

CURRICULUM VITAE

- I. (a). Name: Raymond Akong Akong
(b). Date of Birth: 17 July, 1981
(c). Department: Chemistry
(d). Faculty: Science
- II. (a). First Academic Appointment: Assistant Lecturer
(29 September, 2017)
(b). Present Post (with dates): Lecturer I
(1 October, 2023)
(c). Date of Last Promotion: 1 October, 2023
(d). Date Last Considered (in cases where promotion was not through): Not Applicable
- III. University Education (with dates):
(a) University of Ibadan, Ibadan. 2002 – 2006
(b) University of Ibadan, Ibadan. 2012 – 2014
(c) University of Ibadan, Ibadan. 2015 – 2023
- IV. Academic Qualifications (with dates and granting bodies):
(a) BSc (Industrial Chemistry) Ibadan 2006
(b) MSc (Inorganic Chemistry) Ibadan 2014
(c) PhD (Inorganic Chemistry) Ibadan 2023
- V. Professional Qualifications and Diplomas (with dates): Nil
- VI. Scholarships, Fellowships and Prizes (with dates) in respect of Undergraduate and Postgraduate work only:
(a). Federal Government of Nigeria Undergraduate Scholarship Award 2002
(b). Cross River State Government bursary award 2002
(c). Federal Government of Nigeria/University of Ibadan Needs Assessment (Revitalisation) Fund Academic Staff Training (AST) 2019
- VII. Honours, Distinctions and Membership of Learned Societies:
(a). Dean's roll of honour 2001 – 2004
(b). Outstanding academic performance by the Student Chemical Society of Nigeria (U.I Chapter) 2003
(c). Postdoctoral Fellowship (Research Stays for University Academics and Scientists) at Friedrich Schiller University Germany under DAAD Scholarship 2024
(d). Member, Chemical Society of Nigeria (U.I Chapter)

VIII. Details of Teaching/Work Experience:

(a). Work Experience

Assistant Lecturer, University of Ibadan, Ibadan	2017 – 2020
Lecturer II, University of Ibadan, Ibadan	2020 – 2023
Lecturer I, University of Ibadan, Ibadan	2023 – Date

(b). Teaching Experience

(i) Undergraduate

CHE 225 – Basic Inorganic Chemistry for Non-Majors	2017/18 2021/22 – 2022/23	(Two {2} lecturers) (Two {2} lecturers)
CHE 226 – Inorganic Chemistry II	2016/17; 2022/23 2023/24	(Three {3} lecturers) (Three {3} lecturers)
CHE 299 – Industrial Attachment I	2016/17 – 2023/24	(All lecturers)
CHE 326 – Inorganic Chemistry III	2016/17 – 2022/23	(Three {3} lecturers)
CHE 325 – Inorganic Chemistry for Non-Majors/Inorganic Chemistry for Life and Earth Sciences	2017/18	(Two {2} lecturers)
CHE 328 – Bioinorganic Chemistry	2021/22	(Two {2} lecturers)
CHE 399 – Industrial Attachment II	2016/17 – 2023/24	(All lecturers)
CHE 425 – Nuclear and Radiochemistry, and Material Chemistry	2020/21; 2022/23	(Two {2} lecturers)
CHE 426 – Inorganic Chemistry IV	2020/21 – 2021/22 2022/23 – 2023/24	(Two {2} lecturers) (Three {3} lecturers)
CHE 428 – Special Topics in Inorganic Chemistry	2020/21; 2022/23	(Two {2} lecturers)
CHE 495 – Research Project	2016/17 – 2023/24	(One {1} lecturer)

(ii) Postgraduate

CHE 732 – Recent Advances in Coordination Chemistry	2023/24	(Three {3} lecturers)
CHE 738 – Advances in Inorganic Chemistry	2023/24	(Three {3} lecturers)
CHE 795 – Seminar and Practical Demonstration	2023/24	(All lecturers)
CHE 796 – Research Project	2023/24	(One {1} lecturer)
CHE 835 – Material Science and Nanochemistry	2023/24	(Three {3} lecturers)
CHE 836 – Recent Advances in Coordination Chemistry/Organometallics	2023/24	(Three {3} lecturers)

