

Johnson Ozoemenam URAMA: RESUME

Address: Office of Deputy Vice-Chancellor (Academic), University of Nigeria, Nsukka

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Nationality: Nigerian | **Born:** July 01, 1965

FULL NAME URAMA, JOHNSON OZOEMENAM

PLACE OF BIRTH Ovoko, Igbo-Eze South L.G.A., Enugu State

NATIONALITY Nigerian

STATE OF ORIGIN Enugu

**RESIDENTIAL
ADDRESS**

**CORRESPONDENCE
ADDRESS** Deputy Vice-Chancellor (Academic), University of Nigeria,
Nsukka

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MARITAL STATUS Married

**EDUCATION &
ACADEMIC
QUALIFICATIONS** University of Nigeria, Nsukka (UNN).
1982 – 1986: B.Sc. (Hons.), Physics & Astronomy (1986)
1987 – 1990: M.Sc., Theoretical Solid State Physics (1990)
1993 – 1999: Ph.D., Astrophysics (1999)

**ACADEMIC
AND OTHER
AWARDS** **Science Quiz Champion for Secondary Schools,**
Igbo-Eze LGA of old Anambra State 1981

Best Final Year Student,
Department of Physics & Astronomy, UNN, 1986

Best Graduating Student,
Department of Physics & Astronomy, UNN, 1986

Vice-Chancellor's Postgraduate award,
Best graduating Doctoral (Ph.D) student,
Faculty of Physical Sciences 1999

Most devoted staff award,
Division of General Studies,
Anambra state (now Federal) Polytechnic, Oko 1991

Table – Tennis champion,
Hartebeesthoek Radio Astronomy Observatory,
South Africa 1998

**WORK
EXPERIENCE**

Deputy Vice-Chancellor (Academic),

University of Nigeria

June 2020 – Date

Director, Academic Planning Unit Aug. 2018 – Aug. 2020

Director, Quality Assurance Unit Nov. 2016 – Aug. 2018

Pioneer Dean, Faculty of Science and Technology

Federal University, Ndufu-Alike, Ikwo (FUNAI)

(SABBATICAL POSITION) Oct. 2012 – Sept. 2013

Head,

Department of Physics & Astronomy,

University of Nigeria Nsukka

Aug. 2011 – July 2012

Aug. 2015 – Jan. 2017

Guest Professor,

Department of Physics & Astronomy,

Northern Arizona University, Flagstaff, Arizona,

USA (Course taught: Introduction to Indigenous Astronomy,

AST 201; Class delivered through the Internet.) 2007 – 2009

Professor

Department of Physics & Astronomy,

University of Nigeria Nsukka

Oct. 01, 2007

Senior Lecturer

Department of Physics & Astronomy,

University of Nigeria Nsukka

Oct. 01., 2001

Lecturer II

Department of Physics & Astronomy,

University of Nigeria Nsukka

Dec. 1992

Assistant Lecturer

Department of Industrial Physics,

Enugu State Univ. of Sc. & Tech.

April 1992 – Nov. 1992

Lecturer II

Department of Science Education,

Anambra State College of Education

Awka

Sept. 1991 – March 1992

Assistant Lecturer

Div. of General Studies, Anambra State

(now Federal) Polytechnic, Oko

Nov. 1987 – Aug. 1991

**TEACHING AND
RESEARCH:
SUMMARY**

All these years, I have continued to contribute to research and scholarship, obtain extra funding, and produce high quality publications. I have been deeply committed to effective instruction at the undergraduate and graduate levels, including the development of innovative courses and mentoring of students in research, outreach and professional development. I have, also, been actively involved in creating awareness and broadening participation in Astronomy.

