



## Osanyin Taiwo Olusayo

**Date of birth:** 20/02/1989 | **Nationality:** Nigerian (Nigeria) | **Gender:** Female |

**Phone number:** (+55) 12997287739 (Mobile) | **Email address:**

[osanyintaiwo@gmail.com](mailto:osanyintaiwo@gmail.com) | **Email address:** [osanyin.olusayo@inpe.br](mailto:osanyin.olusayo@inpe.br) | **LinkedIn:**

<https://www.linkedin.com/in/taiwo-osanyin-01056921> |

**Address:** Av. dos Astronautas, 1758 - Jd. Granja, 12.227-010, São José dos Campos, Brazil (Work)

### ● ABOUT ME

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**Executive Summary:** Organized and dependable at managing multiple tasks with a positive attitude. Willingness to take on added responsibilities, either working as an individual or as a member of a team to achieve organizational goals on target.

### ● WORK EXPERIENCE

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06/2018 – 04/2019 Kuje, Abuja, Nigeria

#### **STEM FACILITATOR/PHYSICS TEACHER AFLON DIGITAL ACADEMY**

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- Prepared STEM curriculum for STEM activities at all levels for both junior and senior secondary school.
- Prepared proposal for the school STEM laboratory equipment and executed the project with the school Director.
- Planned and carried out STEM activities with students every week and also conducted STEM week once in a term.
- Enrolled, taught and prepared students for science-based competitions.
- Assisted the Physics teacher to conduct laboratory activities with the senior students.
- Trained boarding students every weekend on various entrepreneurship skills.
- Embarked on various science excursion to science-based organization with students once in every term.

08/2017 – 06/2018 Oluyole Estate, Ibadan, Nigeria

#### **PHYSICS/FURTHER MATHEMATICS TEACHER MARELLA INTERNATIONAL COLLEGE**

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- Prepared lesson notes on weekly basis
- Taught Physics, Mathematics and Further Mathematics
- Instructed and carried out Physics experiments with students in the Laboratory once in a week.
- Coordinated science club for STEM activities.

04/2012 – 04/2013 Afikpo, Ebonyi State, Nigeria

#### **TREASURER/PROJECT MANAGER CHARITY COMMUNITY DEVELOPMENT SERVICE CDS GROUP, NYSC**

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- Managed the organization account with trust and transparency .
- Prepared financial report every month on the account cash flow and balance sheet .
- Planned and utilized resources effectively to deliver organization objectives.
- Organized, planned, and executed three community projects with the club members to outreaches such as prison and orphanage, and remote schools.

05/2012 – 05/2013 Afikpo, Ebonyi State, Nigeria

**PHYSICS/FURTHER MATHEMATICS TEACHER** BISHOP MCGETTRICK'S GIRL'S SECONDARY SCHOOL

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- Taught Physics and Further Mathematics
- Physics laboratory Instructor

12/2008 – 12/2009 Ile-ife, Osun State, Nigeria

**VICE PRESIDENT** PHYSICS AND ENGINEERING PHYSICS STUDENT'S ASSOCIATION, OAU

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- Planned and organized Fresher's week with other members of the executive.
- Organized tutorials for new students
- Guided and mentored 50+ students on career growth and personal development.
- Responsible for students welfare.

● **EDUCATION AND TRAINING**

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26/06/2019 – CURRENT São José dos Campos , Brazil

**PH.D. SPACE GEOPHYSICS** National Institute For Space Research

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- Physics of the Ionosphere
- Solar Terrestrial Physics
- Instrumentation in Space Geophysics
- Special topics in Ionosphere
- Space Geophysics

**Address** Av. dos Astronautas, 1758 - Jd. Granja - SP , 12.227-010, São José dos Campos , Brazil |

**Website** [www.inpe.br](http://www.inpe.br) | **Field of study** Space Geophysics | **Final grade** A- |

**Thesis** Modeling of Total Electron Content (TEC) and Scintillation over the South American Longitudinal Sector.

06/2014 – 07/2017 Ile-Ife, Nigeria

**M.SC. NUCLEAR SCIENCE AND ENGINEERING** Obafemi Awolow University

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- Reactor Modeling and Simulation
- Nuclear Reactor Dynamics and Control
- Nuclear Thermal Hydraulics

**Address** Ile-Ife, Osun State, Ile-Ife, Nigeria | **Website** <https://oauife.edu.ng> |

**Field of study** Nuclear Science and Engineering | **Final grade** B+ |

**Thesis** Numerical Estimation of Reactivity Change in a Cylindrical Nuclear Reactor Core using Multigroup diffusion Theory

18/09/2007 – 27/03/2012 Ile-Ife, Nigeria

**B.SC. ENGINEERING PHYSICS** Obafemi Awolowo University

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**Website** <https://oauife.edu.ng> | **Field of study** Physics and Engineering Physics | **Final grade** B |

