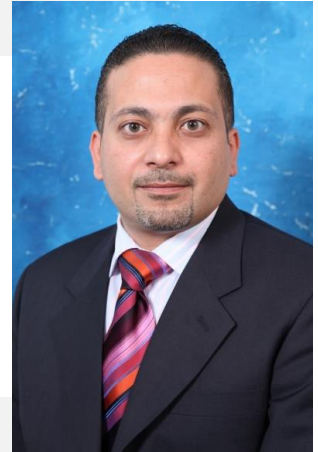


# Curriculum Vitae

## 1. PERSONAL INFORMATION

- Name in full: Safwan Mohammad Ahmed Al-Shara'.
- Sex: Male.
- Date of Birth: October 11, 1973.
- Place of Birth: Irbid/Jordan.
- Nationality: Jordanian.
- Marital Status: Married and four children.



## 2. CURRENT PROFESSIONAL POSITION

- Associate Professor, Chairman, Department of Mathematics, Al al-Bayt University , Mafraq – Jordan .

## 3. OFFICIAL ADDRESS

- Dept. Of Mathematics , Al al-Bayt , Mafraq – Jordan, P.O. Box: 130095, Mafraq - Jordan.
- Phone: (00962)-2-6297000 Ext. 2201 (Office)
- E-mail: [smslara@aabu.edu.jo](mailto:smslara@aabu.edu.jo) , [smath973@yahoo.com](mailto:smath973@yahoo.com)
- Mobile: (+962)-776709462.

## 4. ACADEMIC QUALIFICATIONS

- Ph. D., 2006, Department of Mathematics, Jordan University, Amman, Jordan.
  - Degree Specialization: Applied Mathematics (Fractional Calculus).
  - Title of Ph. D. Dissertation: "Numerical Methods for Solving Fractional Differential Equations".
  - Thesis advisor: Prof. Nabil T. Shawagfeh.
- M. Sc., 1998, Department of Mathematics, Yarmouk University, Irbid, Jordan.
  - Degree Specialization: Numerical Analysis.
  - Title of M. Sc. Dissertation: "Numerical Method for Solving Burger's Equation Using the Continuation Method".
  - Thesis advisor: Prof. Muhammad Syam.

- B. Sc., 1995, Department of Mathematics, Yarmouk University, Irbid, Jordan.

## 5. LANGUAGE

Arabic (Native) and English.

## 6. EMPLOYMENT

- 13/9/2020 – present , Chairman of Mathematics Department, Al al-Bayt University , Al Mafraq – Jordan .
- 27/7/2015 – Present , Associate Professor, Al al-Bayt University , Al Mafraq – Jordan .
- 18/5/2009 – 26/7/2015 , Assistant Professor, Al al-Bayt University , Al Mafraq – Jordan .
- 2008 – 2009 , Chairman of Mathematics and Computer Science Department, Tafila Technical University , Al Tafila – Jordan .
- September 2007 – 2008, Assistant Professor, Department of Mathematics and Computer Science, Tafila Technical University , Al Tafila – Jordan .
- August 2006 – August 2007, Assistant Professor, Department of Mathematics, Al-Zaytoonah University of Jordan, Amman – Jordan.
- September 1999 – August 2006, Teaching Assistant, Department of Mathematics, Al-Zaytoonah University of Jordan, Amman – Jordan.
- August 1995 – August 1999, Teacher at the Ministry of Education, Jordan.

## 7. FIELD OF SPECIALIZATION AND AREAS OF RESEARCH INTEREST

Numerical Analysis, Fractional Calculus, Ordinary differential equation, Partial Differential Equations, Integral equations, Integro-differential equations, Continuation Methods, Soliton Theory, Mathematical physics, Analysis of PDEs and FPD.

My future research plans are to develop models and tools in the area of integrable systems. It is to find powerful and direct methods to the search of explicit solutions to nonlinear partial differential equations and fractional differential equations including exact wave and soliton solutions.

I am professional in programming and teaching the software MATLAB and I use it in my research and for teaching applied courses and mathematics for engineering with applications.

