

O.S. OLANRELE

**Samoson Olajire OLANRELE**

*Lecturer/Researcher*

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**Nationality:** Nigerian  
**Date of birth:** 20 May, 1987  
**Place of birth:** Ibadan, Nigeria  
**Marital status:** Married  
**Language spoken:** English, Basic Chinese, Yoruba

**EDUCATION**

- **P.h.D.** in Materials Science and Engineering, University of Science and Technology of China, Hefei, China 2020
- **PGD** in Education, National Open University of Nigeria, Lagos, Nigeria 2015
- **M.Sc.** in Inorganic Chemistry, University of Calabar, Calabar, Nigeria 2013
- **B.Sc.** [Hons] in Chemistry, Olabisi Onabanjo University, Ago-Iwoye, Nigeria 2009
- **O'Level WASSCE / NECO** Loyola College, Ibadan 1997-2003
- **First School Certificate** St Mary's Catholic Primary School, Ibadan 1992-1997

**PROFESSIONAL EXPERIENCE**

**1 Institute of Metal Research, University of Science and Technology of China, Shenyang**

- Postdoctoral Research Fellow** June – August 2020
- Ph.D. (CAS-TWAS) Research Fellow**  
Materials Physics and Chemistry September 2016 – May 2020

Duties: Researched on, The modeling and computational simulations of halogenated carbon based nanomaterials as multifunctional catalysts for CO<sub>2</sub>-electroreduction, ORR/OER in fuel cells and remediation of polysulfide shuttling in Li-S batteries

**2 Chemical Sciences Department, Mountain Top University, Ogun State, Nigeria**

- Lecturer II** September 2020 – Till date
- Assistant Lecturer** January 2016 – August 2020

Duties: Undergraduate teaching, research and community services

**3 Dayford Academy, No 1 Dayford Street Magboro, Ogun State, Nigeria**

- Deputy Head teacher (Academics)** July 2012 – July 2015

Duties: Supervised general teaching and learning in the school

**4 Estate Secondary School, Ikot Ansa, Calabar, Nigeria**

- National Youth Service Corps Member** March 2010 – February 2011

Duties: Chemistry and mathematics teacher; coordinates students on JETS club activities

**5 Dana Pharmaceutical Limited, Ibadan, Nigeria**

*i. Industrial Trainee Quality Control*

February 2008 – June 2008

Duties: Calibration of P<sup>H</sup> meter, Conductivity meter, Polarimeter and Spectrophotometer before the day production; conducted a quality control test on on-line to finished products in accordance to U.S.P and B.P.

**6 Independent National Electoral Commission (INEC)**

- |  |      |
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| <i>i. Election Collation officer</i>     | 2015 |
| <i>ii. Election Registration Officer</i> | 2011 |
| <i>iii. Election Poll Clerk</i>          | 2011 |
| <i>iv. Election Review Officer</i>       | 2011 |

**AWARDS**

**Ph.D. Achievements/Awards so far in IMR CAS, Shenyang**

1. Excellent student award 2020 (三好学生 2020 年)

**Ph.D. Scholarship:**

September 2016 – July 2020

1. CAS-TWAS President's Fellowship, University of Science and Technology of China, China.
2. Institute of Metal Research Scholarship, University of Science and Technology of China, China.

**Chemical Sciences Departmental Awards:**

1. Second Best Graduating Student in the Chemical Sciences Department (Pure Chemistry Option), Olabisi Onabanjo University, Ago-Iwoye 2008/2009 Session

**Students Chemical Society of Nigeria [SCSN] OOU Chapter Awards**

1. Award of Meritorious Service 2007/2008

**CERTIFICATIONS**

1. Member, Chemical Society of Nigeria 2013
2. Institute of Customer Relationship Management (ICRM) 2011
3. Institute of Industrials Safety and Security of Nigeria (IISSN) 2010
4. Interconnecting Cisco Networking Device (CCNA 640-802) 2009

**POSITIONS OF RESPONSIBILITY/ASSOCIATIONS**

1. **Secretary:** National Emergency Management Agency, NEMA/NYSC Calabar 2010-2011
2. **Public Relation Officer:** Students Chemical Society Of Nigeria [SCSN] OOU Chapter 2007/2008
3. **Community Service Director:** Rotaract Club of OOU [District 9100] 2006/2007

**Thesis and Publication**

**Thesis**

1. **O. S. Olanrele** (2020). Computational studies of halogenated carbon based nanomaterials as multifunctional catalysts. University of Science and Technology of China, Institute of metal research, Shenyang

2. **O. S. Olanrele** (2015). The Influence of Motivation on Academic Performance of Students in Chemistry in Lagos Metropolis. PGDE Thesis. National Open University of Nigeria, Lagos, Nigeria
3. **O. S. Olanrele** (2013). Synthesis and characterization of Mn (II), Ni(II) and Cu(II) mixed-ligand complexes derived from Isatinphenylhydrazone and Salicaldehydephenylhydrazone with nitrogen monodentate ligand. M.Sc. Thesis. Department of Pure and Applied Chemistry, University of Calabar, Calabar, Nigeria
4. **O. S. Olanrele** (2009). Inhibitive effect of *Delonix regia* seed extract on the corrosion of Aluminum in 2M Sodium hydroxide Alkaline solution using weight loss method. B.Sc. Project. Chemical Sciences Department, Olabisi Onabanjo University Ogun state, Nigeria

