

CURRICULUM VITAE السيرة الذاتية

المعلومات العامة :



عقيل جاسم حرفش الرحماني		الاسم الثلاثي واللقب
Akil Jassim Harfash		Full Name
Assistant professor	استاذ مساعد	اللقب العلمي
BASRAH	البصرة	الجامعة
SCIENCE	العلوم	الكلية
mathematics	الرياضيات	القسم
akilharfash@gmail.com		البريد الإلكتروني الرسمي
		Official E-mail

Qualification and certification

المؤهلات والسيرة العلمية

General specialization		Numerical Analysis		التحليل العددي		الاختصاص العام	
Specific specialization		Numerical solutions of PDEs		الحلول العددية للمعادلات التفاضلية الجزئية		الاختصاص الدقيق	
Certificate	Date	University	Country	البلد	الجامعة	تاريخها	الشهادة
B.Sc.	1998	Basrah	Iraq	العراق	البصرة	1998	بكلوريوس
M.Sc.	2000	Basrah	Iraq	العراق	البصرة	2000	ماجستير
Ph.D.	2014	Durham	UK	بريطانيا	دورهام	2014	دكتوراه
Others							اخرى

Postgraduate Supervision

الإشراف على الدراسات العليا

السنة	الشهادة	الجامعة/ الكلية / القسم	اسم الطالب
Date	Degree	Univ./Coll./Dept.	Student Name
2015-2016	الماجستير	البصرة/ العلوم/ الرياضيات	فهد كامل نشمي
2015-2016	الدكتوراة	البصرة/ التربية للعلوم الصرفة/ الرياضيات	غازي عبد مفتن
2016-2017	الماجستير	البصرة/ العلوم/ الرياضيات	ايات عبد الكريم حميد

Undergraduate Studies دراسات اولية			
Course code.	Course name	اسم المقرر	رمز المقرر
	Calculus	التفاضل والتكامل	ر101
	Fundamental Mathematics I	أسس الرياضيات-1	ر103
	Fundamental Mathematics II	أسس الرياضيات-2	ر104
	Advance Calculus	التفاضل والتكامل المتقدم	ر201
	Linear Algebra I	الجبر الخطي-1	ر211
	Probability	الاحتمالية	ر215
	Mathematical statistic	الإحصاء الرياضي	ر216
	Numerical analysis I	التحليل العددي-1	ر335
	Applied Mathematics	الرياضيات التطبيقية	ر337
	Partial differential equations	المعادلات التفاضلية الجزئية	ر437
	Numerical analysis II	التحليل العددي-2	ر441
Postgraduate Studies دراسات عليا			
Course name		الموضوع	
Advance Numerical analysis I		التحليل العددي المتقدم I	
Advance Numerical analysis II		التحليل العددي المتقدم II	

الكتب المؤلفة Book publication

Book Title	Year	country	البلد	سنة النشر	اسم الكتاب
					لا توجد

Articles / Patents

البحوث المنشورة وبراءة الاختراع

No.	Article & Patents details
1	A. J. Harfash, High accuracy finite difference scheme for three-dimensional microscale heat equation, Journal of Computational and Applied Mathematics 220, 335-346 (2008).
2	A. J. Harfash and B. Straughan, Magnetic effect on instability and nonlinear stability in a reacting fluid, Meccanica. 47, 1849-1857 (2012).

