting polymer 'Polyanthranilic acid': corrosion inhibitor of mild steel in acidic solution*

**Poster presentation in: International Conference on Advances in Polymer Science and technology (POLY-2008)**, Jan, 28-31, 2008, APA, IIT Delhi, New Delhi, India.

M.A. Quraishi and **Sudhish Kumar Shukla**, *Corrosion inhibition of mild steel in acidic medium by N-phenylhydrazine-1,2-dicarbothioamide*

**Oral presentation in: National Conference on Newly Emerging Areas in Chemical Sciences**; Dec, 22-24, 2006 UPAC Varanasi, India.

**+ Research Supervised(PhD):**

Vipin Pal on **"Framework for Energy Efficient Clustering Approach for Wireless Sensor Networks"** Year - 2016 (Completed)/(Ongoing)

Somya Tanwar on **"Studies on organic materials towards inhibition of corrosion on mild steel surface in acidic environment"** (Ongoing)

Abhishek Dwivedi **"Studies on Polymeric materials as corrosion inhibitors on mild steel in hydrochloric acid solution"** (Ongoing)

**+ Book/Chapter Publications:**

V.C. Pandey, Ambuj Mishra, **Sudhish Kumar Shukla**, D.P. Singh **Book Chapter: Reed canary grass (Phalaris arundinacea L.): coupling phytoremediation with biofuel production** in Book entitled **"Phytoremediation Potential of Perennial Grasses ch.7 (2020) 165-177**

Vinayak V. Pathak, Ashita Rai, Shiksha Tiwari, Saloni Jangra, **Sudhish K. Shukla**, **Book Chapter: Prospects of iron oxide nanomaterial for remediation of wastewater** in Book entitled **"Functionalized Nanomaterials based Devices for Environmental Applications" Ch15 (2021) (In Press)**

**+ Administrative Responsibilities:**

Head of Department

**+ Professional Affiliation:**

Member of Green Chemistry Network Centre (GCNC), New Delhi (Registration No. GC-0005)

**+ Event Organized(Conference/Seminar/FDP/Workshops**

Organizing Secretary in DST, IOCL and DRDO sponsored International conference "Green and sustainable Chemistry Conference (GSCC-2019) Nov 07-08, 2019, Organized by Department of Chemistry Chemistry Manav Rachna College of Engineering Faridabad in Association with Green Chemistry Network Centre (GCNC) **Royal Society of Chemistry (London) North India Chapter** New Delhi

**Convener** in **Royal Society of Chemistry (London) North India Chapter sponsored International Conference on Green Initiative in science and Technology (GIST-2015)** Jan 15, 2015 Organized by Department of Chemistry Chemistry Manav Rachna College of Engineering Faridabad in Association with Green Chemistry Network Centre (GCNC) New Delhi and ISST Ghaziabad

Contributed as member of organizing committee in Indian Oil Corporation sponsored **National Workshop on Innovative Technologies for Water Detoxification** Jan14-15, 2013, Organized by Department of Chemistry Manav Rachna College of Engineering Faridabad in Association with ISST Ghaziabad