Ahmed Mohamed Yousef, Ph.D.

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Employment History

2024 – ····   🔖 **Professor,** Mathematics Department, Faculty of Science, South Valley University, Qena-Egypt.

2019 – 2024   🔖 **Associate Professor,** Mathematics Department, Faculty of Science, South Valley University, Qena-Egypt.

2013 – 2019   🔖 **Assistant Professor,** Mathematics Department, Faculty of Science, South Valley University, Qena-Egypt.

2008 – 2013   🔖 **Lecturer,** Mathematics Department, Faculty of Science, South Valley University, Qena-Egypt.

Education

2009 – 2013   🔖 **Ph.D. Pure Mathematics, South Valley University**.
Thesis title: *On Some Special Functions in means of fractional calculus.*

2003 – 2008   🔖 **M.Sc. Pure Mathematics, South Valley University**
Thesis title: *On Some Properties of Fractional Order Derivatives For Some Special Functions.*

2003   🔖 **B. Sc. Mathematics, Faculty of Science, South Valley University, Egypt**.

Research Publications

Journal Articles

1. **Yousef, AM**, S. R.-J. Jang, and A. Elsadany, "Dynamic complexity of a nicholson–bailey bioeconomic model with holling type-ii functional response," *International Journal of Bifurcation and Chaos*, p. 2 450 074, 2024.

2. S. R. Jang and **Yousef, Ahmed M**, "Effects of prey refuge and predator cooperation on a predator–prey system," *Journal of Biological Dynamics*, vol. 17, no. 1, p. 2 242 372, 2023.

3. **Yousef, Ahmed M**, S. Z. Rida, and S. Arafat, "Analytical bifurcation behaviors of a host–parasitoid model with holling type iii functional response," *Journal of the Egyptian Mathematical Society*, vol. 31, no. 1, pp. 1–22, 2023.

4. **Yousef, Ahmed M**, S. Z. Rida, S. Arafat, and S. R.-J. Jang, "Stability, bifurcation analysis, and chaos control of a discrete bioeconomic model," *Mathematical Methods in the Applied Sciences*, vol. 46, no. 3, pp. 3204–3222, 2023.

5. **Yousef, AM**, A. M. Algelany, and A. Elsadany, "Codimension one and codimension two bifurcations in a discrete kolmogorov type predator–prey model," *Journal of Computational and Applied Mathematics*, vol. 428, p. 115 171, 2023.

6. **Yousef, AM**, S. Rida, H. Ali, and A. Zaki, "Stability, co-dimension two bifurcations and chaos control of a host-parasitoid model with mutual interference," *Chaos, Solitons & Fractals*, vol. 166, p. 112 923, 2023.

7. A. M. Aly, **Yousef, AM**, and N. Alsedais, "Mhd double diffusion of a nanofluid within a porous annulus using a time fractional derivative of the isph method," *International Journal of Modern Physics C*, vol. 33, no. 04, p. 2 250 056, 2022.

8. S. Salman, **Yousef, AM**, and A. Elsadany, "Dynamic behavior and bifurcation analysis of a deterministic and stochastic coupled logistic map system," *International Journal of Dynamics and Control*, pp. 1–17, 2022.

9. Q. Din, **Yousef, AM**, and A. Elsadany, "Stability and bifurcation analysis of a discrete singular bioeconomic system," *Discrete Dynamics in Nature and Society*, vol. 2021, pp. 1–22, 2021.

10. **Yousef, AM**, S. Rida, and S. Arafat, "Stability, analytic bifurcation structure and chaos control in a mutual interference host-parasitoid model," *International Journal of Bifurcation and Chaos*, vol. 30, no. 15, p. 2 050 237, 2020.

11. C.-H. Li and **Yousef, AM**, "Bifurcation analysis of a network-based sir epidemic model with saturated treatment function," *Chaos: An Interdisciplinary Journal of Nonlinear Science*, vol. 29, no. 3, 2019.

12. **Yousef, AM**, "Stability and further analytical bifurcation behaviors of moran–ricker model with delayed density dependent birth rate regulation," *Journal of Computational and Applied Mathematics*, vol. 355, pp. 143–161, 2019.

13. A. Elsadany, **Yousef, AM**, and A. Elsonbaty, "Further analytical bifurcation analysis and applications of coupled logistic maps," *Applied Mathematics and Computation*, vol. 338, pp. 314–336, 2018.

14. **Yousef, AM**, S. Salman, and A. Elsadany, "Stability and bifurcation analysis of a delayed discrete predator–prey model," *International Journal of Bifurcation and Chaos*, vol. 28, no. 09, p. 1 850 116, 2018.

15. S. Salman and **Yousef, AM**, "On a fractional-order model for hbv infection with cure of infected cells," *Journal of the Egyptian Mathematical Society*, vol. 25, no. 4, pp. 445–451, 2017.

16. S. Salman, **Yousef, AM**, and A. Elsadany, "Stability, bifurcation analysis and chaos control of a discrete predator-prey system with square root functional response," *Chaos, Solitons & Fractals*, vol. 93, pp. 20–31, 2016.

17. **Yousef, AM**, H. Ibrahim, and S. Rida, "Solutions for the fractional differential coupled sine-gordon equation with homotopy analysis method and the modified decomposition method," *Journal of Progressive Research in Mathematics*, vol. 6, no. 4, pp. 831–841, 2016.

18. **Yousef, AM** and S. Salman, "Backward bifurcation in a fractional-order sirs epidemic model with a nonlinear incidence rate," *International journal of nonlinear sciences and numerical simulation*, vol. 17, no. 7-8, pp. 401–412, 2016.

19. **Yousef, AM**, S. Rida, and H. Ibrahim, "Approximate solution of fractional-order nonlinear sine-gordon equation," *Elixir International Journal*, vol. 82, pp. 32 549–32 553, 2015.

20. S. Rida and **Yousef, AM**, "On the fractional order rodrigues formula for the legendre polynomials," *Advanced and applications in mathematical science*, vol. 10, pp. 509–518, 2011.

Conference Proceedings

1. A. El-Sayed, S. Rida, and **Yousef, AM**, "*On the fractional order Rodrigues formula for the Laguerre polynomial of Erdèlyi-Kober type,*" in *Proceedings of the 2nd International Conference on Mathematics and Information Sciences*, Sohag, Egypt, 2011.

2. A. El-Sayed, S. Rida, and **Yousef, AM**, "*On the nonorthogonality of the perturbed Legendre polynomials,*" in *Proceedings of Al-Azhar international scientific conference*, Cairo, Egypt, 2008.

Books and Chapters

1 **Yousef, AM**, A. Elsonbaty, E. A. Hagras, and A. Elsadany, "Chaos-based gary image encryption using two coupled competition type maps," in Springer, 2020, pp. 159–185.

Skills

Languages	▌	Strong reading, writing and speaking competencies for English, Arabic.
Coding	▌	MATLAB, WOLFRAM MATHEMATICA
Misc.	▌	Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

Miscellaneous Experience

Awards and Achievements

2015	▌	**South Valley University award for scientific publishing**.
2016	▌	**South Valley University award for scientific publishing**.
2017	▌	**South Valley University award for scientific publishing**.
2018	▌	**South Valley University award for scientific publishing**.
2019	▌	**South Valley University award for scientific publishing**.
2020	▌	**South Valley University award for scientific publishing**.
2021	▌	**South Valley University award for scientific publishing**.
2022	▌	**South Valley University award for scientific publishing**.
2023	▌	**South Valley University award for scientific publishing**.

References

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Suez Canal University,
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