3	A. J. Harfash, Magnetic effect on instability and nonlinear stability of double diffusive convection in a reacting fluid, <i>Continuum Mech. Thermodyn.</i> 25, 89-106 (2013).
4	B. Straughan and A. J. Harfash, Instability in Poiseuille flow in a porous medium with slip boundary conditions, <i>Microfluid Nanofluid</i> 15, 109-115 (2013).
5	A. J. Harfash, Three dimensions simulation for the problem of a layer of non-Boussinesq fluid heated internally with prescribed heat flux on the lower boundary and constant temperature upper surface. <i>Int. J. Engng. Sci.</i> 74, 91-102 (2014).
6	A. J. Harfash, Three-dimensional simulations for convection in a porous medium with internal heat source and variable gravity effects. <i>Transp. Porous Media</i> 101, 281-297 (2014).
7	A. J. Harfash, Three dimensional simulation of radiation induced convection. <i>Appl. Math. and Computation</i> 227, 92-101 (2014).
8	A. J. Harfash, Three-dimensional simulations for convection problem in anisotropic porous media with nonhomogeneous porosity, thermal diffusivity, and variable gravity effects. <i>Transp. Porous Media</i> , 102, 43-57 (2014).
9	A. J. Harfash, Three dimensional simulations for penetrative convection in a porous medium with internal heat sources. <i>Acta Mechanica Sinica</i> 30, 144-152 (2014).
10	A. J. Harfash, Convection in a porous medium with variable gravity field and magnetic field effects. <i>Transp. Porous Media</i> , 103, 361-379 (2014).
11	A. J. Harfash, Stability analysis of penetrative convection in anisotropic porous media with variable permeability. <i>J. Non-Equilib. Thermodyn.</i> 39, 123-133 (2014).
12	A. J. Harfash, Magnetic effect on convection in a porous medium with chemical reaction effect. <i>Transp. Porous Media</i> 106, 163-179 (2015).
13	A. J. Harfash, A. A. Hill, Simulation of three dimensional double-diffusive through-flow in internally heated anisotropic porous media. <i>Int. J. Heat Mass Trans.</i> 72, 609-615 (2014).
14	A. J. Harfash, Structural stability for convection models in a reacting porous medium with magnetic field effect, <i>Ricerche mat.</i> 63, 1-13 (2014).
15	A. J. Harfash, Structural stability for two convection models in a reacting fluid with magnetic field effect, <i>Ann. Henri Poincaré</i> 15, 2441-2465 (2014).

16	A. J. Harfash, Continuous dependence on the coefficients for double diffusive convection in Darcy flow with Magnetic field effect, <i>Anal. Math. Phys.</i> 3, 163-181 (2013).
17	A. J. Harfash, Three dimensional simulations and stability analysis for convection induced by absorption of radiation. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> 25, 810-824 (2015).
18	A. J. Harfash, A. K. Alshara, Three-dimensional simulation for problem of penetrative convection near the maximum density. <i>Journal of Hydrodynamics</i> 27, 292-303 (2015).
19	A. J. Harfash, A. K. Alshara, Chemical reaction effect on double diffusive convection in porous media with magnetic and variable gravity effects. <i>The Korean Journal of Chemical Engineering</i> 32, 1046-1059 (2015).
20	A. J. Harfash, A. K. Alshara, Magnetic field and throughflow effects on double-diffusive convection in internally heated anisotropic porous media. <i>The Korean Journal of Chemical Engineering</i> 32, 1970-1985 (2015).
21	A. J. Harfash, A. K. Alshara, A direct comparison between the negative and positive effects of throughflow on the thermal convection in an anisotropy and symmetry porous medium. <i>Zeitschrift Fur Naturforschung A</i> 70, 383-394 (2015).
22	A. J. Harfash, Numerical methods for solving some hydrodynamic stability problems. <i>Int. J. Appl. Comput. Math</i> 1, 293326 (2015).
23	A. J. Harfash, Three dimensional simulations for convection induced by the selective absorption of radiation for the Brinkman model. <i>Meccanica.</i> 51, 501-515 (2016).
24	A. J. Harfash, A. K. Alshara, On the stationary and oscillatory modes of triply resonant penetrative convection. In press, <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> 26, 1391 - 1415 (2016).
25	A. J. Harfash, Resonant penetrative convection in porous media with an internal heat source/sink effect. <i>Appl. Math. and Computation</i> 281, 323-342 (2016).
26	A. J. Harfash, Stability analysis for penetrative convection in a fluid layer with throughflow. <i>International Journal of Modern Physics C</i> 27(8), 1650101 (2016).
27	A. J. Harfash, Nonhomogeneous Porosity and Thermal Diffusivity Effects on a Double-Diffusive Convection in Anisotropic Porous Media , <i>International Journal of Nonlinear Sciences and Numerical Simulation</i> , 17, 205–220 (2016).