(iii) Research Supervision

<u>Completed</u>	<u>Ongoing</u>
BSc – 6	BSc – 2
	MSc – 2

(c). Administrative Responsibilities

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|-------|---|-------------|
| (i) | Member, Departmental Maintenance, Safety and Security Committee | 2017 – 2021 |
| (ii) | Level Adviser/Registration officer 100L Chemistry & Industrial Chemistry Students | 2018 – Date |
| (iii) | Member, Departmental Welfare Committee | 2021 – 2023 |
| (iv) | Faculty Representative to Institute of Education | 2023 – Date |
| (v) | Member, Departmental Postgraduate Registration/Examination Committee (M.Sc Matters) | 2023 – Date |
| (vi) | Member, Departmental Teaching Assistants/Demonstrators Allocating/Supervision Committee | 2023 – Date |
| (vii) | Member, Departmental Maintenance, Safety and Security Committee | 2023 – Date |

(d). Community Service

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|-------|---|-------------|
| (i) | President, O/L Cause of our Joy Curia, Seat of Wisdom Catholic Church U.I | 2017 – 2019 |
| (ii) | Member, Parish Laity Council, Seat of Wisdom Catholic Church U.I | 2017 – 2019 |
| (iii) | Secretary, Parish Pastoral Council, Seat of Wisdom Catholic Church U.I | 2023 – Date |
| (iv) | Secretary, Harvest Planning Committee, Seat of Wisdom Catholic Church U.I | 2023 |
| (v) | Member, 2023 project planning committee, O/L Cause of our Joy Curia, Seat of Wisdom Catholic Church U.I | 2023 |
| (vi) | Member, Finance sub-committee, Harvest Planning Committee, Seat of Wisdom Catholic Church U.I | 2024 |
| (vii) | Member, Parish Vocations committee, Seat of Wisdom Catholic Church U.I | 2024 - Date |

IX. Research:

(a). Completed:

- (i). Preparation of monoanionic and dianionic N-Sulfonyl amine chelators, their Pd(II) mixed ligand complexes (water, acetonitrile, pyridine as co-ligand). The prepared compounds showed Suzuki and Heck type C–C coupling activities.
- (ii). Design, synthesis and fluorescent properties of bis-imidazole based dyes. Molecular variation results in sensing of Cr(III) and Hg(II) ions.
- (iii). ES IPT-inspired fluorescent detection of Al(III) ion by O- and S-bridged bis-(phenol-imine) materials.
- (iv). Synthesis and antimicrobial activities of mixed ligand (trimethoprim and 2,2-bipyridine) metal(II) complexes; Structure, spectroscopic and antimicrobial properties of Cu(II) complexes of benzoyltrifluoroacetone, 1,10-phenanthroline and 2,2-bipyridine.

(b). In Progress:

Preparation of organic/inorganic materials and their applications as sensors, in catalysis and magnetism. The search for new materials, in supramolecular chemistry, to give mechanistic insight into the operation of ions as well as aid the monitoring and detection of ions (beneficial or detrimental to man and his environment) continues to grow. More so, study of magnetic behaviour of materials enables a better understanding of information storage and device fabrication. Several materials have been prepared and characterised in this regard, and applications are currently being explored.

(c). Projects, Dissertation and Thesis:

Akong, R. A. (2014) Synthesis and characterisation of metal(II) [M= Co, Ni, Cu] complexes of 1,10-diaminodecane. MSc Project, University of Ibadan, Ibadan, 77 pp.

Akong, R. A. (2023) Synthesis, Characterisation and Fluorescence Properties of Substituted Imidazoles and Bridged Bis-phenol Ligands and Magnetic Behaviour of Their Metal Complexes. Ph.D Project, University of Ibadan, Ibadan, 451 pp.