## **8. COURSES TAUGHT AT UNIVERSITY LEVEL**

1. Calculus I, Calculus II & Calculus III.
2. Linear Algebra.
3. Numerical Analysis I & Numerical Analysis II.
4. Calculus of Variations.
5. Numerical Techniques.
6. Engineering Mathematics.
7. Applied Mathematics.
8. Partial Differential Equations.
9. Special Topics in Mathematics.
10. Statistics and Probability theory.
11. Biostatistics.
12. Logic and Set theory.
13. Ordinary Differential Equations I & II.
14. Mathematical Methods.
15. Linear Programming and Game theory.
16. Mathematical Modeling.
17. Computer Applications in Mathematics (MATLAB).
18. Advanced Ordinary Differential Equations.
19. Advanced Mathematical Methods.

## **9. COMPUTER SKILLS**

- E-Learning: Google Classroom, Moodle.
- Mathematical Software: Matlab, Maple, Mathematica.
- Operating System: Microsoft Windows 2003/XP.
- General Applications: Microsoft office (MS Word, Excel, PowerPoint, and Access).
- Typesetting Software: Latex, Scientific Workplace.
- Language programming: Basic, Fortran, Pascal, Visual Basic.

## 10. LIST OF PUBLISHED AND ACCEPTED PAPERS

#	Title	Journal	Vol., pp. & Year
<u>1</u>	Existence and continuous dependence of mild solutions for impulsive fractional integrodifferential equations in Banach spaces	Computational and Applied Mathematics	39 (4), 1-17, Oct. 2020
<u>2</u>	The Modified Fractional Power Series For Solving A Class Of Fractional Sturm-Liouville Eigenvalue Problems	Journal of Fractional Calculus and Applications	Vol. 10(1), pp. 154-166. Jan. 2019
<u>3</u>	A new two-mode coupled Burgers equation: conditions for multiple kink solution and singular kink solution to exist	Ain Shams Engineering Journal	Vol. 9, Issue 4, pp 3239-3244, Dec. 2018
<u>4</u>	An accurate method for solving singular second-order fractional Emden-Fowler problem	Advances in Difference Equations	2018 (1), 30
<u>5</u>	New Solitary Wave and Multiple Soliton Solutions for the Time-Space Coupled Fractional mKdV System with Time-Dependent Coefficients	Journal of Computational and Theoretical Nanoscience	Vol. 13, 1–8, 2016
<u>6</u>	Analytical Solution of Time-Fractional Drinfeld-Sokolov-Wilson System Using Residual Power Series Method	IAENG International Journal of Applied Mathematics	vol. 46, no.1, pp 64-70, 2016
<u>7</u>	A new simplified bilinear method for the N-soliton solutions for a generalized FmKdV equation with variable coefficients	International Journal of Nonlinear Sciences and Numerical Simulation	Vol. 16 (6), pp. 259-269, 2015
<u>8</u>	Kink, singular soliton and periodic solutions to class of nonlinear equations	Applications and Applied Mathematics	Vol. 10, Issue 1, pp. 212 – 222, 2015.
<u>9</u>	Controllable dynamical behaviors and the analysis of fractal Burgers hierarchy with the full effects of inhomogeneities of media	Romanian Journal of Physics	Vol. 60 No. 3-4, pp. 324-343, 2015
<u>10</u>	Fractional transformation method for constructing solitary wave solutions to some nonlinear fractional partial differential equations	Applied Mathematical Sciences	Vol. 8, no. 116, pp.5751 - 5762, 2014
<u>11</u>	Symbolic Computation on Soliton Solutions for Variable-coefficient Quantum Zakharov-	International Journal of	Vol. 15(1), pp. 35-45, 2014

