

CURRICULUM VITAE

ORCID ID: <https://orcid.org/0000-0003-0044-3330>

Web: <https://scholar.google.com/citations?user=zxyfHPkAAAAJ&hl=en&oi=ao>

PERSONAL DATA

Full Names: **AKINNAWO**, Christianah Aarinola

Areas of Specialization: Medicinal/Pharmaceutical Inorganic Chemistry

Date and Place of Birth: 4th June 1982, Ondo

Nationality: Nigerian

State of Origin, Senatorial District and Local Government Area: Ondo, Ondo Central, Ondo East Local Government Area

Permanent Home Address: 42, Celestial Street, off Ajagbale Road, Oka Area, Ondo, Ondo State.

Contact Address: C/o Dr. Bolawa Akinola, School of Languages, Yoruba Department, PMB 520, Adeyemi College of Education, Ondo, Ondo State.
Mobile Phone: +234 7066473878, +234 8038619706
Email: cakinnawo@unimed.edu.ng

Marital Status: Married

Next of Kin: **AKINNAWO**, Jeremiah Akintewe

Contact Address of Next of Kin: C/o Dr. Bolawa Akinola, School of Languages, Yoruba Department, PMB 520, Adeyemi College of Education, Ondo, Ondo State.
Mobile Phone: +234 8038619706, +234 7048647619
Email: jeremiahakintewe@gmail.com

INSTITUTION ATTENDED WITH DATES

2017-2020	University of Johannesburg, Gauteng, South Africa.
2012-2014	Federal University of Technology, Akure, Ondo State, Nigeria.
2009-2011	Federal University of Technology, Akure, Ondo State, Nigeria.
2002-2006	Obafemi Awolowo University, Adeyemi College of Education, Ondo, Nigeria.

ACADEMIC QUALIFICATIONS AND DISTINCTIONS OBTAINED WITH DATES

2021	Ph.D. Chemistry
2015	M.TECH Industrial Chemistry (85%)
2012	PGD Industrial Chemistry (94%)
2006	B. Sc. (Ed) Chemistry (74%)

WORK EXPERIENCE WITH DATES

- 2022 to date Lecturer II
Chemistry Department, Faculty of Science,
University of Medical Sciences Ondo, Ondo State, Nigeria.
Roles: Lecturing courses: Undergraduate and postgraduate
Assistant Examination Officer
Member Curriculum Development Committee
100L students' advisor
- 2017-2020 Teaching Assistant
Department of Chemical Sciences, Faculty of Science,
University of Johannesburg, South Africa.
Roles: Taught Chemistry modules with lecturers.
Demonstrated Chemistry practicals.
Rendered consultation services to students on Chemistry
modules.
Marked practical reports.
Invigilated tests and examinations.
- 2007-2014 Subject teacher and Vice-principal
Calvary Comprehensive College, Oka, Ondo, Ondo State, Nigeria.
Roles: Developed lesson scheme from the national curriculum.
Taught Chemistry modules and practical Chemistry (Grade
10-12).
Set and conducted tests and examination questions.
Monitored teaching-learning and examination processes of the
school.
Assessed STEM teachers' lesson plans and notes.
Offered administrative duties.
Participated in students' enrollment exercises.
Participated in recruiting qualified STEM teachers.
Offered monthly in-service training for STEM teachers.
- 2010-2016 Directress, Academic Tutor, and Mentor
Royal Achievers Educational Consult, Oka, Ondo, Ondo State, Nigeria.
Roles: Organized tutorial classes for Grade 10-12.
Offered voluntary tutorial classes to underprivileged students.
Offered voluntary counselling on career choice and academic
performance.

PROFESSIONAL MEMBERSHIP

- 2022 to date Member, Teachers Registration Council of Nigeria.
2019-2021 Member, Royal Society of Chemistry.
2018-2021 Member, South African Chemical Institute.