**RESEARCH
VISITS**

Harvard-Smithsonian Center for Astrophysics,
Cambridge Massachusetts, USA July – Aug. 2015

National Centre for Radio Astronomy,
Pune, India Feb. – April 2011

SRON Netherlands Institute for
Space Research, Utrecht, Netherlands April – June 2008

Urumqi Astronomical
Observatory, China July – Sept. 2006

Hartebeesthoek Radio Astronomy
Observatory (HartRAO),
South Africa
July – Sept. 2004
Aug. – October 2002
Aug. – October 2001
July – October 2000
June 1997 – May 1999

COMMITTEES

Held so many positions and served in a number of Committees in the past thirty (30) years. Some of these include:

Member, Univ, of Nig. Governing Council 2020 – Date

Member, University Appraisals Committee,
Representing Fac. of Phys. Sc. UNN 2010 – 2012

Chairman, Faculty Postgraduate Studies Committee
Faculty of Physical Sciences, UNN 2010 – 2012

Member, Senate Curriculum Committee,
University of Nigeria, Nsukka (UNN) 2009 – 2011

Member and, in some cases, Chairman of a number of University panels (exam malpractice panels, disciplinary Panels and other investigative panels)

POSTGRADUATE SUPERVISION AND MENTORING	Jonas Nzeagwu, Ph.D (2021)	
	Innocent Eya, Ph.D (2017)	
	Daniel I. Okoh, Ph.D. (2014)	
	Benjamin G. Ayantunji, Ph.D. (2013)	
	Successfully supervised several M.Sc. students	
	Currently supervising 2 Ph.D students	
INTERNATIONAL WORKSHOPS	5 th International School on Contemporary Problems in Mathematical Physics, Cotonou, Republic of Benin.	Oct. 24 – Nov. 06, 2008
	10th Summer Synthesis Imaging Workshop, University of New Mexico, Albuquerque, New Mexico, USA.	June 03 – June 10, 2006
	COSPAR Workshop on X-Ray Astronomy, University of KwaZulu–Natal, Durban, South Africa.	June 27 – July 09, 2004
INTERNATIONAL CONFERENCES	International Astronomical Union (IAU) General Assembly. China.	2012
	Oxford IX – International Symposium on Archaeoastronomy. Peru.	2011
	International Astronomical Union (IAU) Symposium 260 on The Role of Astronomy in Society and Culture. France.	2009
	International Conference and Workshop on African Cultural Astronomy. Ghana.	2006
	Committee on Space Research (COSPAR) Scientific Assembly. China.	2006
	232nd Symposium of the International Astronomical Union (IAU) on the Scientific Requirements for Extremely Large Telescopes. South Africa.	2005
	International Conference on Radio Pulsar, in celebration of the contributions of Andrew Lyne, Dick Manchester and Joe Taylor. Greece.	2002
	Pulsar Studies in Africa. South Africa.	2002
	International Conference on “Science with SALT – The Southern African Large Telescope”, South Africa.	1998
	Numerous Local Conferences in Nigeria, South Africa, India and the Netherlands.	1994 – date

**MEMBERSHIP
OF SOCIETIES**

Member, International Astronomical Union.
Coordinator, African Cultural Astronomy Project.
Fellow, Astronomical Society of Nigeria.
Member, American Institute of Physics.

