# **Academic Curriculum Vitae**



### **Personal Information:**

Full Name: Hero Waisi Salih Academic Title: Lechers

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Mobile:07515206829



### **Education:**

1999-2003 B.Sc Mathematics Science, Salahaddin University-Erbil, Kurdistan region Iraq

2005–2010 Master's degree in Dynamic system, Koya University, Erbil, Kurdistan Region Iraq "Computing the Lyapunov Quantities for Lop sided Systems".

2011–2015 Ph.D. in Dynamic System, Universiti Teknologi Malaysia- Faculty of Science-Mathematical Science Department– Johor– Malaysia. "Solution of Hilbert Sixteenth Problem for the Cubic Liénard and Quartic Polynomial Differential System"

### **Employment:**

| - | 2004-2006    | ass. Researcher in center library of Salahaddin University                        |
|---|--------------|---|
| - | 2006-2008    | assistant Researcher in center library of Koya University – Erbil- Iraq.          |
| - | 2008-2011    | assistant Lecturer at Mathematics department- Faculty of, Science & Health- Koya  |
| - |              | University, Erbil/Iraq  |
| - | 2011-2015    | PhD student, Johor – Universiti Teknologi Malaysia, Malaysia.                     |
| - | 2016-2017    | Lecturer in Mathematics Dep t. – Faculty of Science & Health -University of Koya. |
| - |              | Erbil /Iraq   |
| - | 2018-present | Lecturer in Mathematics Dept College Science Salahaddin University. Erbil         |
|   | /Iraq        |   |

### Qualifications

- 2010: Teaching methods training course at Faculty of Education / Koya University.
- 2009: Computer Training Course at Koya University.
- 2009: English Training Course at Koya University
  2019: Statistics and Statistical Data Analysis with SPSS, GraphPad Prism,
  Mathematics Department, College of Science, Salahaddin University-Erbil.

## **Teaching experience:**

I have been asked by the mathematics Department in University to participate in the undergraduate degree

| 2022-2023 | Partial Differential Equation, Mathematics Department, Salahaddin University, Iraq   |
|-----------|--|
| 2022-2023 | Topic in applied mathematics, Mathematics Department, Salahaddin University, Iraq    |
| 2021-2022 | Theory of Differential Equation, Mathematics Department, Salahaddin University, Iraq |
| 2019-2021 | Theory of Differential Equation, Mathematics Department, Salahaddin University, Iraq |
| 2019-2020 | Partial Differential Equation, Mathematics Department, Salahaddin University, Iraq   |
| 2017-2018 | Finite Mathematics, Mathematics Department, Salahaddin University, Iraq              |
| 2016-2017 | Stability Theory, Mathematics Department, Koya University, Iraq                      |
|           |  |

### Master courses

| 2020–2021 | Intervention in the course Dynamic system, Mathematics Department, Salahaddin |
|-----------|---|
|           | University Iraq   |
| 2018–2019 | Intervention in the course stability Theory, Mathematics Department, Koya     |
|           | University Iraq   |
| And       |   |

### **Research and publications**

- 3.1 Peer-reviewed articles
- H. W. Salih, A. Nachaoui,
  On the stability of a mathematical model for HIV(AIDS) cancer dynamics,
  mathematical modeling and computing, Vol. 8, No. 4, pp. 783–796 (2021)
- H. W. Salih, A. Nachaoui, Study of the stability for Drug Delivery Models, Journal of Physics: Conference Series 1743 (2021), IOP Publishing doi:10.1088/1742-6596/1743/1/012019
- H. W. Salih, A. Nachaoui,

Computing general form of the focal value and Lyapunov function for the lopsided system in degree eight. Advanced Mathematical Models & Applications Vol.5, No.1, 2020, pp.121-130

- H. W. Salih.
  Investigation of the Stability of the Melting Liquid Phase Nanoparticle Model". Journal Zanko 2019
- H. W.Salih and Z. A. Aziz.

