

# Curriculum Vitae

## Saleem Ali Obaidat

**Place and date of birth:** Aqabat Jabr Camp, 04.11.1957

**Nationality:** Jordanian

**Marital status:** Married

**Present rank:** Associate Professor

### **Contact information:**

Postal address: Department of Mathematics, College of Sciences, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia.

E-mail: [saleem@ksu.edu.sa](mailto:saleem@ksu.edu.sa)

Telephone No.: Office **76311**, Mobile: **0538630221**

### **Qualifications**

- (1) Ph.D. in Computational Mathematics, 2005 G  
Institute of Mathematics and Informatics,  
Bulgarian Academy of Sciences, Sofia, Bulgaria.
- (2) M. Sc. in Mathematics (functional analysis), 1983 G  
The University of Jordan, Amman, Jordan.
- (3) B. Sc. in Mathematics, 1980 G  
The University of Jordan, Amman, Jordan.

### **Research interests**

Bivariate polynomial interpolation  
Numerical solutions of PDEs.

### **Employment history**

- (1) Associate Prof. Department of Mathematics, College of Sciences, King Saud University, Riyadh, Saudi Arabia, since 15.10.2012.
- (2) Assistant Prof. Department of Mathematics, College of Sciences, King Saud University, Riyadh, Saudi Arabia, 08.09.2006 – 15.10.2012.

(3) Part time instructor, Department of Mathematics, Applied Sciences University, Amman, Jordan, 01.10.2005--30.06.2006

(4) Part time instructor, Department of Mathematics, the University of Jordan, Amman, Jordan, 25.09.2005--25.10.2006

### **Courses**

Numerical analysis, Linear Algebra, Differential Equations, and Calculus I, II and III.

### **Committees**

- (1) Program coordinator of the B.Sc. program in mathematics, Department of Mathematics, king Saud University.
- (2) Member of the Steering Committee, Department of Mathematics, king Saud University.
- (3) Member of the Accreditation Committee for the B.Sc. program, Department of Mathematics, king Saud University.
- (4) Member of Computational Mathematics Committee, Department of Mathematics, king Saud University.
- (5) Member of Introduction and Conclusion Committee for Renewing the Institutional Accreditation of KSU 1437/1438H
- (6) Member of KSU Board of Assessors.

### **Conferences**

- (1) The seventh meeting of Saudi Association for Mathematical Sciences, April 7-8, 2004. Prince Sultan University, Riyadh, KSA.
- (2) Polynomial Inequalities, September 12-19, 2004, Sozopal, Bulgaria.
- (3) Constructive Theory of Functions, June 1-7, 2005, Varna, Bulgaria.
- (4) Mathematics and its Applications, March 23- 24, 2011, Riyadh, Saudi Arabia.
- (5) First Math-days, December 16-17, 2009, Riyadh, Saudi Arabia.
- (6) Second Math-days, March 14- 15, 2012, Riyadh, Saudi Arabia.

### **Languages**

- 1- Arabic Language (Native)                      2- English Language.

### **Computer backgrounds**

Microsoft Office, Scientific Work Place, Latex, Matlab, Mathematica.

## **Publications** (Research articles)

- (1) On a Bivariate Interpolation Problem, *J. Approx. Theory* 116(2002) 6-99. (Joint with H. Hakopian).
- (2) On Bivariate Polynomial Interpolation, *East J. Approx.* 8(2002) 209-228.
- (3) On Bojanov-Xu Interpolation on Conic sections, *East J. Approx.* 9(2003) 251-267. (Joint with H. Hakopian).
- (4) On recovering of a bivariate polynomial from its Radon projections, *Constructive Theory of Functions*, Varna 2005, (B. Bojanov, Ed.), 127-134, Marin Drinov Academic Publishing House, Sofia, 2006. (Joint with I. Georgieva).
- (5) On Bojanov-Xu bivariate polynomial interpolation, *East J. Approx.* 13(2007) 445-454.
- (6) On L-1 Approximation of continuous functions by means of piecewise-continuous cubics, *International Journal of Applied Mathematics & Engineering Sciences*. Vol.4, 2 (2010) 111-117 (Joint with H. Hamedih and A. Mukheimer)
- (7) On one-dimensional fox-rabies dynamics of advection type, *International Journal of Computer Mathematics*, Vol. 88, 12(2011) 2538 – 2549, (Joint with M. Abo Elrish).
- (8) Soret and dufour effects on the stagnation-point flow of a micropolar fluid toward a stretching sheet, *Journal of Fluids Engineering – Transactions of the ASME*, Vol. 133, 2(2011) 212021- 212029. (Joint with T. Hayat & M. Mustafa).
- (9) Axisymmetric magnetohydrodynamics flow of micopolar fluid between unsteady stretching surfaces, *Applied Mathematics and Mechanics*, Vol. 32, 3(2011) 361-374. (Joint with T. Hayat & M. Nawaz).
- (10) Exact Solutions on MHD Flow Past an Accelerated Porous Plate in a Rotating Frame, *Chinese Physics Letters*, Vol. 28, 5(2011) 54701 –54704 (Joint with: T. Hayat, L.A. Khan, R. Ellahi).
- (11) Simultaneous Effects of MHD and Thermal Radiation on the Mixed Convection Stagnation-Point Flow of a Power-Law Fluid, *Chinese Physics Letters*, Vol. 28, 7(2011) 74702 – 54704. (Joint with T. Hayat, M. Mustafa)
- (12) Steady Flow of Maxwell Fluid with Convective Boundary Conditions, *Zeitschrift fur Naturforschung Section A- A Journal of physical Sciences*, Vol. 66, 6-7(2011) 417- 422. (Joint with T. Hayat, S. A. Shehzad, M. Qasim)
- (13) Group theory transformation for Soret and Dufour effects on free convective heat and mass transfer with thermophoresis and chemical reaction over a porous