LIST OF PUBLICATIONS**A. PAPERS IN INTERNATIONAL JOURNALS**

- 1 Grover H., Singha J., Joshi B.C., Arumugam P., Gugercinoglu E., Bandyopadhyay D., Desai S., Banik, S. Eya, I., Chibueze, J., **Urama, J.** and Kundu, A. (2023). "Confirmation of glitch event detected in PSR J1740-3015 using the upgraded Giant Metrewave Radio Telescope (uGMRT)", The Astronomer's Telegram (ATel), **15851**.
- 2 Eya, I.O., Alhassan, J.A., Iyida, E.U., Chukwude, A.E. & **Urama, J.O.** (2022). "On the pulsar spin frequency derivatives and the glitch activity". *Astrophysics & Space Science*, **Vol. 367**, 28 . <https://doi.org/10.1007>.
- 3 Ugwoke, R. E., Ubachukwu, A. A., **Urama, J. O.**, Okike, O., Alhassan, J. A., & Chukwude, A. E. (2022). "Analysis of Ground Level Enhancement Events of 1989 September 29; 2001 April 15 and 2005 January 20". *Research in Astronomy and Astrophysics*, **Vol. 22 (10)**, 105008 - 105025.
- 4 Strubbe, L., Okere, B.I., Zhang, J., Chibueze, J.O., Ikape, M., Okouma, P.M., Ibik, A., White, H., Abotsi-Masters, S., Man, A., Webb, S., Asabere, B.D., Bop, C.T., Esaenwi, S., Mowla, L., Nguyen, T.D.C., Odo, F., Okoh, D., Ofodum, C.N., Onyeuwaoma, N., Cheek, W., Deng, M., Eze, R., Kerzendorf, W., Klutse, N.A.B., Lepo, K., Pardi, A.-L., Rose, A. & **Urama, J.O.** (2021). "The Pan-African School for Emerging Astronomers". *Nature Astronomy*, **Volume 5**, pp. 217 – 220.
- 5 Nzeagwu, J. N., **Urama, J.O.**, Chukwude, A.E. and Okoh, D.I. (2021) "Comparative assessment of radio occultation-based refractivity measurements from the COSMIC mission and in-situ atmospheric measurements in equatorial Africa." *Meteorology and Atmospheric Physics* **Vol. 133 (5)**, 1545 - 1554.
- 6 Nzeagwu, J. N., **Urama, J. O.**, Chukwude, A. E., & Okoh, D. I. (2021). "A Neural Network-Based Method for Time Series Modeling of 3-D Atmospheric Refractivity Using Radio Occultation Measurements". *IEEE Transactions on Geoscience and Remote Sensing*, **Vol. 60**, 1- 8.
- 7 Eya, I.O., Iyida, E.U., **Urama, J.O.** & Chukwude, A,E, (2020). "Microglitches in radio pulsars: the role of strange nuggets". *Astrophysics & Space Science*, **Vol. 365**, 121. <https://doi.org/10.1007/s10509-020-03838-x>.
- 8 Eya, I. O., **Urama, J. O.** & Chukwude, A. E. (2019) "Entrainment Factor of Individual Glitch Fractiona lmoment of Inertia". *Revista Mexicana de Astronomía y Astrofísica*, Vol. **55**, 3 – 9.
- 9 Eya, I. O., **Urama, J. O.** & Chukwude, A. E. (2019) "On the distributions of pulsar glitch sizes and the inter-glitch time intervals" *Research in Astronomy and Astrophysics*, Vol. **19**, 89 – 96.

- 10 Eya, I.O., Eze. C.I., Iyida, E.U, Nweke. V.S, Chukwude. A.E. and **Urama, J.O.** (2019) “On the Pulsar Spin-down Model and Pulsar Spin-down Properties”. Publication of the Astronomical Society of Nigeria (PASN). **Vol. 4**, 49 – 55.
- 11 Eze, C.I., Iyida, E.U., Odo, F.C. and **Urama, J.O.** (2018) “Statistical Study of Glitch Behaviours of Glitching Pulsars” International Journal of Astrophysics and Space Science. **Vol. 6**, No. 4, 62 – 72.
- 12 Harding, A. J., Stefano, R. D., Lépine, S., **Urama, J.O.**, Pham, D. & Baker, C. (2018) “Predicting gravitational lensing by stellar remnants” Monthly Notices of the Royal Astronomical Society, **Vol. 475**, pp 79 – 93.
- 13 Eya, I.O., **Urama, J.O.** & Chukwude, A.E. (2017) “Angular Momentum Transfer and Fractional Moment of Inertia in Pulsar Glitches” Astrophysical Journal, Vol. **840**, pp. 56 – 63.
- 14 Eya, I.O., **Urama, J.O.** & Chukwude, A.E. (2017) “Regularity of Rotational Glitches in Pulsars: On the Reservoir Effect” Publication of the Astronomical Society of Nigeria, **Vol. 1**, pp 15 – 18.
- 15 Eya, I.O., **Urama, J.O.** & Chukwude, A.E. (2016) “Estimating the radius of Neutron Stars via Pulsar Glitch” Publication of the Astronomical Society of Nigeria, **Vol. 1**, pp. 1 – 3.
- 16 Okoh, D., Esimbek, J, Zhou, J., Xindi, T., Tang, X.D., Chukwude, A., **Urama, J.O.** & Okeke, P. (2014) “Formaldehyde and H110 α observations towards 6.7 GHz methanol maser sources” Astrophysics & Space Science, **Vol. 350**, pp. 657 - 681.
- 17 **Urama, J.O.** (2014) “Glitch Evolution in Neutron Stars” Nigerian Journal of Space Research, **Vol. 12**, pp. 33 – 38.
- 18 Eya, I.O. & **Urama, J.O.** (2014) “Statistical Study of Neutron Star Glitches” International Journal of Astrophysics and Space Science, **Vol. 2**, pp 16 – 21.
- 19 Okoh, D., Esimbek, J, Zhou, J., Xindi, T., Chukwude, A., **Urama, J.O.** & Okeke, P. (2013) “A Machine Learning Approach for Investigating Spatial Structures between Spectral Line Sources: Formaldehyde Absorption versus Methanol Masers” Research & Reviews: Journal of Space Science & Technology, **Vol. 2**, pp. 1 – 11.
- 20 Kuiper, L., Hermsen, W., den Hartog, P.R. & **Urama, J.O.** (2012) “Temporal and spectral evolution in X- and γ -rays of magnetar 1E 1547.0–5408 since its October 2008 outburst: the discovery of a transient hard pulsed component after its January 2009 outburst” Astrophysical Journal, **Vol. 748**, p. 133.