Computation of Lyapunov quantities for a non-homogeneous cubic Liénard Polynomial system", International Journal of Mathematics and Statistics vol. 53(3) 159 -164 (2015) ISSN: 0973-8347.

- H. W. Salih, Z. A. Aziz, and F. Salah

Number of limit cycles for homogeneous polynomial system", (2015) Vol. 9, 2015, no. 22, 1077-108, International Journal of Mathematical Analysis http://dx.doi.org/10.12988/ijma.2015.5231.

- H. W. Salih and Z. A. Aziz.

Maximum number of limit cycles of a general Lienard equation", AIP Conference Proceedings 1602, 121(2014); doi:10.1063/1.4882476, (http://dx.doi.org/10.1063/1.48 824 76)

- H. W. Salih, Z. A. Aziz, and F. Salah.

Maximum number of limit cycles of cubic Liénard differential system", Vol 8, 64 (2014): 3161-3171 Applied Mathematical Sciences <a href="http://dx.doi.org/10.12988/ams.2014.43147">http://dx.doi.org/10.12988/ams.2014.43147</a>.

- H. W. Salih and Z. A. Aziz.

Computation of Lyapunov Quantities of Homogeneous Quartic Polynomial System", (2013), Matematika Vol. 29, No. 1, 73-83 (2014 Malaysian Mathematical Science Society (PERSAMA) Award for Research Paper Category.

### 2 Proceedings / Conference abstract

- H. W. Salih and A. Nachaoui. "A direct method for the solution of a geometric inverse problem". Oral presentation at the International Conference on Mathematics and Data Science held online on October 28-30, 2021.
- H. W. Salih and A. Nachaoui." On the stability of a mathematical model for HIV(AIDS) cancer dynamics". Oral presentation at the International Hybrid Conference on Numerical Analysis and Optimization Days (JANO'13). Held in Khouribga, Morocco from 22-24February 2021.
- H. W. Salih and A. Nachaoui. "Study of the stability for Drug Delivery Model". Oral presentation at the International Conference on Mathematics and Data Science held online on June 29-30, 2020.
- H. W. Salih. "Investigation of the Stability of the Melting Liquid Phase Nanop article Model". Oral presentation at the 2nd International conference of Mathematics 2019(SICME 2019) February 3rd -5th, 201 9 in Erbil, Kurdistan Region of Iraq at Mathematics Department, college of Science, Salahaddin University- Erbil
- H. W. Salih "Computation of Lyapunov Quantities of Homogeneous Polynomial System of degree five" Oral presentation at the 6th International Conference and Workshop on Basic and Applied Sciences 2017(ICOWOBAS2017) 18th-19th March 2017, Salahaddin University, Erbil- Kurdstan Region

-Iraq.

- H. W. Salih and Z. A. Aziz. "Investigation of the Stability and Existence of the Limit Cycles in Nanoparticle Model" Oral presentation at the 3rd International Science Postgraduate Conference 2015 (ISPC2015) Faculty of Science, Universiti Teknologi Malaysia, 24 -26 February, 2015, Ibnu Sina Institute for fundamental science studies, Universiti Teknologi Malaysia.
- H. W. Salih and Z. A. Aziz. "Computation of Lyapunov Quantities for a Nonhomogeneous Cubic Liénard Polynomial System". Oral presentation at the 5th International Graduate Conference on Engineering Science & Humanity 2014 (IGCESH 2014), 19-21 August, N24, Universiti Teknologi Malaysia.
- H. W. Salih and Z. A. Aziz. "Stability and the Unique Limit Cycle of Liénard Equation". Oral presentation at the 2nd International Science Postgraduate Conference 2014 (ISPC2014) Faculty of Science, Universiti Teknologi Malaysia, 10-12 March 2014, Ibnu Sina institute for fundamental science studies, Universiti Teknologi Malaysia.
- H. W. Salih and Z. A. Aziz. "Maximum number of limit cycles of a general Liénard equation" Oral presentation at the 3<sup>rd</sup> international conference on mathematical sciences (ICMS3-2013), 17–19
  December 2013, Putra World Trade Centre, Kuala Lumpur, Malaysia. AIP Conf. Proc., vol. 1602. Published at 19 June 2014.

