

Curriculum Vitae

SEMIU ODURO, KAREEM**Short Profile**

Semiu O. Kareem is a Senior Lecturer and the Ag. HOD in the Department of Physics, Mountain Top University, Ibafo, Ogun State. He holds B.Sc. Physics (Ogun State University), M.Sc. Physics (Olabisi Onabanjo University), and PhD in Computational and Theoretical Physics from the Reddemer's University, Ede. Semiu Kareem's current research interests include Atmospheric data analysis, Fluid mechanics, Thermodynamic analysis of channel fluid flow, Stability in MHD flows, Laminar-turbulent transition in fluid dynamics and Non-linear dynamics.

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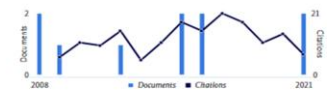
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Publications LinksResearchgates: <https://www.researchgate.net/profile/Semiu-Kareem-2/research>Google Scholar: <https://scholar.google.com/citations?hl=en&user=S-fNwGMAAAAJ>Scopus: <https://www.scopus.com/authid/detail.uri?authorId=36905077200&eid=2-s2.0-60649113255>Orcid: <https://orcid.org/0000-0001-9043-7908>**1. Personal Information**

Full Name:	Semiu Oduro KAREEM
Marital Status:	Married
Number of Children:	Four
Date of Birth:	March 27th, 1972
Citizenship:	Nigerian
State of Birth:	Ogun
Local Government Area:	Obafemi Owode
Home Address:	13 Road 3 Gloryland Estate Erigo Ijebu Ode
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2 Qualifications

2.1 Academic

Degree	Class	Institution	Date
Ph.D., Physics		Redeemer's University	2017
M.Sc., Physics	Ph.D. grade	Olabisi Onabanjo University	2006
B.Sc., Physics	Second Class Upper	Ogun State University	2000

2.2 Membership of Learned Society

- Nigerian Institute of Physics
- Nigerian Association of Mathematical Physics

3 Awards and Commendations

- Commendation by Mountain Top University for donating a dot matrix display board to the College of Basic and Applied Sciences of the University, in 2020.
- Commendation by the Redeemer's University for job dedication, 2017/2018 session
- Best graduating student in Physics 1998/1999 session

4 Working Experience

4.1 University employment

Year	Position	Institution
June 2018 Till date	Senior Lecturer	Department of Physics, Mountain Top University, Prayer City Ogun State
Oct. 2013 – May 2018	Lecturer I	Department of Physical Sciences, Redeemer's University Ede Osun State
Sept. 2010 – Sept. 2013	Lecturer II	Department of Physical Sciences, Redeemer's University Ede Osun State
Feb. 2006 – Aug. 2010	Assistant Lecturer	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Jan. 2002 – Feb. 2006	Graduate Assistant	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State

4.2 Courses Taught at University Level

S/N	Course Title
1	Mathematical Physics I
2	Mathematical Physics II
3	Solid State Physics I
4	Solid State Physics II
5	Quantum Mechanics I
6	Quantum Mechanics II
7	Statistical Physics
8	Thermal Physics / Thermodynamics
9	Classical / Analytical Physics I & II
10	General Physics I & II

4.3 Students Supervision

Name of Supervisee	Year	Title of Project / Dissertation	Institution
Lateef, Abosede Shekinah (17010302002)	August, 2021	Analysis of Physical Variables for Magneto-hydrodynamic (MHD) Fluid Flow through a Deformable Layer	Department of Physics, Mountain Top University, Ibafo, Ogun State
Bakare, Odunayo Adedayo (189076012) Co-Supervisor: M.Sc. Dissertation	March, 2021	Effect of Fluid Parameters on Dynamic Variables in a Magneto-hydrodynamics (MHD) Fluid Flow	Department of Physics, University of Lagos
Abdulsalam, Ayomide Ahmed (16010302001)	Nov., 2020	Effect of Magnetic Field on the Velocity and Temperature in a Horizontal channel Fluid Flow	Department of Physics, Mountain Top University, Ibafo, Ogun State
Akinola, Stephen Sunkanmi (RUN 07-08/1435)	June, 2011	Controlling Chaos in a 3-D Bonhoffer-van der Pol Oscillator using Nonlinear Recursive Back-Stepping Control Function	Department of Physical Sciences, Redeemer's University Ede Osun State
Olulaja, Temidayo Anthony (RUN/PHY/14/5816)	May, 2018	Analysis of Buoyancy Driven MHD Fluid Flow through a Permeable Inclined Channel	Department of Physical Sciences, Redeemer's University Ede Osun State
Adesina, Sunday Toyosi (04059859)	Jan., 2009	Solution of van der Pol Oscillator using Microsoft Excel Spread Sheet	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Olabisi, Olatunji	April, 2008	Construction of Static Circuit	Department of Physics,