- 21 **Urama, J.O.**, Chukwude, A.E. & Joshi, B.C. (2011) “Large Glitches, Small Glitches and Timing Noise” Bulletin of the Astronomical Society of India, **Vol. 3**, p. 116.
- 22 Ayantunji, B.G., Okeke, P.N. & **Urama, J.O.** (2011) “Statistics of Calculated Anomalous Microwave Propagation over Nigeria” International Journal of Physical Science, **Vol. 10**, pp 50 – 63.
- 23 Ayantunji, B.G., Okeke, P.N., **Urama, J.O.** & Najib, Y. (2011) “A Semi-Empirical Model for Vertical Extrapolation of Surface Refractivity over Nigeria” The African Review of Physics, **Vol. 6**, pp 121 – 128.
- 24 **Urama, J.O.** (2011) “On Radio Pulsar Stability” African Skies, No. **15**, pp. 28 - 30.
- 25 **Urama, J.O.** (2011) “Cultural Astronomy in Nigeria” African Skies, No. **15**, pp. 7 - 8.
- 26 **Urama, J.O.** (2011) “Editorial” African Skies, No. **15**, p. 1.
- 27 Ayantunji, B.G., Okeke, P.N. & **Urama, J.O.** (2011) “Diurnal and Seasonal Variation of Surface Refractivity over Nigeria” Progress in Electromagnetics Research B, **Vol. 30**, pp 201 – 222.
- 28 Ayantunji, B.G., Okeke, P.N. & **Urama, J.O.** (2011) “Microwave Propagation in Tropical Environment (A case of Nigeria)” Journal of Earth Science and Engineering, **Vol. 3**, pp 22 – 35.
- 29 Ayantunji, B.G., Okeke, P.N. & **Urama, J.O.** (2011) “Seasonal Variation of Surface Refractivity over Nigeria” Advances in Space Research, **Vol. 48**, pp 2023 – 2027.
- 30 Chukwude, A.E. & **Urama, J.O.** (2010) “Observations of microglitches in HartRAO radio pulsars” Monthly Notices of the Royal Astronomical Society, **Vol. 406**, pp 1907 – 1917.
- 31 Kuiper, L., Hermsen, W., **Urama, J.O.**, den Hartog, P.R., Lyne, A.G., & Stappers, B.W. (2010) “Hard X-ray timing and spectral characteristics of the energetic pulsar PSRJ0205+6449 in supernova remnant 3C 58 – An RXTE PCA/HEXTE and XMM-Newton view on the 0.5–250 keV band” Astronomy & Astrophysics, **Vol. 515**, pp. A34.
- 32 **Urama, J.O.**, Urama, E.N. & Animalu, A.O.E. (2009) “Endogenous Astronomy of parts of Nigeria” African Journ. of Phy. Vol. **2**, pp. 357 – 372.
- 33 Zou, W. Z., Wang, N., Manchester, R.N., **Urama, J.O.**, Hobbs, G. Liu, Z.Y. & Yuan, J.P. (2008) “Observations of six glitches in PSR B1737-30” Monthly Notices of the Royal Astron. Society, **Vol. 384**, pp. 1063 – 1068.