	Kuznetsov Equation in Magnetized Dense Plasmas	Nonlinear Sciences and Numerical Simulation	
<u>12</u>	Toward a new algorithm for systems of fractional differential -algebraic equations.	Italian Journal of Pure and Applied Mathematics	Vol.32, pp. 579-594,2014
<u>13</u>	The multi-step homotopy analysis method: A powerful scheme for handling non-linear oscillators	Iranian Journal of Science & Technology	Vol. 37 , pp. 421-429, 2013
<u>14</u>	Automatic Iterative Methods for the Multivariate Solution of Nonlinear Algebraic Equations	World Academy of Science, Engineering and Technology	Index 75, Vol. 7(3), pp. 172 - 174,2013
<u>15</u>	Applications of a simplified bilinear method to ion-acoustic solitary waves in plasma.	European Physical Journal D	Vol. 66, no. 40, pp. 1-8, 2012
<u>16</u>	Variable coefficient equations of the Kadomtsev-Petviashvili hierarchy: multiple soliton solutions and singular multiple soliton solutions.	Physica Scripta <u>this paper has been selected by the editors of Physica Scripta for inclusion in the exclusive 'Highlights of 2012' collection.</u>	Vol. 85, pp. 1- 7, 2012
<u>17</u>	Solution of Time-Independent Schrödinger Equation for a Two-Dimensional Quantum Harmonic Oscillator Using He's Homotopy Perturbation Method.	Journal of Mathematics Research, Canadian Center Of Science and Education	Vol. 3 , No. 2, May 2011
<u>18</u>	An Automatic Scheme on the Homotopy Analysis Method for Solving Nonlinear Algebraic Equations	Italian Journal of Pure and Applied Mathematics	Vol. 32, pp. 1- 10, 2011
<u>19</u>	A Numerical Method for solving Nonlinear Integral Equations	International Mathematical Forum	Vol. 4, no. 17, pp. 805-817, 2009
<u>20</u>	Analytic Solution Of Multi – Pantograph Equation	Journal of Applied Mathematics and Decision Sciences	Vol. 2008 , pp. 1-10, 2008
<u>21</u>	Numerical solution of Linear Integro- Differential Equations	Journal of Mathematics and Statistics	Vol. 4 , pp. 250-254, 2008
<u>22</u>	Collocation-Continuation Technique for solving NonLinear Ordinary Boundary Value Problems	Computer and Mathematics with Applications	Vol. 37(10), pp. 11-17, 1999

## 11. TRAINING COURSES AND WORKSHOPS

- Effective University Teaching Methods, Al al-Bayt University, Al-Mafraq, 12/12/2020 , (3 hours, Zoom).
- Preparing Tests and Evaluating Student Learning, Al al-Bayt University, Al-Mafraq, 13/12/2020 , (3 hours, Zoom).
- The Ethics of University Education and Scientific Research, Al al-Bayt University, Al-Mafraq, 14/12/2020 , (3 hours, Zoom).
- University Laws, Regulations and Instructions, Al al-Bayt University, Al-Mafraq, 15/12/2020 , (3 hours, Zoom).
- Description Of Academic Programs And Courses, Al al-Bayt University, Al-Mafraq, 20/12/2020 , (3 hours, Zoom).

## 12. LIST OF CONFERENCES ATTENDED

- \* Numerical solution of linear two-boundary value problems using Legendre polynomials, **The Third International Conference on Mathematical Sciences – ICM 2008**, United Arab Emirates, Al – Ain, 3 – 6 March 2008.
- \* Analysis of a coupled Burgers Equation with the full effects of inhomogeneities of media , **International Conference on Mathematics and Engineering – ICOME 2017** , May 10 – 12 , 2017, YTU, Istanbul, Turkey.

## 13. REVIEWS

- Reviewer of **Annulus criteria for oscillation second order elliptic equations** , May 2008. Journal of Computational and Applied Mathematics.
- Reviewer of **An Estimate of the upper bound for the distance between adjacent zeros of solutions of delay differential equations**, Dec. 2008, Journal of Computational and Applied Mathematics.
- Reviewer of **Effects of Additional Food to Predator-prey Systems with Monotonic and Non-monotonic Functional Response: A Comparative Study**, August, 2011, Science Journal of Mathematics and Statistics.
- Reviewer of **The approximate solution of Mathieu fractional equation by using generalized differential transform method (GDTM)** , Sep. 2011, Applications and Applied Mathematics: An International Journal (AAM).

- Reviewer of **New explicit solutions for homogeneous KdV equations of third order by trigonometric and hyperbolic function methods**, Oct. 2011, Applications and Applied Mathematics: An International Journal (AAM).
- Reviewer of **(3+1)-dimensional nonplanar KdV equation for quantum electron-positron-ion plasma**, June, 2014 , Physica Scripta.
- Reviewer of **Numerical Solutions for Space-Time Fractional Burgers and Time-Fractional Cahn-Allen Equations Using the FRDTM**, Aug. 2015, Applied Mathematics & Information Sciences (AMIS).

#### 14. ACADEMIC ACTIVITIES

- Supervisor for M.Sc. student:
  - Duaa Shdaifat, Al al-Bayt University.
  - Wessam Al-Msaeed, Al al-Bayt University.
- Co-Supervisor for M.Sc. student:
  - Mazen Al Jazazi, **Analytical Series Solutions of Two- Point, Second Order Fuzzy Boundary Value Problems**, Al al-Bayt University, December, 2015.
  