**Thesis** Experimenting the Use of Natural Fluorite for Environmental Monitoring within the Premises of the Centre for Research and Development (CERD)

● **LANGUAGE SKILLS**

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Mother tongue(s): **YORUBA**

Other language(s): **ENGLISH** | **PORTUGUESE**

## ● **DIGITAL SKILLS**

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MicrosoftOffice Suite 365 | Latex: advanced user

Programming Languages: Fortran, Python, Visual Basic, R/R studio, Matlab

Programming languages: Fortran, Visual basic, bash, Python

## ● **ADDITIONAL INFORMATION**

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### **PUBLICATIONS**

[Amosun, A.A., Salau, A.O., Fadodun, O.G., Jayeola, M.A., Osanyin, T.O., Fasasi, M.K., Ibitoye, F.I., \(2018\). Numerical Calculation of Fuel Burn-up Rate in a Cylindrical Nuclear Reactor, Journal of Radioanalytical and Nuclear Chemistry.](#)

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[F.S. Chingarandi, C.M.N. Candido, F. Becker-Guedes, O.F. Jonah, S.P. Moraes-Santos, V.I. Klausner, and O.O.Taiwo., \(2023\). Assessing the effects of a Minor CIR-HSS Geomagnetic Storm on the Brazilian Low-Latitude Ionosphere: Ground-based Observations, Space Weather, 21, 22023SW003500](#)

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Link <https://orcid.org/0000-0001-9687-3831>

[T.O. Osanyin, C.M.N. Candido, F. Becker-Guedes et al., Performance of a locally adapted NeQuick-2 model during high solar activity over the Brazilian equatorial and low-latitude region, Advances in Space Research.](#)

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Link <https://orcid.org/my-orcid?orcid=0000-0002-9950-9282>

[T.O. Osanyin, C.M.N. Candido, F. Becker-Guedes, Y. Migoya-Orue, John Bosco Habarulema., \(2023\). Validation of data ingestion in NeQuick 2 model over South America by Means of TEC, Ionosonde, and Radio Occultation Data. Journal of Geophysical Research: Space Physics, Manuscript under review, 2023SW003662](#)

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S. Pires-de-Moraes-Santos, C.M.N. Candido, F. Becker-Guedes, B. Nava, V. Klausner, C. Borries, F.S. Chingarandi, T.O. Osanyin., (2023SW003495), Space Weather, Manuscript under review.

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Link <https://orcid.org/my-orcid?orcid=0000-0002-9950-9282>

T.O. Osanyin, C.M.N. Candido, F. Becker-Guedes et al., (2023). Quiet-Time Climatology of Total Electron Content (TEC) over South America during Solar Cycle 24: Observation and Models, Manuscript in preparation

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T.O. Osanyin, C.M.N. Candido, F. Becker-Guedes et al., (2023). Quiet-Time Climatology of Total Electron Content (TEC) over South America: Observation and Models, Manuscript in Preparation.

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### **CONFERENCE AND WORKSHOP PRESENTATIONS**

17/04/2023 – 21/04/2023

T.O. Osanyin, C.M.N. Candido, F. Becker-Guedes, Y. Migoya-Orue, John Bosco Habarulema, F.S. Chingarandi (2023). Validation of Data Ingestion in NeQuick 2 Model over South America by Means of Ionosonde and COSMIC data

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Space Weather Workshop (SWW), Boulder, Colorado

01/08/2022 – 05/08/2022

T.O, Osanyin; C.M.N, Candido; F. Becker-Guedes; Yenca Migoya-Orue (2022). Performance of a locally adapted NeQuick-2 model during high solar activity over the Brazilian equatorial and low-latitude region using GNSS-derived data.

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Beacon Satellite Symposium, Boston College, USA.

27/11/2022 – 03/12/2022

Osanyin T.O., Claudia M.N., Fabio B.G., Yenca M.O, Chingarandi S.F (2022). Study of Ionospheric Response to Geomagnetic Disturbances using VTEC Regional Maps and the NeQuick 2 Model.

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XIII COLAGE (Conferencia Latino-Americana de Geofísica Espacial), National Institute for Space Research, Brazil.

18/09/2022 – 22/09/2022

**Osanyin T.O., Claudia M.N., Fabio B.G., Yenca M.O (2022). Validation of NeQuick 2 model over South America.**

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International Colloquium on Equatorial and Low Latitude Ionosphere, Abuja, Nigeria.

25/04/2022 – 27/04/2022

**Osanyin, T.O., Claudia, M.N., Fabio, B.G., Yenca, Migoya-Orue., F.S. Chingarandi (2022). Performance of a locally adapted NeQuick 2 model during 2014 solar maximum over the Brazilian equatorial region**

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Space Weather Workshop (2022), Boulder, USA.

