

# Curriculum Vitae

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## Mohammed O. Al-Amr

Assistant Lecturer & PhD Candidate in Mathematics, University of Mosul

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### PERSONAL DATA

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Full Name: Mohammed Omar Shaaban Al-Amr  
Birth: January 29, 1986 in Mosul, Iraq  
Current Position: Assistant Lecturer - PhD Student  
Work Address: Department of Mathematics, College of Computer Sciences and Mathematics, University of Mosul, Mosul 41002, Iraq.  
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H-index: Google Scholar: 7 | Scopus: 4  
Citations: Google Scholar: 162 | Scopus: 64  
ResearchGate Score: 16.61  
Publons: 64 Verified Peer Reviews  
Academic Profiles: <https://orcid.org/0000-0002-7885-9371>  
[https://www.researchgate.net/profile/Mohammed\\_Al-Amr2](https://www.researchgate.net/profile/Mohammed_Al-Amr2)  
<https://publons.com/author/1333449/mohammed-o-al-amr>  
<https://scholar.google.com/citations?user=LjnPdGgAAAAJ&hl=en>  
<https://www.scopus.com/authid/detail.uri?authorId=56009938400>

### EDUCATION

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Oct. 2010 - Feb. 2013 M.Sc. in Applied Mathematics, University of Mosul, Iraq.  
Thesis: *On the Numerical Solution of Reaction-Diffusion System with Fast Reversible Reaction.*  
Total Average: 90.472%

Sept. 2003 - July 2007 B.Sc. in Mathematics, University of Mosul, Iraq.  
Project: *Finite Difference Methods for Solving Heat Equation.*  
Average Mark: 88.71%  
Rank: (1) out of (58) students.

### WORK EXPERIENCE

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July 2008 - July 2012 Assistant Researcher, Department of Mathematics, College of Computer Sciences and Mathematics, University of Mosul.

Aug. 2008 - Oct. 2010 Secretary, Al-Rafidain Journal of Computer Sciences and Mathematics, University of Mosul.

- July 2012 - Feb. 2013     Researcher, Department of Mathematics, College of Computer Sciences and Mathematics, University of Mosul.
- Feb. 2013 - Present        Assistant Lecturer, Department of Mathematics, College of Computer Sciences and Mathematics, University of Mosul.
- Nov. 2013 - Mar. 2014    Administrative Assistant, Planning and Informatics Unit, College of Computer Sciences and Mathematics, University of Mosul.

## TEACHING EXPERIENCE

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### ✚ UNDERGRADUATE LEVEL

- Taught undergraduate courses in Mathematics and Computer Science as an *Assistant Lecturer* at the University of Mosul. (2013-present):  
*Calculus, Microsoft Word, Numerical Analysis (Laboratory), Programming (Laboratory), Computer Mathematics (Laboratory), Mathematical Modelling (Laboratory).*

## RESEARCH INTERESTS

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Numerical Analysis, Traveling Wave Analysis, Solitons, Partial Differential Equations, Fractional Differential Equations, Semi-Analytical Methods.

## SEMINAR PRESENTATIONS

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- May 2012                      *"A New Application of He's Variational Iteration Method for Reaction-Diffusion System with Fast Reversible Reaction by Using Adomian's Polynomials"*, College of Computer Sciences and Mathematics, University of Mosul.

## CONFERENCES

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- February 11-12, 2018      *"Approximate solution of the Kersten-Krasil'shchik coupled KdV-mKdV system via reduced differential transform method"*, National Conference on Pure and Applied Mathematics and Mathematics Education (NCPAME-2018), Ishik University, Erbil, Kurdistan, Iraq.
- March 28-29, 2018         *"Exact solutions of A Family of Higher-Dimensional Space-Time Fractional Kdv-Type Equations"*, 2nd International Conference on Computer Science and Information Technology (COMIT 2018), Dubai, UAE.
- April 5-7, 2018             *"New Exact Solutions of the (2+1)-Dimensional Date-Jimbo-Kashiwara-Miwa Equation"*, 2<sup>nd</sup> International Conference on Mathematics, and Applications (ICMA18), MUST University, Cairo, Egypt.
- April 5-7, 2018             *"First integral and modified simple equation methods via new solitons in chiral nonlinear Schrodinger equations and optical metamaterials"*, 2<sup>nd</sup>

April 20-22, 2018 “Solution of the coupled Boussinesq–Burger’s equations by reduced differential transform method”, 15th International Conference on Informatics and Information Technologies (CIIT), Faculty of Computer Science and Engineering, Ss Cyril and Methodius University, Skopje, Macedonia.

