

Academic Curriculum Vitae



Personal Information:

Full Name: Azad Ibrahim Amen

Academic Title: professor

Email: (university email) azad.amen@su.edu.krd

Mobile:+9647504679830

Education:

PhD in applied mathematics (Differential Equations and Dynamical Systems), 2009-2011.

University of Salahaddin-Erbil –Iraq.

Dissertation title: “Periodic solutions and Darboux first integrals of polynomial systems)

Masters of Mathematics (Differential Equations), University of Baghdad, Iraq, 1989–1991.

Bachelor of Mathematics. University of Salahaddin-Erbil –Iraq, 1984–1988.

Employment:

1992 Assistant lecture, Department of mathematics, college of Education. Salahaddin University, Erbil- Iraq.

Lecture (1998)

Assistant Professor (2005)

Professor (2015) Salahaddin University, Iraq.

Head of Mathematics Department (2002 – 2008 and 20012-2017),

Head of Mathematics Department –Evening (2021 until now) College of Basic Education Salahaddin University, Iraq.

Qualifications

- **Good information and skills to find a solution of mathematics problems.**
- **Dependable and trustworthy with a high awareness to detail.**
- **Comprehensive working information of a field of IT flanks inclusive Microsoft Office, Excel and MAPLE programming.**
- **Speedy to develop powerful working relationships and to part with multifunctional teams.**

Teaching experience:

- **Experienced in teaching undergraduate: Ordinary Differential Equations, Partial Differential Equations, Calculus, Linear Algebra, Finite Mathematics, Complex analysis.**
- **Experienced in teaching Postgraduate: Stability theory, bifurcation theory, theory of ordinary differential equations, advance linear algebra and dynamical systems.**

Research and publications

- 1.The sufficient conditions for the existence and non-existence of positive periodic solutions for polynomial scalar differential equations . J.Dohok,Uni,vol 15,no1(2012).<http://web.uad.ac>**
- 2.The number of w-Periodic solutions of non-autonomous first order polynomial differential equations. J.Koya Uni. no 23, 2012,65-76.ISSn.2073-0713.
<http://web.uad.ac>**
- 3.Hopf bifurcation analysis for stability nontrivial critical points of the Rosslers second system,J.Koya University,no12(2009)77-95.**

4. Limit cycles of Lorenz system with Hopf bifurcation, J. AlRafdin, Mosul University, vol 5, no1(2008)81-99. www.AL-RAFIDEN.org. ISSN 1815-4816. iasj.net/iasj?func
5. The number of periodic solutions of Riccati type logistic periodic equation. J. Zankoy Sulaimani, vol 7, no1(2004), 25-29.
6. Periodic solutions related to a Poincare map. J. Dohuk University, vol2, no1(2004)44-48.
7. Multiplicity of periodic solutions by word problems, Zanco J. pure & applied Science, Salahaddin University, vo16, no1(2004)73-82.
8. On periodic solutions of nonautonomous differential equations, J. Duhok University Vol 3, no2(2000)35-39.
9. The computations of Lyndon factorization of words. J. Duhok University Vol 2, no2(2003)35-48.
10. Word problems related to a center of two dimensional system, J. Zanco, Salahaddin University. Vol.10, no1(1998)51-54.
11. Conditions for the quartic nonautonomous equations to have a center. J. Zanco. Salahaddin University, Special issue2(1997)307-311.
12. Word problems related to quartic nonautonomous equations, J. Zanco. Salahaddin University, Special issue2(1997)243-252.
13. On the centers of generalized Abel equation. to appear in J. Zankoy Sulaimani (2013). zancojournals.su.edu.krd
14. Some propositions of a Hopf bifurcation behavior of the Tobin Benhabib-Miyao system. Zanco. J. pure & applied Science, Salahaddin University. V.25, no 2, 2013. ISSN 2218-0230.
16. On Limit Cycles of Planar Dynamical System Via Dulac-Cherkas Function, Journal of Zankoy Sulaimani, Vol.(17), No.(2), (2015). ISSN:1812-4100. www.jzs.uos.edu.krd.
17. Isochronous center conditions for non homogenous rigid systems. Zanco. J. pure & applied Science, Salahaddin University. V26 no.2, 2014. ISSN 2218-0230. www.academia.edu
18. Inverse integrating factors of cubic polynomial system. J. Garman university. Vol 1, 2015, 156-164. ISSN 2310-0087.