- stretching surface in the presence of heat source/sink, *Nuclear Engineering and Design*, Vol. 241, 6(2011) 2155-2161. (Joint with R. Kandasamy, T. Hayat)
- (14) Boundary layer flow of an Oldroyd-B fluid with convective boundary conditions, *Heat Transfer-Asian Research*, Vol. 40, No. 8 (2011) 744-755. (Joint with T. Hayat, Z. Iqbal, and M. Mustafa)
- (15) Stagnation-point flow of a nanofluid towards a stretching sheet, *International Journal of Heat and Mass Transfer*, Vol. 54 No. 25-26 (2011) 5588-5594. (Joint with M. Mustafa, T. Hayat, I. Pop, S. Asghar, S)
- (16) Thermal Radiation Effects on the Mixed Convection Stagnation-Point Flow in a Jeffery Fluid, *Zeitschrift fur Naturforschung Section A-A Journal of Physical Sciences*, Vol. 66, No. 10-11 (2011) 606-614. (Joint with T. Hayat, S. Shehzad, M. Qasim, M)
- (17) Flow of a Second Grade Fluid with Convective Boundary Conditions, *Thermal Science*, Vol. 15, Supplement: 2 (2011) S253-S261. (Joint with T. Hayat, S. Shehzad, M. Qasim ).
- (18) Flow and Heat Transfer due to Stretching Surface in an Anisotropic porous Medium Filled with a Viscoelastic Fluid, *Journal of porous Media*, Vol. 14, No. 6(2011) 523-532. (Joint with T. Hayat, M. Mustafa, I. Pop)
- (19) Series Solution for Rotating Flow of an Upper Convected Maxwell Fluid over a Stretching Sheet, *Communications in Theoretical Physics*, Vol. 56 No. 4(2011) 740-744. (Joint with M. Sajid, Z. Iqbal and T. Hayat)
- (20) Peristaltic Motion with Soret and Dufour Effects, *Magnetohydrodynamics*, Vol. 47, No. 3 (2011) 295-302. (Joint with T.Hayat , F.M.Abbasi)
- (21) Mixed Convection Three-Dimensional Flow of an Upper-Convected Maxwell Fluid Under Magnetic Field, Thermal-Diffusion, and Diffusion-Thermo Effects, *Journal of Heat transfer-Transactions of the ASME*, Vol.134, 4(2012) 44503- 44508. (Joint with T. Hayat &M. Awais)
- (22) Flow and heat transfer with prescribed skin friction in a rotating fluid, *International Journal for Numerical Methods in Fluids*, Vol. 68, 7(2012) 872-886. (Joint with Z. Iqbal, M. Sajid, T. Hayat)
- (23) Steady flow of an Eyring Powell fluid over a moving surface with convective boundary conditions, *International Journal of Heat and Mass Transfer*, Vol. 55, 7-8(2012) 1817-1822. (Joint with T. Hayat, Z. Iqbal, M. Qasim)