12/12/2021 – 16/12/2021

**Osanyin T.O. Claudia M.N., Fabio B.G., Yenca M.O (2021). Latitudinal Variation of the Vertical Total Electron content (VTEC) over the Brazilian longitudinal Sector during distinct phases of the solar cycle 24.**

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American Geophysical Union, New Orleans, USA.

17/10/2021 – 18/10/2021

**Osanyin T.O., Claudia M.N., Fabio B.G., Yenca M.O (2021). Modeling of the Vertical Total Electron Content (VTEC) over the Brazilian Equatorial Region.**

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Joint ICTP-IUCG Workshop on Data Assimilation and Inverse Problems in Geophysical Sciences, ICTP, Italy.

## **HONOURS AND AWARDS**

04/05/2022

**SCOSTEP Visiting Scholar Award 2022**

## **PROFESSIONAL CERTIFICATES COURSES**

04/07/2021 – 09/07/2021

**Hybrid PhD Summer School, Bulgaria**

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25/07/2021 – 29/07/2021

**Iberian Space Science Summer School (1st Edition)**

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17/10/2021 – 28/10/2021

**Joint ICTP-IUGG Workshop on Data Assimilation and Inverse Problems in Geophysical Sciences**

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05/09/2021 – CURRENT

**The CODATA RDA Research Data Science Summer School, ICTP**

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## **NETWORKS AND MEMBERSHIPS**

26/06/2021 – CURRENT

**Space4Women Mentorship Program**

**Space Tourism Society Africa**

**Nigeria Institute of Physics**

**African Network of Women in Astronomy (AfNWA)**

08/2020 – CURRENT

**Africa Geophysical Society (AGS)**

05/2020 – CURRENT

**American Geophysical Union**

02/2021 – CURRENT

**Supernova Foundation**

## **HOBBIES AND INTERESTS**

Space Weather, Education, STEM, Machine Learning, Catering Services, Events Planning, Tourism, Outreaches, Volley ball, Table tennis.

## **CONFERENCES AND SEMINARS**

11/09/2022 – 15/09/2022 – Uji Campus, Kyoto University, Kyoto, Japan  
**16 th International Symposium on Equatorial Aeronomy**

07/2021 – ,Centre for Atmospheric Research, Abuja, Nigeria  
**International Colloquium on Equatorial and Low-latitude Ionosphere**

06/2021  
**1st summer school on space research, technology, and applications (Virtual)**

06/2021  
**RHESSI-20 workshop: Preparing for the next Decade in High Energy Solar Physics research (Virtual)**

19/06/2021 – 24/06/2021 – Virtual  
**CEDAR Workshop**

04/2021 – ICTP, Italy  
**Mothers in STEM: Motherhood and career retention conference (Virtual)**

04/2021  
**6th East African Astronomical Society (EAAS) Workshop program (Virtual)**

04/2021  
**Online Radio Heliophysics Catch-up Meeting, SCOSTEP (Virtual)**

03/2021 – Sao Paolo, Brazil  
**American Chemistry Society (ACS), Publishing talks (Virtual)**

03/2021  
**Space Weather Workshop (Virtual)**

18/01/2021 – 20/01/2021 – Japan (Virtual)  
**GNSS Data Processing for High-Accuracy Positioning using Low-cost Receiver Systems,**

04/10/2020 – 05/10/2020 – ICTP, Italy,  
**African Workshop on GNSS and Space Weather**

11/2018 – Aflon Digital Academy, Kuje, Abuja, Nigeria  
**Teacher's training on 21st century teacher's skills**

04/2017 – Abuja, Nigeria  
**Telecommunication Power Training, Huawei University**

06/2012 – Nasarawa State, Nigeria  
**Entrepreneurship and Workshop Programme by Association of Entrepreneurs and Technologists of Nigeria (Certified)**

06/2012 – Nasarawa State, Nigeria  
**Graduate skills Development Seminar by Skills Edge Consulting Limited**

2010 – Ile-Ife, Nigeria  
**34th Annual National Conference, Nigeria Institute of Physics (CERD)**

16/11/2021 – 18/11/2021 – Virtual  
**Career Development Workshop for Women in Physics**

03/10/2020 – 04/10/2020 – Virtual  
**Eastern Africa GNSS and Space Weather Capacity Building Workshop organized by ICTP**

## **ORGANISATIONAL SKILLS**

### **Personnal Strength**

- Quick learning, Innovative, and versatility

- Critical thinking and problem-solving
- Management and team work
- Entrepreneurship and leadership
- Good communication (oral and written)
- Capacity building

## **RECOMMENDATIONS**

**Dr. John Bosco Habarulema** Researcher

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South African National Space Agency, Hermanus, South Africa

**Email** [jhabarulema@sansa.org.za](mailto:jhabarulema@sansa.org.za) | **Phone** (+27) 0283121196

**Dr. Fabio Becker-Guedes** Researcher

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National Institute for Space Research. Brazil

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**Yenca Migoya-Orue** Researcher

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