- 34 **Urama, J.O.** (2007) "Radio pulsar spin-down stability" J. Adv. Space Res. **Vol. 40**, 1517 – 1521.
- 35 Liu, Z.Y., Wang, N., **Urama, J.O.** & Manchester, R.N. (2006) "Monitoring of Pulse Intensity and Mode Changing for PSR B0329+54" Chin. J. Astron. Astrophys. **Vol. 6, Suppl. 2**, pp. 64 – 67.
- 36 **Urama, J.O.**, Link, B. & Weisberg, J.M. (2006) "A strong $\ddot{\nu} - \dot{\nu}$ correlation in radio pulsars with implications for torque variations" Monthly Notices of the Royal Astronomical Society, **Vol. 370**, pp. L76 – L79.
- 37 **Urama, J.O.** (2003) "Long-Term Timing Analysis of Some Pulsars". Pub. Astronomy Soc. Pacific, Vol **302**, pp. 107 - 110.
- 38 **Urama, J.O.** (2002) "The Challenges of Astronomy in Nigeria" Physica Scripta. **T97**, pp. 20 - 23.
- 39 **Urama, J.O.** (2002) "Radio Pulsar Observations and the challenges of the Neutron Star Interior" African Skies, No. **7**, pp. 18 - 20.
- 40 **Urama, J.O.** (2002) "Glitch monitoring in PSRs B1046-58 and B1737-30" Monthly Notices of the Royal Astronomical Society, Vol. **330**, pp. 58 - 62.
- 41 **Urama, J.O.** (2001) "Neutron star core superfluid dynamics and the pulsar glitch recovery" Astrophysical Letters & Communications. Vol. **40**, pp. 183 - 196.
- 42 Shabanova, T.V., Lyne A.G. & **Urama, J.O.** (2001) "Evidence for free precession in the pulsar B1642-03" Astrophysical Journal, Vol. **552**, pp. 321 - 325.
- 43 Shabanova, T.V. & **Urama, J.O.** (2000) "Glitch behaviour of the pulsar B1822-09 in the range 0.1 - 2.3 GHz", Astronomy & Astrophysics, Vol. **354**, pp. 960 - 964.
- 44 **Urama, J.O.** & Okeke, P.N. (1999) "Radio pulsar glitch studies", African Skies, No. **4**, pp. 41 - 45.
- 45 **Urama, J.O.** & Okeke, P.N. (1999) "Vela-size glitch rates in youthful pulsars", Monthly Notices of the Royal Astronomical Society, Vol. **310**, pp. 313 - 316.

B. PROCEEDINGS OF INTERNATIONAL CONFERENCES

- 1 **Urama, J. O.**, Joshi, B. C. & Chukwude, A. E. (2013) "On the glitch evolution of pulsars" In J. van Leeuwen (ed.) *Neutron Stars and Pulsars: Challenges and Opportunities after 80 years: Proceedings of the International Astronomical Union*, Vol. **291**, pp. 533-535.