Oluwafemi (CSB 0217147)		Breaker	Olabisi Onabanjo University Ago-Iwoye Ogun State
Adenuga, David Olusegun (03047320) & Ajogbeje, Olumide Chris (04059606)	Jan., 2009	A Geo-Technical Investigation of Structural Foundation: A case Study of the Faculty of Science, Main Campus of the Olabisi Onabanjo University, Ago- Iwoye	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Osikomaya, Tolulope Adebukola (03050676)	Feb., 2008	Effect of Limestone on Underground Water using Direct Water Analysis and Electrical Resistivity Methods	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Olaifa, Christianah Funmi (03053758)	Feb., 2008	Construction of a Domestic Refrigerator	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Odulate, Olawale Olalekan (03050371)	Dec., 2006	An Extended van der Pol- Duffing Oscillator Circuit Exhibiting Rossler Like Chaotic Attractor	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Umusu, Itoje Ekrugbare (03050880)	Dec., 2006	Construction of a Single Phase Transformer (To Power a 1.25 kVA Inverter)	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State
Odukoya, Abiodun Adeniyi (CSB 0006090)	Dec., 2006	7-Segment Display Unit for an Inverter	Department of Physics, Olabisi Onabanjo University Ago-Iwoye Ogun State

4.4 University Administrative Responsibilities / Committees

Position	Date
1. Ag. Head of Department (Physics)	2018 Till Date
2. Ag. Director, ICT	April 2021 Till Date
3. Representative of Department of Physics at Senate	2018 Till Date
4. Representative of Department of College of Basic and Applied Sciences at the Board of PG School	2020 Till Date
4. Member, Business Committee of Senate	2019 Till Date
5. Member, the Admissions Committee	2019 Till Date
6. Member, the Quality Assurance Committee	2019 Till Date
7. Chairman, College Curriculum, Seminar and Annual Lecture Committee	2021 Till Date

5 Publications

5.1 Articles Published in Learned Journals

1. **Kareem S. O.**, Vincent U. E. , Laoye J.A., Complex dynamics in soil temperature: A case study of southern Nigeria, MTU Journal of Applied Science and Technology 1 (1) (2021) 115-129
2. J.A. Laoye, B.O. Ogunsua, **S.O. Kareem**, Links between the complexities in atmospheric-soil energy exchange and temperature dynamics in tropical regions, Journal of Atmospheric and Solar-Terrestrial Physics 219 (2021) 105651, <https://doi.org/10.1016/j.jastp.2021.105651>
3. Ayodele O. Soge, Oluropo F. Dairo, Modupe E. Sanyaolu and **Semiu O. Kareem**, Recent development in polymer optical fibre strain sensors: A short review, J. Opt (2021), <https://doi.org/10.1007/s12596-021-00699-7>
4. **S. O. Kareem** , S. O. Adesanya , J. A. Falade , U. E. Vincent, Entropy generation rate in unsteady buoyancy-driven hydromagnetic couple stress fluid flow through a porous channel, International Journal of Pure and Applied Mathematics 115 (2) 199-209 (2017), <https://ijpam.eu/contents/2017-115-2/9/index.html>
5. J. A. Falade , S. O. Adesanya , S. R. Lebelo , **S. O. Kareem**, Second law analysis for a porous channel flow with asymmetric slip and convective boundary conditions, International Journal of Pure and Applied Mathematics 115 (2) 247-257 (2017)
6. **Kareem S. O.**, Adesanya S. O. and Vincent U. E., Second law analysis for buoyancy-driven hydromagnetic couple stress fluid flow through a porous channel, Comptes Rendus Mecanique 344 (8) 547-555 (2016), <http://dx.doi.org/10.2016/j.crme.2016.03.003>
7. **Kareem S. O.**, Adesanya S. O. and Vincent U. E., Second law analysis for hydromagnetic couple stress fluid flow through a porous channel, Alexandria Engineering Journal 55 (2) 925-931 (2016), <http://dx.doi.org/10.1016/j.aej.2016.02.020>
8. Adesanya S. O., **Kareem S. O.**, Falade J. A. and Arekete S. A., Entropy generation analysis for a reactive couple stress fluid flow through a channel saturated with porous material, Energy 93 (1) 1239-1245 (2015), <http://dx.doi.org/10.1016/j.energy.2015.09.115>
9. U. E. Vincent, **S.O. Kareem**, B.R. Nana Nbenjo and A.N. Njah, Quasi-synchronization dynamics of coupled and driven plasma oscillators, Chaos, Solitons & Fractals, 70: 85-94 (2015), <http://dx.doi.org/10.1016/j.chaos.2014.11.005>
10. **S.O. Kareem**, K.S. Ojo and A.N. Njah, Function projective synchronization of identical and nonidentical modified finance and Shimizu–Morioka systems, Pramana Journal of

physics, 79(1) 71-79 (2012), <http://link.springer.com/article/10.1007%2Fs12043-012-0281-x>

