

**Ministry of Higher Education and Scientific Research**

**University of Basrah -College of Science**

**Mathematics Department.**

## **The curriculum Vitae**

### **Dr. Shatha Ahmed Mahdi Haddad**

**Name:** Dr. Shatha Ahmed Mahdi Haddad

**Country/Place and Date of Birth:** Iraq 21/12/1973

**Sex:** female

**Marital Status:** single

**Place of work:** Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

**Languages proficiency:** Arabic, English

**Personal E-Mail:** [shathahaddad@hotmail.com](mailto:shathahaddad@hotmail.com)

**Contact Mobile:** 009647832015095

**Current Academic Qualification:** Doctor of Philosophy in Mathematics, Department  
Of Mathematical Sciences, Durham University, Durham, UK.

### **Academic Qualifications**

1-B.Sc. degree in Mathematics, Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq, 1996.

2- M.Sc in Mathematics , Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq, 1999.

3- Ph.D. degree in Mathematics, Department of Mathematical Sciences, Durham University, Durham, UK, 2015.

### **Title of Theses**

1- Title of M.Sc. thesis is “Improved Five-Point Formula by using Two-Level weighted differences schemes for solving the One-dimensional heat transfer.”

2- Title of Ph.D. thesis is “Stability Analyses for Porous Convection Including Second Sound Effects.”

## **Research Interests**

I am interested in many areas, such as Ordinary and Partial Differential Equations, Fractional Differential Equations., Numerical Analysis, Stability, Fluid Mechanic, Hydrodynamic stability, Flow in porous media.

## **OTHER SKILLS**

Programming : Latex, Maple software , Origin software.

## **Scientific degrees**

- 1- Assistant lecturer      1999-2009
- 2-Lecture                      2009 –2017
- 3-Assistant professor      2017- until now

## **Academic Positions**

- 1- (1999-2009) Assistant lecturer , Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq .
- 2- (2009- until now ) Lecturer, Department of Mathematics, College of Science, University of Basrah, Basrah, Iraq.

## **Topic in Mathematics and Computer Science Taught**

Calculus, Advance Calculus, Statistics Probability, Topics in General Mathematics, Linear Algebra, Numerical Analysis, Complex Analysis, Applied Mathematics and Partial Differential Equations.

## **Scientific Activity**

### **A-Publications**

- 1- High Order Finite Difference Scheme for One Dimensional Heat Transport Equation at the Microscale. Journal of Basrah Researches (Sciences).vol.33.No.4 (58-69) DEC.(2007).
- 2- Fourth Order Compact Finite Difference Scheme for Two Dimension Schrödinger Equation. Basrah Journal of science .vol 25. No.2 (2007).

- 3- Fourth Order Exponential Compact Alternating Direction Implicit (ADI) Scheme for Solving Three-Dimensional Convection-Diffusion Equations. Basrah Journal of science .
- 4-Porous convection and thermal oscillations. Ricerche di Matematica. 61(2) · November 2012 .
- 5-Thermal Convection in a Cattaneo–Fox Porous Material with Guyer–Krumhansl Effects. Transport in Porous Media 100(3) · December 2013. Transport in Porous Media. 100(3) · December 2013.
- 6-Thermal instability in Brinkman porous media with Cattaneo–Christov heat flux. International Journal of Heat and Mass Transfer 68:659-668 · January 2014.
- 7-Thermal Convection in a Darcy Porous Medium with Anisotropic Spatially Varying Permeability. Acta Applicandae Mathematicae 132(1) · August 2014.
- 8-Mean Square Solutions of Second-Order Random Differential Equations by Using the Differential Transformation Method. Open Journal of Applied Sciences, 6, 287-297. April 2016.
- 9- Cauchy Problem for Fractional Ricatti Differential Equations Type with Alpha Order Caputo Fractional Derivatives. Journal of Progressive Research in Mathematics(JPRM). Volume 7, Issue 2. April 2016.
- 10-Improve the Mean Square Solution of Second-order Random Differential Equations by Using Homotopy Analysis Method. British Journal of Mathematics & Computer Science. 16(5). No.BJMCS.25673. May 2016.
- 11- Restricted fractional differential transform for solving irrational order fractional differential equations. Chaos, Solitons and Fractals. Volume 101 , 81–85. August 2017.
- 12-Thermal Convection in a Rotating Anisotropic Fluid Saturated Darcy Porous Medium. Fluids. August 2017.

## **B- Conference**

I participated in XVII International Conference on Waves and Stability in Continuous Media-WASCOM2013. Levico Terme (Trento, Italy), June 17th-21 st, 2013 .

## **C-Seminars and Supervision of undergraduate students.**