- (23) Peristaltic flow of a Williamson fluid in an inclined asymmetric channel with partial slip and heat transfer, *International Journal of Heat and Mass Transfer*, Vol. 55, 7-8(2012) 1855-1862. (Joint with N. S. Akbar, T. Hayat, S. Nadeem)
- (24) Radiative flow of Jeffery fluid in a porous medium with power law heat flux and heat source, *Nuclear Engineering and Design*, Vol. 243, (2012) 15-19. (Joint with T. Hayat, S.A. Shehzad, M. Qasim)
- (25) Homotopy Solution for Stagnation-Point Flow, *Communications in Theoretical Physics*, Vol. 7, 2 (2012) 290-294. (Joint with T. Hayat, A. Rafique, M. Malik, S. Shehzad)
- (26) Three-dimensional flow of a Jeffery fluid over a linearly stretching sheet, *Communications in nonlinear Science and Numerical Simulation*, Vol. 17, 2(2012) 699-707. (Joint with T. Hayat, M. Awais)
- (27) Analytic approximate solutions for steady flow over a rotating disk in porous medium with heat transfer by homotopy analysis method, *Computers & Fluids*, Vol. 54 (2012) 1-9. (Joint with M. Rashidi, S.A. Pour, T. Hayat)
- (28) Flow and Heat Transfer of Jeffrey Fluid Over a Continuously Moving Surface With a Parallel Free Stream, *Journal of Heat transfer-Transactions of the ASME*, Vol. 134, 1(2012) 11701-11707. (Joint with T. Hayat, Z. Iqbal, M. Mustafa)
- (29) Almost periodic solutions for Fox production harvesting model with delay, *Electronic Journal of Qualitative Theory of Differential Equations*, 2012, No. 34. (Joint with J. Alzabut)
- (30) Similar solution for three-dimensional flow in an Oldroyd-B fluid over a stretching surface, *International Journal for Numerical Methods in Fluids*, Vol. 70, No. 7 (2012) 851-859. (Joint with T. Hayat, and M. Awais).
- (31) Axisymmetric magnetohydrodynamic flow of Jeffrey fluid over a rotating disk, *International Journal for Numerical Methods in Fluids*, Vol. 70, No. 6 (2012) 764-774. (Joint with T. Hayat, M. Nawaz, and M. Awais)
- (31) On heat and mass transfer in the unsteady squeezing flow between parallel plates, *Meccanica*, Vol. 47, No. 7 (2012) 1581-1589. (Joint with M. Mustafa and T. Hayat)
- (32) Unsteady Flow of Third Grade Fluid With Soret and Dufour Effects, *Journal of Heat Transfer-Transactions of the ASME*, Vol. 134, No. 6 (2012) . (Joint with T. Hayat, M. Awais, and S. Asghar)
- (33) MHD squeezing flow of second-grade fluid between two parallel disks, *International Journal for Numerical Methods in Fluids*, Vol. 69, No. 2 (2012) 399-410. Joint with T. Hayat, A. Yousaf, and M. Mustafa)

(34) Radiation Effect on the Mixed Convection Flow of a Viscoelastic Fluid Along an Inclined Stretching Sheet, *Zeitschrift fur Naturforschung Section A-A Journal of Physical Sciences*, Vol. 67, No. 3-4 (2012) 195-202. (Joint with M. Qasim and T. Hayat).

(35) Peristaltic flow of a Tangent hyperbolic fluid in an inclined asymmetric channel with slip and heat transfer, *Progress in Computational Fluid Dynamics*, Vol. 12, No. 5 (2012) 363-374. (Joint with N. Akbar, T. Hayat, and S. Nadeem)

(36) Peristaltic Motion of an Oldroyd-B Fluid with Induced Magnetic Field, *Chemical Engineering Communications*, Vol. 199, No. 4 (2012) 512-537. (Joint with T. Hayat and S. Noreen).

(37) Stagnation-point flow of Maxwell fluid with magnetic field and radiation effects, *Heat Transfer-Asian Research*, Vol. 41, No. 1 (2012) 23-32. (Joint with T. Hayat, A. Rafique, and Y. Malik)

(38) On two-dimensional whooping cough dynamics of convection type, *Journal of Mechanics in Medicine and Biology*, Vol. 12, No. 5 (2012).

RGP-VPP-117 ;2

(39) Homotopy Perturbation Solution for Generalized Burgers and Burgers-Huxley systems with two coupled equations, *International Journal of Applied Mathematics and Applications*, Vol.4 No.1 (2012), Pages: 39-49

(40) On the Application of the Homotopy Analysis Method for a Nonlocal Mixed Problem with Bessel Operator, *Applied Mathematics and Computation*, Vol. 219, No. 8 (2012) 3477-3485. (Joint with S. Mesloub)

(41) On two-dimensional whooping cough dynamics of diffusion type, *Int. J. Computational Science and Engineering*, Vol. 8, No. 2 (2013). (Joint with A. Mukheimer)

(42) Stagnation point flow of Burgers' fluid over a stretching surface, *Progress in Computational Fluid Dynamics*, Vol. 13, No. 1(2013) 48-53. (Joint with T. Hayat, S. Ali, and M. Awais).

(43) A numerical solution of two-dimensional fox-rabies dynamics of advection type, *International Journal of Computer Mathematics*, Vol. 91, No. 7 (2014), 1480-1496 (Joint with M.R. Abo Elrish & S. Mesloub).

(44) Exponential extinction of discrete Nicholson's blowflies systems with patch structure and mortality terms, *J. Math. Computer Sci.* 16 (2016), 298-307. (Joint with J. Alzabut)

(45) On the numerical solution of a singular second-order thermoelastic system, *Advances in Mechanical Engineering*, 2017, Vol. 9(5) 1–12 (Joint with S. Mesloub)

(46) A Second-Order Scheme for the Numerical Solution of a Whooping Cough Model, *Journal of Computational and Theoretical Nanoscience*, Vol. 14, (2017) 4352–4360. (Joint with M. Abo Elrish, and S. Mesloub)

(47) Well posedness and numerical solution for a non-local pseudohyperbolic initial boundary value problem, *International Journal of Computer Mathematics*, Vol. 96 (12), (2019) 2533–2547. (Joint with M. Abo Elrish, and S. Mesloub)

(48) A New Explicit Four-Step Symmetric Method for Solving Schrödinger's Equation", accepted in *Mathematics* (2019), (Joint with S. Mesloub)

(49) Homotopy analysis method for a fractional order equation with a Dirichlet and a non-local integral conditions, *Mathematics* (2019) (Joint with S. Mesloub)