11. J.A. Laoye, U.E. Vincent, **S.O. Kareem**, Chaos control of 4-D chaotic systems using recursive backstepping nonlinear controller, Chaos Solitons & Fractals, 39(1) 356-362 (2009), <http://dx.doi.org/10.1016/j.chaos.2007.04.020>
12. **S.O. Kareem**, U.E. Vincent, J.A. Laoye, T.A. Akinola, Chaos control of the autonomous van der Pol-Mathieu equation for dust charge fluctuation in dusty Plasma Using backstepping control, Acta Physica Polonica B, 39(8), 1817-1824 (2008), <http://www.actaphys.uj.edu.pl/fulltext?series=Reg&vol=39&page=1817>
13. J.A. Laoye and **S.O. Kareem**, On the Numerical Solution of the Gross-Pitaevskii equation for an isolated vortex in trapped gas, J. of Nigeria Association of Mathematical Physics, Vol. 13, 55-58, (2008)
14. T.W. David, O.O. Odusote, and **S.O. Kareem**, Physical model of income distribution, J. of Nigeria Association of Mathematical Physics, Vol. 13, 315-320 (2008)
15. U.E. Vincent, A. Ucar, J.A. Laoye and **S.O. Kareem**, Control and synchronization of chaos in RCL-shunted Josephson junction using backstepping design, Physica C 468, 374- 382 (2008), <http://dx.doi.org/10.1016/j.physc.2007.11.012>

5.2 Books/Chapters in Books

1. J.A. Laoye, **S.O. Kareem**, The kinetic theory of ideal gases, in Concise general physics for colleges, polytechnics and universities, Vol 1. ISBN: 978-044-674-5, Eds. Kola Odunaike, Nnamdi Jibiri, and Bidemi Laoye, Bib press, Ibadan (2006), pp. 254-267.
2. **S.O. Kareem** and O.E. Akinsoju, Determination of relative density using spring balance, in Experimental physics course for the 100 level undergraduates, ISBN: 9789789025268, Eds. Kola Odunaike, Victor Chukwuma and Abidemi Laoye, Bib press, Ibadan (2009), pp. 137-142.
3. **S.O. Kareem**, R. O. Akande and O. F. Olawole, Physics practical manual for undergraduates, Bodalex Reprographics, Ijebu-Ode (2019)

5.3 Published Conference Proceedings

4. **S.O. Kareem**, J.A. Laoye, T.W. David and S.O. Bankole, The Synchronization of the van der Pol- Mathieu System, in refereed conference proceedings on “physics for sustainable environment, transportation and economic empowerment” of the Department of Physics, Olabisi Onabanjo University, Ago Iwoye Vol.2, (2008)Pp 68-70.

5. **S.O. Kareem**, G.C. Ijeoma and G.B. Jaiyeola, Ground investigation of the proposed site for the central administrative building of Olabisi onabanjo University, Ago-Iwoye, Ogun state, in refereed conference proceedings on “physics for sustainable environment, transportation and economic empowerment” of the Department of Physics, Olabisi Onabanjo University, Ago Iwoye Vol.2, (2008)Pp 144-148.
6. R.A. Williams, R.K. Odunaike, **S.O. Kareem**, S.O. Adesanya, The electrical nature of circular bismuth on n-silicon contact to other geometrical shapes of equal lengths and areas, in refereed conference proceedings on “physics for sustainable environment, transportation and economic empowerment” of the Department of Physics, Olabisi Onabanjo University, Ago Iwoye Vol.2, (2008)Pp 166-174.

5.4 Academic Projects / Dissertations

1. Kareem S. O. (2017): Entropy Generation in Couple Stress Magneto-hydrodynamics (MHD) Flow through a Porous Channel, Department of Physics, Redeemer’s University, Ede, Osun State (Ph.D. Thesis)
2. Kareem S. O. (2005): Numerical Solution of the Gross-Pitaevskii Equation for an Isolated Vortex in a Trapped Gas, Olabisi Onabanjo University, Ago-Iwoye (M.Sc. Dissertation)
3. Kareem S. O. (1999): Construction of an Audio Voltmeter, Ogun State University, Ago-Iwoye (B.Sc. Project)

6 Referees Contacts

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