X. Publications:

1. Omoregie, H. O., Eseola, A. O. and **Akong, R. A.** (2022). Mixed ligand complexes of copper(II) with benzoyltrifluoroacetone, 1,10-phenanthroline and 2,2'-bipyridine: structure, spectroscopic and antimicrobial properties. *Journal of Molecular Structure*, Vol. 1250, No. 131826: 1 – 6

2. **Akong, R. A.**, Görls, H., Woods, J. A. O., Plass, W., Eseola, A. O. (2021). ESIPT-inspired fluorescent turn-on sensitivity towards aluminium(III) detection by derivatives of O- and S-bridged bis-(phenol-imine) molecules. *Results in Chemistry*, Vol. 3, No. 100236: 1 – 11

3. Eugene-Osoikhia, T. T., Ojeyemi, S. A., **Akong, R. A.**, Oyetunde, T., Onche, E. U., and Ayeni, F. (2021). Synthesis, Characterisation and Antimicrobial Studies of Metal(II) Complexes of Trimethoprim and 2,2' Bipyridine Heterocycle. *Nigerian Research Journal of Chemical Sciences*, Vol. 9. No. 1: 273 – 295

4. Aouina, A., Oloyede, H. O., **Akong, R. A.**, Abdelhak, J., Görls, H., Plass, W., and Eseola, A. O. (2021). Molecular variation and fluorescent turn-on detection of chromium(III) by three ESIPT-reactive 2,2'-(1,4-phenylenebis(5-phenyl-1H-imidazole-4,2-diyl))diphenols. *Journal of Photochemistry and Photobiology A: Chemistry*, Vol. 406. No. 113006: 1 – 8

5. Aouina, A., Oloyede, H. O., **Akong, R. A.**, Abdelhak, J., Görls, H., Plass, W. and Eseola, A. O. (2020). “Exploring Broad Molecular Derivatization as Tool in Selective Fluorescent Detection of Mercury(II) by a Series of Large Stokes Shift 1,4-Bis(5-phenyl-1H-imidazol-4-yl)benzenes” *Industrial & Engineering Chemistry Research*, Vol. 59. No. 52: 22398 – 22412

6. Oloyede, H. O., **Akong, R. A.**, Woods, J. A. O., Görls, H., Plass, W. and Eseola, A. O. (2021). New Bidentate N-Sulfonyl-Substituted Aromatic Amines as Chelate Ligand Backbones: Pd Catalyst Generation in C–C Coupling via In Situ and Precatalyst Modes. *Australian Journal Chemistry*, Vol. 74: 101 – 110

XI. Major Conferences/Workshops Attended with Papers Read (in the last 5 years):

(i) University of Ibadan-Wide Learning Management System Training in Collaboration with the Partnership for Enhanced and Blended Learning-West Africa 27th March – 9th June, 2023 (Represented Department of Chemistry)

(ii) 6th International Asian Congress On Contemporary Sciences, 27 – 29 May, 2022, Van, Turkey. Paper Read: **R. A. Akong**, J. A. O. Woods “Exploring Al(III) Sensing Potential of Some ESIPT Based Bis(S- and O-Bridged) Imine Fluorophores

(iii) The Conversation Africa/University of Ibadan Science Communication workshop, 14 October, 2021.

(iv) International Conference on Medical, Biological and Pharmaceutical Sciences (ICMBPS-21), 7 – 8 July, 2021, Accra, Ghana.

Paper Read: Eugene-Osoikhia, T. T., Ojeyemi, S. A., **Akong, R. A.**, Oyetunde, T., Onche, E. U., Ayeni, F. “Synthesis, Characterisation and Antimicrobial Studies of Metal(II) Complexes of Trimethoprim and 2,2'Bipyridine Heterocycle”

- (v) Istanbul International Modern Scientific Research Congress, 4 – 5 June, 2021, Istanbul, Turkey.
Paper Read: Eugene-Osoikhia, T. T., Olawoyin, A. S., Oyetunde, T., **Akong, R.**, Onoche, E. U., Oladosu, I. A. “Synthesis and Characterisation of Antibiotics Derivatives of Tricarbonyl(1-5-*H*-2-Methoxycyclohexadienyl)iron: A convenient route to antibiotics modification”
- (vi) 1st Commonwealth Chemistry Congress: Partnership for the Goals, 18 – 20 May, 2021.