## RESEARCH PAPERS

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1. A.J. Al-Sawoor and M.O. Al-Amr, *Numerical Solution of a Reaction-Diffusion System with Fast Reversible Reaction by Using Adomian’s Decomposition Method and He’s Variational Iteration Method*, Al-Rafidain J. Comput. Sci. Math. (2012), Vol. 9, No. 2, pp. 243-257.
2. A.J. Al-Sawoor and M.O. Al-Amr, *Fourier Stability Analysis of Two Finite Element Schemes for Reaction-Diffusion System with Fast Reversible Reaction*, Al-Rafidain J. Comput. Sci. Math. (2013), Vol. 10, No. 3, pp. 117-128.
3. A.M. Al-Rozbayani and M.O. Al-Amr, *Discrete Adomian Decomposition Method for Solving Burger’s–Huxley Equation*, Int. J. Contemp. Math. Sciences (2013), Vol. 8, No. 13, pp. 623-631.
4. M.O. Al-Amr, *New Applications of Reduced Differential Transform Method*, Alexandria Eng. J. (2014), Vol. 53, No. 1, pp. 243–247.
5. A.J. Al-Sawoor and M.O. Al-Amr, *A New Modification of Variational Iteration Method for Solving Reaction-Diffusion System with Fast Reversible Reaction*, J. Egyptian Math. Soc. (2014), Vol. 22, No. 3, pp. 396–401.
6. M.O. Al-Amr, *Exact solutions of the generalized (2+1)-dimensional nonlinear evolution equations via the modified simple equation method*, Comput. Math. Appl. (2015), Vol. 69, No. 5, pp. 390–397. [IF: 1.398](#)
7. M.O. Al-Amr, S. El-Ganaini, *New exact traveling wave solutions of the (4+1)-dimensional Fokas equation*, Comput. Math. Appl. (2017), Vol. 74, No. 6, pp. 1274-1287. [IF: 1.531](#)
8. M.O. Al-Amr, *Exact Solutions of a Family of Higher-Dimensional Space-Time Fractional KdV-Type Equations*, Computer Science & Information Technology (2018), Vol. 8, No. 6, pp. 131-141.
9. A.F. Qasim, M.O. Al-Amr, *Approximate Solution of the Kersten-Krasil’shchik Coupled KdV-MKdV System via Reduced Differential Transform Method*, Eurasian Journal of Science & Engineering (2018), Vol. 4, No. 2, pp. 1-9.
10. M.O. Al-Amr, *Solution of the coupled Boussinesq–Burger’s equations by reduced differential transform method*, Proceedings of 15th International Conference on Informatics and Information Technologies (CIIT), Faculty of Computer Science and Engineering, Ss Cyril and Methodius University, Skopje, Macedonia (2018) 83-87.
11. A. Biswas, M.O. Al-Amr, H. Rezazadeh, M. Mirzazadeh, M. Eslami, Q. Zhou, S.P. Moshokoa, Milivoj Belic, *Resonant Optical Solitons with Dual-Power Law Nonlinearity and Fractional Temporal Evolution*, Optik (2018), Vol. 165, pp. 233–239. [IF: 1.191](#)

12. S. El-Ganaini, M.O. Al-Amr, New abundant wave solutions of the conformable space-time fractional (4+1)-dimensional Fokas equation in water waves, *Comput. Math. Appl.* (2019), InPress. [IF: 2.811](#)

## SCIENTIFIC ASSOCIATIONS MEMBERSHIP

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- Iraqi Al-Khawarizmi Association
- International Association of Engineers (IAENG):
  - The IAENG Society of Computer Science
  - The IAENG Society of Operations Research
  - The IAENG Society of Scientific Computing
- International Association of Mathematical Physics (IAMP)
- International Society of Difference Equations (ISDE)
- International Association for Engineering & Technology (IAET)
- Athens Institute for Education and Research (ATINER)
- World Association for Scientific Research and Technical Innovation (WASRTI)
- Scientific and Technical Research Association (STRA)
- International Academy of Science and Engineering for Development (IASSED)
- Academic Research and Solutions Sociedad Limitada (ARS)

## REFEREE EXPERIENCE

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### A. Journals:

- Computers and Mathematics with Applications - Outstanding Reviewer
- Walailak Journal of Science and Technology (WJST)
- Applied Mathematics and Computation
- Scientia Iranica
- Mathematical Methods in the Applied Sciences
- SN Applied Sciences
- Iranian Journal of Numerical Analysis and Optimization
- Computer Modeling in Engineering & Sciences
- African Journal of Mathematics and Computer Science Research (AJMCSR)
- International Journal of Dynamical Systems and Differential Equations (IJDSDE)
- Communications in Numerical Analysis
- Science Journal of University of Zakho
- Applied Mathematics and Nonlinear Sciences
- Baghdad Science Journal
- ZANCO Journal of Pure and Applied Sciences
- American Journal of Applied Mathematics and Statistics (AJAMS)
- Advances in Differential Equations and Control Processes