- Member in the examining committee for a number of M. Sc. students:
  - ❖ Roba H. Al-Omari, **Soliton Solutions to Systems of Nonlinear Partial Differential Equations Using Trigonometric-Function Method**, Jordan University Of Science and Technology, July, 2011.
  - ❖ Hasan Hussien Hasan, **New Solutions to Nonlinear Partial Differential Equations Using Rational Sine-Cosine Function Method**, Jordan University Of Science and Technology, November, 2011.
  - ❖ Khaled M. Bani Khaled, **A study on Hopf Bifurcation**, Al al-Bayt University, March, 2012.
  - ❖ Ahmad A. Hamadneh, **On a study of some Difference Equations**, Al al-Bayt University, December, 2012.
  - ❖ Teber M. Ali, **Soliton Solutions of Integrable Systems and Hirota's Bilinear Method**, Al al-Bayt University, 2013.

- ❖ Ghada M. Al-Smadi, **Finding Approximate and Exact Solutions for Linear and Nonlinear Partial Differential Equations Using the Reduced Differential Transform Method (RDTM) in Different Dimensions**, Jordan University Of Science and Technology, December, 2013.
- ❖ Rawan B. Mustafa, **Analytical Approximate Solutions of Systems of Fractional Algebraic Differential Equations By The Multi-Step Homotopy Analysis Method**, Al al-Bayt University, August, 2014.
- ❖ Mohammad A. Al-harashseh, **An approximate solution for the smallest root of some algebraic equations**, Al al-Bayt University, August, 2020.
- ❖ Maha AL-Mhawesh, **Application of reduced Residual power Series method for solving a System of fractional differential equations**, Al al-Bayt University, August, 2020.
- ❖ Walaa Tanash, **Convergence of Hermite interpolation at zeros of Jacobi nodes of the second kind**, Jordan University Of Science and Technology, December, 2020.

## 15. REFERENCES

- ❖ Dr. Mohammad Sharif Daoud, Al Ain University Of Science and Technology, College of Engineering, Abu-Dhabi, UAE, Phone (+971-55-9850961) , E-mail : [Mohammad.daoud@aau.ac.ae](mailto:Mohammad.daoud@aau.ac.ae) .
- ❖ Prof. Feras Shatat, Emirates College of Technology, Abu Dhabi, Phone (+971-50-7826701) , E-mail : [feras.shatat@ect.ac.ae](mailto:feras.shatat@ect.ac.ae) .
- ❖ Prof. Nabil T. Shawagfeh, Mathematics Department, Faculty of Science, University of Jordan, Amman-Jordan. Phone (+962-6-5355000 Ext.22078).  
E-mail: [shawagnt@ju.edu.jo](mailto:shawagnt@ju.edu.jo) .
- ❖ Prof. Fuad A. Kittaneh, Department of Mathematics, The University of Jordan, Amman, Jordan.  
E-mail: [fkitt@ju.edu.jo](mailto:fkitt@ju.edu.jo)
- ❖ Prof. Khaleel Al Asali, Department of Chemistry, Faculty of Science and Arts, Jordan University of Science and Technology.  
E-mail : [asali@ttu.edu.jo](mailto:asali@ttu.edu.jo)



- ❖ Prof. Abdel Fattah Al-Tamimi, Dean Faculty of Science and Information Technology, Al-Zaytoonah University Of Jordan, Amman, Jordan. phone (+962-6-4291511 ext. 391).  
E-mail: [drtamimi@zuj.edu.jo](mailto:drtamimi@zuj.edu.jo)
- ❖ Prof. Muhammed I. Syam, Department of Mathematical Sciences, United Arab Emirates University, Phone (+971- 03-7136395 ext. 6395). E-mail : [m.syam@uaeu.ac.ae](mailto:m.syam@uaeu.ac.ae)
- ❖ Prof. Eqab Rabei, Vice President, Al al-Bayt University, Mafraq, Jordan. Phone (+ 962-2-6297000 ext. 2165).  
E-mail : [eqabrabei@gmail.com](mailto:eqabrabei@gmail.com)

I hereby declare that the information provided in this C.V. is true complete and correct to the best of my knowledge and belief.

Signature:.....

Date:.....