

**Dr. Sudhish Kumar Shukla, M.Sc., Ph.D.**

*Assistant Professor*

Department of Chemistry,  
Manav Rachna College of Engineering,  
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Teaching / Research Interests:

- To teach the various Applied and basic aspects of the chemistry viz engineering applications of chemistry, basics of organic inorganic and physical chemistry.
- Synthesis of organic compounds for corrosion testing
- Chemical synthesis of Polymers for corrosion inhibitor
- Conventional, Microwave and Ultrasound mediated synthesis of organic compounds as corrosion inhibitors
- Corrosion inhibition properties of organic compounds, polymers, drugs, natural plant extract, dyes and ionic liquids on various metals in various environments.
- Corrosion studies, inhibitor development and studies in concrete and refinery system.

Teaching Experience:

- **Assistant Professor**, Department of Applied Sciences, Les Filles Institute of Engineering and Technology, Palwal Haryana India (**From July 2009 – March 2011**).
- **Assistant Professor**, Department of Chemistry, Manav Rachna College of Engineering, Faridabad Haryana India (**From June 2012 to Till Date**).

In this duration, I was engaged in the undergraduate teaching of the Engg. Chemistry to B. Tech first year students. I was also handled the various other non teaching activities in the college as Co-ordinator first year, B.tech, Time table co-coordinator and other such activities.

Research / Technical Experience:

### **Post Doctoral Fellow**

Department of Chemistry, School of Mathematical and Physical Sciences, North West University (Mafikeng Campus), Mmabatho 2735, South Africa (**April 2011- May 2012**)

(Working with Prof. Eno E. Ebenso on Ionic liquids and other organic compounds as corrosion inhibitors for different metals and alloys system in acidic medium)

### **Senior Research Fellow**

Department of Applied Chemistry, Institute of Technology, Banaras Hindu University, Varanasi, INDIA. (**October 2008 to June 2009**) **09 Months**

(Worked on concrete corrosion in this duration with Prof. M.A. Quraishi)

### **UGC-Research Fellow**

Department of Applied Chemistry, Institute of Technology, Banaras Hindu University, Varanasi, INDIA. (**January 2007 to October 2008**) **01Year 09 Months**

(Worked on acidic corrosion inhibition by organic polymers, organic compounds and drugs with Prof. M.A. Quraishi)

### **Publications:**

All the publications are in the journals of high international repute with high impact factors. Most of the publications start receiving continuous citations in very few times. Article related to polymers utilized as corrosion inhibitors receiving citations regularly. One of the article entitled *“Streptomycin: A commercially available drug as corrosion inhibitor for mild steel in hydrochloric acid solution”* published in *Materials Letters 63 (2009) 819-822* was made the place in research highlight column of the **Nature India** science journal (A journal of **Nature group**) as **“Antibiotic shield against corrosion” DOI No. 10.1038/nindia.2009.113**; published online 29 April 2009. **The citations of my published papers are more than 460 and the total impact factor is more than 90.**

### **In Journals:**

#### **Published: (32)**

1. 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.
2. 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.
  3. E.E. Ebenso; M. Kabanda; L.C. Murulana; A.K. Singh; **Sudhish Kumar Shukla**; *Inhibitive Effect of Azorubine Dye on the Corrosion of Mild Steel in Hydrochloric Acid Medium and Synergistic Iodide Additive*, **Industrial & Engineering Chemistry Research**, 51 (2012) 12940.
  4. 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.
  5. 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.
  6. G. Ji; **Sudhish Kumar Shukla**; P. Dwivedi; S. Sundaram; E.E. Ebenso; R. Prakash; *Pathenium Hystephorus Plant Extract as an Efficient Green Corrosion Inhibitor for Mild Steel in Acidic Environment*, **International Journal of Electrochemical Science**, 7 (2012) 9933.
  7. **Sudhish Kumar Shukla**; E.E. Ebenso; *Inhibitive Effect of N'-(7-Chloroquinolin-4-Yl)-N,N-Diethyl-Pentane-1,4-Diamine Towards Mild Steel / Sulphuric Acid Solution Interface*, **International Journal of Electrochemical Science**, 7 (2012) 12134.
  8. **Sudhish Kumar Shukla**; E.E. Ebenso; *Effect of Condensation Product of Thio-Semicarbazide and Phenyl-Isothiocynate on Corrosion of Mild Steel in Sulphuric Acid Medium*, **International Journal of Electrochemical Science**, 7 (2012) 12121.
  9. **Sudhish Kumar Shukla**; A.K. Singh; L.C. Murulana; M.M. Kabanda; E.E. Ebenso; *Inhibitive Effect of Azorubine Dye on the Corrosion of Mild Steel in Hydrochloric Acid Medium and Synergistic Iodide Additive*, **International Journal of Electrochemical Science**, 7 (2012) 5057.