RESEARCH INTERESTS AND ACTIVITIES

- Synthesis, standard characterization, and application of inorganic materials.
- Catalytic organic transformations for the synthesis of active pharmaceutical ingredients (API) (drug discovery and development).
- Treatment of infectious diseases using metal nanoparticles: metal oxide nanoparticles for anti-tubercular drug delivery in macrophages.
- Catalytic organic transformations for the synthesis of industrial intermediates and consumer products.

CONFERENCES

- 2018 Department of Applied Chemistry Post-Graduate Research Symposium, University of Johannesburg, Doornfontein, South Africa. September 10-12, 2018.
Poster presentation: High-surface area mesoporous ceria/zirconia: Synthesis, characterization, and utilization as catalyst in redox reactions.
- 2017 Conference of the Catalysis Society of South Africa (CATSA), 28th Annual conference November 19-22, 2017
Poster presentation: Physicochemical properties of mesoporous mixed $Ce_xZr_{1-x}O_2$ prepared via inverse micelles approach.
- 2012 Science and Technology in an Evolving Economy, 1st Annual Conference SOS-The Federal University of Technology, Akure.
Oral presentation: Quality assessment of soap produced from palm-bunch alkali and coconut oil.

COURSES ATTENDED

- 2020 Safety, Operation, and Maintenance of ALD. Training Course, by Picosun Oy, Finland at the University of Johannesburg, South Africa. November 31-December 4, 2020.
- 2020 "Reaxys in Practice" webinar, South Africa. August 11, 2020.
- 2019 Short Term Music School, by Deeper Christian Life Ministry, Gauteng Province, South Africa. March 21-23, 2019.
- 2018 Fundamentals of XPS Training Course, ARPES laboratory, University of Johannesburg, South Africa. February 2018.
- 2017 Fundamentals and Operation of ICP-MS Training Course, by Shimadzu South Africa (Pty) Ltd at the University of Johannesburg, South Africa. April 2017.
- 2017 Fundamentals and Operation of TEM and SEM Training Course, Spectrum, University of Johannesburg, South Africa. August 2017- June 2018.

PROFESSIONAL ACCOMPLISHMENT

- 2022 10-months University Researcher Scholarship by National Scholarship Programme of the Slovak Republic (Declined).
- 2021 Lifetime membership Golden Key International Honour Society, South Africa.
- 2019-2021 Member, Royal Society of Chemistry.
- 2018-2021 Member, South African Chemical Institute.

HONOURS AND AWARDS

- 2021 One of the top 15% in my field of study (Chemistry), awarded by Golden Key International Honour Society, South Africa.
- 2006 The Most Industrious Student, awarded by Chemistry Department, Adeyemi College of Education, Ondo State, Nigeria.

RESEARCH GRANTS AND GRANTSMANSHIP EXPERIENCE

2017-2020	NRF-TWAS African Renaissance Doctoral Scholarship, South Africa.
2017-2019	University of Johannesburg Doctoral Merit Award, South Africa.
2017-2019	Faculty of Science Doctoral Merit Award, University of Johannesburg, South Africa.
2013	High Chief (Sir) Dr. O.A. Akingbule Foundation Scholarship, Nigeria.

PUBLICATIONS WITH DATE

1. Theses

- **C.A. Akinnawo, (2020).** Tailoring mesoporous metal oxides for sustainable heterogeneous catalysis, (Doctoral Thesis). Johannesburg: University of Johannesburg.
- **C.A. Akinnawo, (2014).** Extraction of alkali from selected agricultural wastes and its application in soap making and textile dyeing processes, (MTECH Thesis). The Federal University of Technology Akure Institutional Repository. <http://196.220.128.81:8080/xmlui/handle/123456789/3146>
- **C.A. Akinnawo, (2012).** Quality assessment of soap produced from palm-bunch alkali and coconut oil, (PGD Thesis). The Federal University of Technology Akure.
- **C.A. Akinnawo, (2006).** The impact of teachers' welfare on their classroom performance: A case study of some selected secondary schools in Ondo West Local Government Area. Obafemi Awolowo University, Ile-Ife.