#### **Publications (in Refereed Journals)**

- 1 **O. S. Olanrele**, Z. Lian, C. Si, S. Chen, B. Li (2020). Tuning of interactions between cathode and lithium polysulfide in Li-S battery by rational halogenations. *Journal of Energy Chemistry*, 49:147-155.
- 2 **O. S. Olanrele**, Z. Lian, C. Si, B. Li (2019). Halogenation of graphene triggered by heteroatom doping. *RSC Advances*, 9, 37507-37511.
- 3 J. M. Yang, **O. S. Olanrele**, X. Zhang, C. C. Hsu (2018). Fabrication of Hydrogel Materials for Biomedical Applications in H. J. Chun et al. (eds.), *Novel Biomaterials for Regenerative Medicine. Advances in Experimental Medicine and Biology*, 1077: 197-224. **{Equal Contribution}**
- 4 **O. S. Olanrele**, Z. Lian, S. Chen, C. Si, B. Li (2020). Catalytic performance of novel halogen-doped Fe embedded carbon nanotube single-atom catalysts for small molecules adsorption and oxygen reduction reaction. **(Under review)**
- 5 Z. Lian, **O. S. Olanrele**, C. Si, M. Yang & B. Li (2020). The Critical Role of Interfacial Sites Between Ni and CeO<sub>2</sub> Support in Dry Reforming of Methane: Revisit of Reaction Mechanism and Origin of Stability. *Journal of Physical Chemistry C*, 124:5118-5124.
- 6 S. Chen, T. Liu, **O. S. Olanrele**, Z. Lian, C. Si, Z. Chen, B. Li Boosting electrocatalytic activity for CO<sub>2</sub> reduction on nitrogen-doped carbon catalysts by co-doping with phosphorus. *Journal of Energy Chemistry*, doi.org/10.1016/j.jechem.2020.05.006.
- 7 C. Si; Z. Lian, **O. S. Olanrele**; X.Y. Sun & B. Li (2020). Revealing the origin of the reactivity of metal-free boron nitride catalysts in oxidative dehydrogenation of propane. *Applied Surface Science*, 519:14624.
- 8 S. Ali, **O. S. Olanrele**, Z. Lian, T. Liu, C. Si, M. Yang, B. Li (2019). Single Au Anion Can Catalyze Acetylene Hydrochlorination: Tunable Catalytic Performance from Rational Doping. *Journal of Physical Chemistry C*, 123, 29203–29208.
- 9 S. Ali, Q. YiYang, Z. Lian, **O. S. Olanrele**, L. Guo Jun, L. Ying, D. S. Su, B. Li (2019). Screening of active center and reactivity descriptor in acetylene hydrochlorination on metal-free doped carbon catalysts from first principle calculations. *Applied Surface Science*, 476:574-580.

- 10 G. E.Iniama, **O. S. Olanrele**, A. Johnson (2015).Synthesis, Spectral Characterization and Antimicrobial activity of Manganese(II) and Copper(II) complexes derived from Salicylaldehydephenylhydrazone. *International Journal of Chemistry and Applications*. 7(1):15-23.
- 11 G. E.Iniama, **O. S. Olanrele**, T. I. Iorkpiligh (2015).Synthesis, Structure Characterization and Antimicrobial activity of Manganese(II) and Copper(II) complexes derived from Isatinphenylhydrazone. *The International Journal of Science & Technoledge*.3(8):229-233.
- 12 G. E.Iniama, **O. S. Olanrele** & T. I. Iorkpiligh (2015).Synthesis, Characterization and Antimicrobial activity of Mn(II), Ni(II) and Cu(II) mixed ligand complexes derived from Isatinphenylhydrazone and Nitrogen/Sulphur Monodentate ligands. *International Journal of Science & Research*,4(9):2084-2088.
- 13 G .E. Iniama,T. I. Iorkpiligh,, **O. S. Olanrele** (2015). Antimicrobial studies Of Synthesized Zn(II) Schiff Base complexes derived from Amino Acid and 2-Hydroxy-1-Naphthaldehyde.*International Journal of Scientific and Technology Research*.4(8):24-27.
- 14 G. E. Iniama, T. I. Iorkpiligh,**O. S. Olanrele**, D. Shiriki & M. I. Kondom (2015).Synthesis, Characterization and Antimicrobial studies on Mn(II), Co(II) and Zn(II) Schiff Base complexes derived from Glycine and 2-Hydroxy-1-Naphthaldehyde. *International Journal of Innovation and Scientific Research*, 18(1):117-121.

#### Conference Papers/Presentations

- 15 **O. S. Olanrele**, Z. Lian, C. Si, B. Li (2019). Halogenation of graphene triggered by heteroatom doping. **The World Corrosion Organization Conference 2019, April 22-24, 2019. IMR, Shenyang, China.**
- 16 G. E. Iniama, T. I. Iorkpiligh, **O. S. Olanrele**, D. Shiriki (2014).Synthesis, Characterization and Antimicrobial studies on Mn(II), Co(II) and Zn(II) Schiff Base complexes derived from Amino Acid and 2-Hydroxy-1- Naphthaldehyde. Proceedings of 37th *Annual International Conference of Chemical society of Nigeria(CSN)*. Uyo: Chemical Society of Nigeria, 1: 112-115. 7th - 12th Sept., 2014

#### REFEREE

##### Prof. Bo Li

Catalysis and Material Division,  
Shenyang National Laboratory for Materials Science,  
Institute of Metal Research, Chinese Academy of Sciences,  
72 Wenhua Rd. Shengyang, Liaoning, 110016 China.

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