10. **Sudhish Kumar Shukla**; M.A. Quraishi; *Effect of Some Substituted Anilines-Formaldehyde Polymers on Mild Steel Corrosion In Hydrochloric Acid Medium*, **Journal of Applied Polymer Science**, 124 (2012) 5130.
11. **Sudhish Kumar Shukla**, A.K. Singh, M.A. Quraishi, *Triazines: Efficient Corrosion Inhibitors for Mild Steel in Hydrochloric Acid Solution*, **International Journal of Electrochemical Science**, 7 (2012) 3371-3389.
12. A.K. Singh, **Sudhish Kumar Shukla**, M. A. Quraishi, Eno E. Ebenso, *Investigation of adsorption characteristics of N, N'-[(methylimino)dimethyldiyl]di-2,4-xylidine as corrosion inhibitor at mild steel / sulphuric acid interface*, **Journal of Taiwan Institute of Chemical Engineers**, (2012)
13. G. Ji, **Sudhish Kumar Shukla**, P. Dwivedi, S. Sundaram, R. Prakash, *Inhibitive effect of Argemone mexicana plant extract on the acid corrosion of mild steel*, **Industrial and Engineering Chemistry Research** 50 (2011) 11954-11959.
14. A.K. Singh, **Sudhish Kumar Shukla**, E.E. Ebenso, *Cefacetrile as corrosion inhibitor for mild steel in acidic media*, **International Journal of Electrochemical Science** 6 (2011) 5689-5700.
15. **Sudhish Kumar Shukla**, A.K. Singh, M.A. Quraishi, *Corrosion inhibition and adsorption properties of N-phenylhydrazine-1,2-dicarbothioamide on mild steel in hydrochloric acid*, **International Journal of Electrochemical Science** 6 (2011) 5779-5791.
16. A.K. Singh, **Sudhish Kumar Shukla**, M.A. Quraishi, *Corrosion behaviour of mild steel in Sulphuric acid solution in presence of ceftazidime*, **International Journal of Electrochemical Science** 6 (2011) 5802-5814.
17. A.K. Singh, **Sudhish Kumar Shukla**, M.A. Quraishi, *Ultrasound mediated Green Synthesis of Hexa-hydro Triazines*, **Journal of Materials and Environment Science**, 2 (2011) 403-406.
18. **Sudhish Kumar Shukla**, L.C. Murulana, E.E. Ebenso *Inhibitive Effect of Imidazolium Based Aprotic Ionic Liquids on Mild Steel Corrosion in Hydrochloric Acid Medium*, **International Journal of Electrochemical Science** 6 (2011) 4286-4295.
19. **Sudhish Kumar Shukla**, A.K. Singh, E.E. Ebenso, *Pharmaceutically Active Compound as Corrosion Inhibitor for Mild Steel in Acidic Medium*, **International Journal of Electrochemical Science** 6 (2011) 4276-4285.

20. **Sudhish Kumar Shukla**, E.E. Ebenso, *Corrosion inhibition, adsorption behavior and thermodynamic properties of streptomycin on mild steel in hydrochloric acid medium*, **International Journal of Electrochemical Science** 6 (2011) 3277-3291.
21. **Sudhish Kumar Shukla**; M.A. Quraishi; E.E. Ebenso; *Adsorption and corrosion inhibition properties of cefadroxil on mild steel in hydrochloric acid*, **International Journal of Electrochemical Science** 6 (2011) 2912-2931
22. A.K. Singh; **Sudhish Kumar Shukla**; M. Singh; M.A. Quraishi; *Inhibitive effect of ceftazidime on corrosion of mild steel in hydrochloric acid solution*, **Materials Chemistry and Physics** 129 (2011) 68-76
23. **Sudhish Kumar Shukla**; M.A. Quraishi; *Cefalexin drug: A new and efficient commercially available drug as corrosion inhibitor for mild steel in hydrochloric acid medium*, **Materials Chemistry and Physics** 120 (2010) 142-147.
24. **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.
25. **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.
26. **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.
27. 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.
28. **Sudhish Kumar Shukla**; M. A. Quraishi; *Ceftriaxone: A novel corrosion inhibitor for mild steel in hydrochloric acid*, **Journal of Applied Electrochemistry** 39 (2009) 1517-1523.
29. **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.

30. 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.
31. M.A. Quraishi; Ishtiaque Ahamad; Ashish Kumar Singh; **Sudhish Kumar Shukla**, Basant Lal; Vakil 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.
32. **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.

### Submitted:

1. Gopal Ji, **Sudhish Kumar Shukla**, Rajiv Prakash, *Argemone mexicana leaf extract for inhibition of mild steel corrosion in sulfuric acid solutions*, **International Journal of electrochemical Sciences** (Under Review)

### Presentations in International & National Conferences / Seminars

1. 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.
2. Suparna Roy, Rajiv Prakash, **Sudhish Kumar Shukla**, M. A. Quraishi, *A self doped conducting polymer 'Polyanthranilic acid': corrosion inhibition 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.
3. **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

4. **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.
5. 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.

## WORKSHOPS

Contributed 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

## EDITORIAL RESPONSIBILITIES:

1. Editorial an Advisory Board member of "INTERNATIONAL JOURNAL OF EMERGING TECHNOLOGY AND ADVANCED ENGINEERING" ISSN 2250-2459
2. Editorial Board Member of "INTERNATIONAL JOURNAL OF TECHNICAL RESEARCH AND APPLICATIONS" ISSN 2320-8163

## Education

**Ph.D.** – Applied Chemistry (2009), (Award Date: Sept 2010) Department of Applied Chemistry, Institute of Technology, Banaras Hindu University, India on topic "**Studies on some organic compounds as corrosion inhibitors**"

**M.Sc.** – Chemistry, 2005, Udai Pratap Autonomous College, Varanasi India (Affiliated to VBS Purvanchal University Jaunpur, INDIA)

**B.Sc.** – Chemistry, Botany, Zoology; 2003, Udai Pratap Autonomous College, Varanasi India (Affiliated to VBS Purvanchal University Jaunpur, INDIA)

## Personal Information

Date of Birth:

July 04, 1982

*Curriculum Vitae of Dr. Sudhish Kumar Shukla M.Sc., Ph.D.*

Father's Name:	Sri Vinay Prakash Shukla
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**REFERENCES:**

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**Date**.....

**Place**.....

**SUDHISH KUMAR SHUKLA**