Conferences and courses attended

- 1) third International Conference of Mathematics and its Application(TICMA-2022), August 29-31, 2022 Erbil, Kurdistan Region.
- 2) Topics in Commutative Algebra, International Workshop: the west Asia Mathematical School (WAMS-Sulaimani): October 2021
- 3) New Approaches to Improve Teaching Quality of University Level Mathematics. Workshop Held on October 2021 in Erbil, KRG-Iraq, by Department of Mathematics Education, Tishik International University
- 4) Topics in Algebra number theory. International Workshop: the west Asia Mathematical School (WAMS-Erbil), October 2021.
- 5) Young Women in PDEs and Applications, online, September 2021
- 6) Mathematical concepts in the context of Physics problem. International Workshop, Mathematics Dep. College of Science Salahaddin University. December 2019
- International Workshop in cooperation with the university of Dyala and Salahaddin University. Mathematics Department. College of Science, Salahaddin University-Erbil. December 2019.
- 8) The west Asia Mathematical School (WAMS-Izmir-2019): Mathematics and their interaction. October- November 2019. At Nesin Mathematics Village-Izmir Turkey.
- 9) International Workshop: Control and Optimization with Industrial Applications. Mathematics Department College of Science, Salahaddin University-Erbil, December 2018.
- 10) An International Workshop of Mathematics and Physics with their Applications", at College of Science, Salahaddin

University-Erbil, October, 2018.

- 11) International Workshop: Some Basic Mathematics in Cryptographic Protocols. Mathematics Department. College of Science, Salahaddin University-Erbil. 29th April -3rd May 2018.
- 12) 1 day workshop: mathematical application in the real life, May 2017 Faculty of Science and Health, Koya University.
- 13) Topics in algebraic number theory and Diophantine approximation: partnership with CIMPA at the Salahaddin University-Erbil-Mathematics Department- Kurdistan region- Iraq from 12-17 March 2017.
- 14) Workshop on COMSOL MULTIPHYSICS held at Ibn u Sina Institute for Fundamental Sciences Studies, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru- Johor, Malaysia. March 2015
- 15) EZTEMPLATE + MENDLEY workshop on at computer lab3, C22, department of Mathematical Sciences, faculty of sciences, Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Johor, Malaysia. November.2014.
- 2nd International Mathematics in Industry Study Group Malaysia (MISG-2014) Held Between Mar.17- 21,2014, at Sultan Ibrahim Chancellery Building Universiti Teknologi Malaysia, 81310 UTM Johor Bahru, Joho r, Malaysia

### Funding and academic awards

2014 Malaysian Mathematical Sciences Society (PERSAMA) Award Research Paper Category, "Computation of Lyapunov quantities of homogeneous quartic polynomial system", MATEMATIKA 29, 73-83. (with Zainal Abdul Aziz)

### **Professional memberships**

- Kurdish Mathematics Society.
- Unite teacher in Kurdistan

### **Professional Social Network Accounts:**

https://scholar.google.com/citations?hl=ar&user=HDXlc\_0AAAAJ&view\_op=list\_works&gmla=AJsN-F70nMW25Vr7amUXHiWLEIWDa3YV3qQoTBB-

<u>bzaesdpWGpUhUdV9\_ZzmWZnr3Aw227ZuSuGG31IFm9YNVYIcWdYjhkiCiPxvqN4b6OOdj4YUeW8XtXgUrcjMnKNGRDarbT5lfqVAz7QXPzK\_a-9EcLV1JkjYmw</u>

https://www.researchgate.net/profile/Hero Waisi

https://orcid.org/my-orcid?orcid=0000-0003-1680-1681 https://academics.su.edu.krd/hero.salih It is also recommended to create an academic cover letter for your CV, for further information about the cover letter, please visit below link:

https://career-advice.jobs.ac.uk/cv-and-cover-letter-advice/academic-cover-letter/