- 2 **Urama, J.O.**, Eze-Uzomaka, P.I., Opata, C.C., Chami, F.A. & Obatala, J.K. (2011) "Traditional rites and their celestial alignments in parts of south-eastern Nigeria" In *D. Clive L.N. Ruggles(ed.) "Oxford IX" International Symposium on Archaeoastronomy*. Proceedings IAU Symposium No. 278, pp. 390 – 396.
- 3 **Urama, J.O.** & Holbrook, J.C. (2011) "The African Cultural Astronomy Project" In *D. Valls-Gabaud & A. Boksenberg,(eds.) The Role of Astronomy in Society and Culture: Proceedings of the International Astronomical Union Symposium 260*, pp. 48-53.
- 4 Oluseyi, H.M. & **Urama, J.O.** (2008) "Participation and Research of Astronomers and Astrophysicists of Black African Descent" in J. Holbrook, R. Medupe & J. Urama (Ed.) *African cultural astronomy* (Dordrecht, The Netherlands: Springer, pp. 239 – 255).
- 5 **Urama, J.O.** (2008) "Astronomy and Culture in Nigeria" in J. Holbrook, R. Medupe & J. Urama (Ed.) *African cultural astronomy* (Dordrecht, The Netherlands: Springer, pp. 231 – 238).
- 6 **Urama, J.O.** (2006) "Extremely large telescopes and the extremely small sources" in P.A. Whitelock, M. Dennefeld & B. Leibundgut (Ed.) *The Scientific Requirements for Extremely Large Telescopes, Proceedings of the 232nd Symposium of the International Astronomical Union, Held in Cape Town, South Africa, November 14-18, 2005*, Cambridge: Cambridge University Press, pp. 233 – 234.
- 7 **Urama, J.O.** & Okeke, P.N. (2006) "Extremely large telescopes and the developing nations" in P.A. Whitelock, M. Dennefeld & B. Leibundgut (Ed.) *The Scientific Requirements for Extremely Large Telescopes, Proceedings of the 232nd Symposium of the International Astronomical Union, Held in Cape Town, South Africa, November 14-18, 2005*, Cambridge: Cambridge University Press, pp. 404 – 409.
- 8 **Urama, J.O.** (2005) "Pulsar Stability and the 'Anomalous' Braking Indices". In H.M. Oluseyi & J.L. Williamson (Ed.) *Proceedings of the National Society of Black Physicists: Vol. 33*, pp. 1 – 4.
- 9 Shabanova, T.V. & **Urama, J.O.** (2000) "Glitch behaviour of the pulsar B1822-09 in the range 0.1 - 2.3 GHz". In M. Kramer, N. Wex & R. Wielebinski (Ed.) *Proc. IAU Col. 177, Pulsar Astronomy - 2000 and Beyond*. San Francisco: ASP, Vol **202**, pp. 107 – 108.
- 10 Shabanova, T.V. & **Urama, J.O.** (2000) "Evidence for free precession in the pulsar B1642-03". In M. Kramer, N. Wex & R. Wielebinski (Ed.) *Proc. IAU Col. 177, Pulsar Astronomy - 2000 and Beyond*. San Francisco: ASP, Vol **202**, pp. 99 - 100.

- 11 **Urama, J.O. & Okeke, P.N.** (1998) "Optical pulsar studies with SALT". In **D.A.H. Buckley (Ed)** Science with SALT - The Southern African Large Telescope. Cape Town: SAAO, pp. 95 - 99.

C EDITORSHIP OF BOOKS/JOURNALS

- (1) **J. O. Urama**, Guest Editor: African Skies, No. 15 (2011), Special Issue on: Overview of Astronomy in Nigeria.
- (2) J. Holbrook, R. Medupe and **J. Urama**. Editors: African Cultural Astronomy – Current Archaeoastronomy and Ethnoastronomy Research in Africa (Dordrecht, The Netherlands: Springer, 2008), 260 pages.
- (3) Okeke, P.N., Okeke, C.E., Okeke, F.N., **Urama, J.O.**, Eze, R.N.C. & Alhassan, J.A. (2000) Mechanics and Properties of Matter (Nsukka, Jolyn Publishers)

D CHAPTERS IN BOOKS

- (1) **Urama, J.O. & Eze, B.U.** (2000) "The Solar System as part of our Natural Environment" in Obasikene, J.I., Adinna, E.N. & Uzoechi, I.F.A. (Eds) Man and the Environment (Enugu, Computer Edge Pub. pp. 22 – 43).
- (2) **Urama, J.O.** (1997) "The Solar and Stellar Systems" in Ezugwu, E.C., Nnadi, C.E., Onyeoma, U. and Akumah, E. (Eds) History and Philosophy of Science (Enugu, Computer Edge Pub. pp. 27 – 36).