19. Polynomial Inverse integrating factors of cubic systems. J.Dohuk university, vol 18, no 1 2015.

20. ON EXISTENCE INVERSE INTEGRATING FACTORS AND FIRST INTEGRALS FOR CUBIC IN 2D AUTONOMOUS DIFFERENTIAL . Zacco. J.pure& applied Science, Salahaddin University.2018 .

21. Qualitative analysis for general Sel'kov model. Cite as: AIP Conference Proceedings 2096, 020012 (2019); <https://doi.org/10.1063/1.5097809> Published Online: 09 April 2019.

22. "Zero-Hopf bifurcation in the generalized stretch-twist-fold flow." Sultan Qaboos University Journal for Science [SQUJS] 24, no. 2 (2019): 122-128.

23. Hussein, N.H. and Amen, A.I., 2022. Integrability of Van der Pol–Duffing oscillator system in three-dimensional vector field. *Mathematical Methods in the Applied Sciences*, 45(3), pp.1597-1611.

24. Aziz, W., Amen, A. and Pantazi, C., 2021. Integrability and linearizability of a family of three-dimensional quadratic systems. *Dynamical Systems*, 36(2), pp.317-331.

25. Mirkhan, J.M. and Amen, A.I., 2022. Bifurcation analysis for Shil'nikov Chaos Electro-dissolution of Copper. *Zanco Journal of Pure and Applied Sciences*, 34(4), pp.83-91.

26. Othman, K.B. and Amen, A.I., 2022. Periodic Solutions of the Forest Pest System Via Hopf Bifurcation and Averaging Theory. *Iraqi Journal of Science*, pp.5496-5509.

27. Periodic solutions of Simple Chaotic system in 3D via the second order Averaging method. <https://www.semanticscholar.org/paper/Periodic-solutions-of-Simple-Chaotic-system-in-3D-Jalal>

Hussein/e34742dc9ee978b84b695615622a3078c897fa13#related-papers

28. Liouvillian and Darboux first integrals of the self-assembling micelle system. To appear Iraqi journal of Science.

29. Taha, R.Y., Amen, A.I. and Hussein, N.H., Darboux and analytic integrability of five-dimensional semiclassical Jaynes–Cummings system. *Mathematical Methods in the Applied Sciences*.

30. Amen, A.I., 2023. Integrability and dynamics Analysis of the Chaos Laser System. *Scientia Iranica*.

31. Amen, A.I., Integrability Analysis of the Smallest 3D Biochemical Reaction Model.

Conferences and courses attended

1.Diversity education and international educational research. Friedrich-Alexander university Erlangen –Nurnberg-German- from 25 June until 8th of July 2018.

2.Capacity Building in Teacher Education and Research, Salahaddin University-Erbil, Kurdistan, Iraq, August 28th - 29th,2017.

3. Capacity building in teacher education and research.-workshop. Leipzig

-Germany from 8-10-2015-25 until 23-10-2015.

4.The First Iraqi-French Mathematics Conference in cooperation with College of Science, Salahaddin University-Erbil, Erbil, 14th - 18th November, 2009.

5.SPS program 1/7-2002-1/8/2002 –center I.T- Salahaddin university

6. I.T and Excel programs 1/7/2001-1/8/2001- College of Education-Salahaddin university.

7. The Second Mathematics Conference in Salahaddin University-Erbil.Iraq,1997.

Funding and academic awards

Professional memberships

Member of the Society of Physics and Mathematics-Iraq.

Professional Social Network Accounts:

https://scholar.google.com/citations?user=G_WEP6QAAAAJ&hl=en.

<https://www.researchgate.net/profile/Azad-Amen>.

<https://www.linkedin.com/in/azad-amen-817663163>.

<https://orcid.org/0000-0002-9310-6474>.