2. Books**A) Chapter Contribution**

C.A. Akinnawo, J.A. Akinnawo and R. Meijboom; Chapter 3, Teaching Chemistry in Yoruba Language: A step towards techno-scientific advancement in Nigeria *in: Glocalization of perspectives in Nigerian Languages, culture, science, and technology. (2018)*, Pp. 26-41, ISBN: 978-978-965-973-9.

3. Peer-reviewed publications

- D.P. Fapojuwo, **C.A. Akinnawo**, C.O. Oseghale, R. Meijboom; Tailoring the surface wettability of mesoporous silica for selective hydrogenation of cinnamaldehyde to hydrocinnamaldehyde in a Pickering emulsion system. *Colloids and Surfaces A: Physicochemical and Engineering Aspects, (2022)*. doi.org/10.1016/j.colsurfa.2022.130231
- **C.A. Akinnawo**, N. Bingwa and R. Meijboom; Meerwein-Ponndorf-Verley reduction of α,β -unsaturated aldehydes over metal-doped mesoporous zirconia catalysts: Correlation of surface properties and performance. *New Journal of Chemistry, RSC, (2021)*. doi.org/10.1039/D1NJ00936B
- **C.A. Akinnawo**, D. J. Maheso, N. Bingwa and R. Meijboom; Highly tunable selectivity to benzaldehyde over Pd/ZrO₂ nanoparticles in catalytic Oppenauer oxidation of benzyl alcohol using acetone as H-acceptor. *Appl. Catal. A.: General, (2021)*. doi.org/10.1016/j.apcata.2021.118022
- **C.A. Akinnawo**, L. Mosia, O.A. Alimi, C.O. Oseghale, D.P. Fapojuwo, N. Bingwa and R. Meijboom; Eco-friendly synthesis of valuable fuel bio-additives from glycerol. *Catal. Commun., (2021)*. doi.org/10.1016/j.catcom.2021.106287
- **C.A. Akinnawo**, N. Bingwa and R. Meijboom; Surface properties vs activity of meso-ZrO₂ in chemoselective Meerwein-Ponndorf-Verley reduction of citral: Effect of calcination temperature. *Microporous and Mesoporous Mater., (2021)*. doi.org/10.1016/j.micromeso.2020.110693

- **C.A. Akinnawo**, N. Bingwa and R. Meijboom; Tailoring the surface properties of meso-CeO₂ for selective oxidation of benzyl alcohol. *Catal. Commun.*, (2020). doi.org/10.1016/j.catcom.2020.106115
- D.P. Fapojuwo, C.O. Oseghale, **C.A. Akinnawo**, R. Meijboom; Heterogeneous Pd based catalysts for hydrogenation in a Pickering emulsion. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, (2021). doi.org/10.1016/j.colsurfa.2021.126513
- C.O. Oseghale, D.P. Fapojuwo, O.A. Alimi, **C.A. Akinnawo**, B.M. Mogudi, O.R. Onisuru, R. Meijboom; Bifunctional Au/Co₃O₄-Cs (Basic and Redox)- Catalyzed oxidative synthesis of aromatic azo compounds from anilines. *European Journal of Organic Chemistry*, (2021). doi.org/10.1002/ejoc.202100976
- C.O. Oseghale, B.M. Mogudi, O.R. Onisuru, **C.A. Akinnawo**, D.P. Fapojuwo, R. Meijboom; Stable and surface-active Co nanoparticles formed from cation (x) promoted Au/x-Co₃O₄ (x = Cs) as a selective catalyst for [2+2+1] oxygen-tethered cyclization reactions. *ChemCatChem.*, (2021). doi.org/10.1002/cctc.202001841
- O.A. Alimi, **C.A. Akinnawo**, R. Meijboom; "3D-printing mediated alumina monolith: A reusable support for modern palladium catalyzed cross-coupling reactions. *New J. Chem., RSC*, (2020). doi.org/10.1039/DONJ03651J.
- C.O. Oseghale, B.M. Mogudi, **C.A. Akinnawo** and R. Meijboom; *In-Situ* generation of surface-active HCo(CO)_y like intermediate from gold supported on ion-promoted Co₃O₄ for induced hydroformylation-hydrogenation of alkenes to alcohols. *Appl. Catal. A.: General*, (2020). doi.org/10.1016/j.apcata.2020.117735.
- O.A. Alimi, **C.A. Akinnawo**, O.R. Onisuru, R. Meijboom; 3-D printed microreactor for continuous flow oxidation of a flavonoid. *J. Flow Chem.*, (2020). doi.org/10.1007/s41981-020-00089-3.
- A.O. Adedara, H.O. Ogunsuyi, **C.A. Akinnawo**; Evaluation of Tigernut waste for production of bioproducts. *IJRSI.*, (2020), vol VII (II) Pp 253-260.
- H.O. Ogunsuyi & **C.A. Akinnawo**; Quality assessment of soap produced from palm-bunch alkali and coconut oil. *J. Appl. Sci. Environ. Manage.*, (2012), vol. 16 (4), Pp 363-366.