### B. Book Chapters:

- IntechOpen
- Taylor & Francis Group

### A. Journal Citations:

- Journal of the Egyptian Mathematical Society
- Optik - International Journal for Light and Electron Optics
- Kuwait Journal of Science
- Computers and Mathematics with Applications
- Applied Mathematical Sciences
- Scientific Research and Essays
- American Journal of Applied Sciences
- Science International (Lahore)
- British Journal of Mathematics & Computer Science
- International Journal of Sciences: Basic and Applied Research (IJSBAR)
- Journal of Applied Mathematics, Statistics and Informatics (JAMSI)
- Alexandria Engineering Journal (AEJ)
- Journal of Mathematics and Statistics
- Selçuk Journal of Applied Mathematics
- International Journal of Mathematical Engineering and Science (IJMES)
- Journal of Applied Environmental and Biological Sciences
- International Journal of Physical Research
- Journal of Computational and Theoretical Nanoscience
- Mathematical Sciences Letters
- SeMA Journal
- Pakistan Journal of Science
- World Applied Sciences Journal
- Journal of Mathematics and System Science
- Applied and Computational Mathematics
- Global Journal of Pure and Applied Mathematics
- International Journal of Computational Methods
- Journal of the Brazilian Society of Mechanical Sciences and Engineering
- Journal of Nonlinear Sciences and Applications
- Optical and Quantum Electronics
- Advanced Studies in Theoretical Physics
- Mathematical Problems in Engineering
- Scientia Iranica
- International Journal of Multidisciplinary Educational Research
- International Journal of Applied and Computational Mathematics
- Iranian Journal of Science and Technology: Transactions of Mechanical Engineering
- Mathematical Methods in the Applied Sciences
- Results in Physics
- Journal of Taibah University for Science
- Pramana - Journal of Physics
- Journal of Mathematical Physics
- Nonlinear Dynamics
- Journal of Low Frequency Noise, Vibration and Active Control
- Journal of Ocean Engineering and Science
- Eurasian Journal of Science & Engineering
- European Physical Journal Plus
- Open Physics

- AUT Journal of Mechanical Engineering
- Sigma Journal of Engineering and Natural Sciences
- Eurasian Journal of Science & Engineering
- SN Applied Sciences
- International Journal of Mathematics and Computer Science
- Applied Mathematics and Nonlinear Sciences
- Chinese Journal of Physics
- Applied Physics B
- China Ocean Engineering
- Waves in Random and Complex Media
- Modern Physics Letters B
- Mathematics (MDPI)

## B. Conference Proceeding Citations

- Proceedings of the UGC-Sponsored Two-Day National Seminar on Recent Developments in Functional Analysis, Topology and Graph Theory, The M.D.T. Hindu College, Tirunelveli 26th & 27th March 2015, p 33-40.
- The Third International Conference on Computational Mathematics and Engineering Sciences (CMES2018), ITM Web Conf., Volume 22, Article Number 01065, 2018.

## C. Book Citations

- M. Hatami, D.D. Ganji and M. Sheikholeslami, Differential Transformation Method for Mechanical Engineering Problems, Academic Press, Elsevier, 2017.
- F. Zhang, Y. Shi, K. Wu, J. Li and W. Li, Atmospheric Radiative Transfer Parameterizations, IntechOpen, 2019, DOI: 10.5772/intechopen.82122.
- H. Singh, D. Kumar, D. Baleanu, Methods of Mathematical Modelling: Fractional Differential Equations, 1<sup>st</sup> Ed., CRC Press, 2019.

## D. Thesis Citations

- G. Makanda, Numerical Study of Convective Fluid Flow in Porous and Non-porous Media, Ph.D. Thesis, School of Mathematics, Statistics and Computer Science University of KwaZulu-Natal, Pietermaritzburg, 2015.
- M.K. Vanhari, Static Analysis of Functionally Graded Euler–Bernoulli Beam in Nonlinear Elastic Foundation by Modified Couple Stress Theory, M.Sc Thesis on Solid Mechanics, Faculty of Mechanical Engineering, Khomeinishahr Branch, Islamic Azad University, 2015 (In Persian).
- R.S. Muhammad, Computational Methods for Solving Coupled Hirota system, M.Sc. Thesis, College of Science, Salahaddin University-Erbil, 2015.
- A. Girgin, Solution Methods Of The Nonlinear Conformable Fractional Partial Differential Equations, M.Sc Thesis, Institute Of Science, Pamukkale University, 2019 (In Turkish).

## OTHER SKILLS AND ABILITIES

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- Languages: Arabic (Mother tongue) and English (ITP TOEFL 497).
- IT: Windows, Microsoft Office, MATLAB and MAPLE.
- Basic First Aid.

*Last update: February 2020*