SERVICE TO THE NATIONAL BODIES

- | | |
|------|---|
| 2008 | National Youth Service Corps, Nigeria. |
| 2008 | National Drug Law Enforcement Agency NDLEA, Nigeria |

EXTRA-CURRICULAR ACTIVITIES

- Motivational speaker (teenagers)
- Writing
- Reading
- Travelling

SKILLS AND CAPABILITIES

- **Teaching Skills**
Effective and efficient in classroom teaching and management. Excellent presentation and clarification of subject matters. Well-grounded in simplifying methodologies, achieving desirable teaching objectives, setting and evaluating course assessments, improvising teaching aids, and utilizing teaching technologies to provide sustainable teaching outcomes.
- **Research Skills**

Excellent research management skills. Ability to interact confidently within an interdisciplinary research area and collaborate effectively, ability to achieve research goals with little or no supervision within the stipulated time, self-motivated, eye for details, hardworking, enthusiastic about innovations, desirable skills in data analysis and interpretation, good skills in research writing for publication and communication in a public presentation.

- **IT Skills**

Dexterity in Microsoft Word Office, Microsoft Excel, Powerpoint packages, computational data software, and Internet Browsing.

- **Analytical Instrumental Skills**

Dexterity in using ALD, ICP-MS, N₂ sorption system (BET), pXRD, TEM, SEM, FTIR, GC-FID, GC-MS, UV-Vis, NMR, and Temperature programmed analyzer (Micromeritics Autochem II).

- **Interpersonal Skills**

Ability to develop positive relationships with a diverse range of people, readiness to learn from others, efficient team player with a strong ability to bring out the best in students, understanding, harnessing their strengths, and complementing their weaknesses.

- **Critical Thinking and Analytical Skills**

My training as a chemist and an industrialist, work experience, and 13 years of experience in a standard chemistry laboratory, both local and international, have equipped me for critical and analytical thinking.

- **Other Skills**

Problem-solving ability, efficient time management, ability to learn fast with extraordinary performance within a limited time, multi-task and results-oriented, and ability to recognize and respect cultural diversity among students and the workplace.

REFEREES

Prof. Reinout Meijboom

Professor,
Department of Chemical Sciences,
University of Johannesburg,
P.O. Box 524, Auckland Park, South
Africa.
+27 11559 2367
rmeijboom@uj.ac.za

Prof. Helen Olayinka Ogunsuyi

Professor,
Department of Chemistry,
Federal University of Science and Technology,
PMB 704, Akure, Nigeria.
+234 7031388288
helenogunsuyi@gmail.com

Dr. Ndzondelelo Bingwa

Senior Lecturer,
Department of Chemical Sciences,
University of Johannesburg,
P.O. Box 524, Auckland Park, South
Africa.
Tel +27 814053666
nbingwa@uj.ac.za

Dr. Sunday J. Olusegun

Senior Researcher,
Department of Metallurgical and Materials
Engineering,
National Institute of Science and Technology
on Minerals Resources, Water and Biodiversity:
INCT-Acqua, Brazil.
+5531975672191
arewasegun@gmail.com arewasegun@ufmg.br
