CURRICULUM VITAE

جامعة الأزهر Al-Azhar University-Gaza



Usama H. Hegazy

PERSONAL DETAILS

Date Of Birth	10/9/1969	Place Of Birth	Gaza
Nationality	Palestinian		
Martial Status	Married	Gender	Male
Designation	Professor		
Department	Mathematics		
Faculty	Science		
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Address (Home)			
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ACADEMIC QUALIFICATIONS

(YEAR, QUALIFICATION, INSTITUTION, TITLE) 2007 Doctoral Degree, PHD,Zagazig University, Egypt (Solutions of Nonlinear Dynamical System for the Oscillations of a Rotor Magnetic Bearing) 1994 Master Degree, MSC,Imperial College, London, UK (Numerical Study of 2-D Navier-Stokes Equations in the Vorticity-Velocity Formulation) 1992 Bachelor Degree, BSC,Zagazig University, Egypt (Mathematics)

CAREER HISTORY

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(START DATE - END DATE, EMPLOYMENT ,ORGANIZATION)
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2017 , till now	Professor ,Al-Azhar University, Gaza, Palestine
1995 ,2006	Lecturer ,Al-Azhar University, Gaza, Palestine
2012, 2017	Associate Professor ,AI-Azhar University, Gaza, Palestine
2007 ,2012	Assistant Professor ,AI-Azhar University, Gaza, Palestine

ADMINISTRATIVE DUTIES

(START_DATE - END_DATE	, ROLE , LEVEL)
2018 , till now	Dean of Faculty of Science ,University
2018 ,2018	Dean, Admission and Registration Deanship ,University
2007 ,2009	Head of Mathematics Department ,Department
2010 ,2011	Member of the Committee for students aid and grants ,University
2010 ,2011	Member of the Council on Discipline ,University
2010 ,2011	Deputy Dean, Faculty of Science ,Faculty

PROFESSIONAL AFFILIATION/MEMBERSHIP

(YEAR , ORGANISATION , ROLE , LEVEL)

1995 Al-Azhar University, Gaza, Palestine, Professor of Applied Mathematics, University

AREAS OF EXPERTISE

(AREA)

Nonlinear dynamic systems, Vibration phenomena and control, Numerical analysis,

SELECTED PUBLICATIONS

- Article in Academic Journal

- 1 Usama H. Hegazy and Mousa A. ALshaweesh (2016). Harmonic Oscillations and Resonances in 3-D Nonlinear Dynamical System ,International Journal of Partial Differential Equations and Applications,4(1) ,7-15. (ISI Cited Publication)
- ² Usama H. Hegazy and Hatem F. Hamato (2016). Dynamic Responses to Different Excitations of One Degree of Freedom System with Quadratic and Cubic Nonlinearities, American Journal of Computational and Applied Mathematics, 6(4), 165-176. (ISI Cited Publication)
- ³ Usama H. Hegazy (2016). Control of Periodic and Chaotic Motions in a Cantilever Beam with Varying Orientation under Principal Parametric Resonance, International Journal of Control Science and Engineering,6(2),23-37. (ISI Cited Publication)
- 4 Usama H. Hegazy (2016). Parametric Response of an Axially Moving Viscoelastic Beam With Three-Mode Interaction ,International Journal Of Scientific & Engineering Research,7(7) ,937-951. (ISI Cited Publication)
- ⁵ Usama H. Hegazy and Jihad Y. Abu Ful (2016). Vibration Control of an Electromechanical Model with Time-Dependent Magnetic Field, Journal of Mechanical Design and Vibration, 4(1), 1-9. (ISI Cited Publication)
- 6 Usama H. Hegazy and Noura A. Salem (2016). Nonlinear Saturation Controller for Suppressing Inclined Beam Vibrations, International Journal Of Scientific & Engineering Research, 7(7), 964-985. (ISI Cited Publication)
- 7 Usama H. Hegazy and Helmy F. Alsultan (2015). Combination Resonances of a Beam with Two-Mode Interaction, Journal of Mathematical Sciences and Applications, 3(1), 22-31. (ISI Cited Publication)
- 8 Usama H. Hegazy (2015) . In-Plane and Out-of-Plane Dynamic Responses of Elastic Cables under External and Parametric Excitations

,Applied Mathematics,5(6) ,111-124. (ISI Cited Publication)

- 9 Usama H. Hegazy (2014). Internal-External Resonance and Saturation Phenomenon in a Two Coupled Oscillators, International Journal of Mechanics and Applications, 4(3), 101-114. (ISI Cited Publication)
- 10 Usama H. Hegazy (2014). Nonlinear Dynamics of a Controlled Cantilever Beam with Varying Orientation Under Primary Resonance, American Journal of Mechanical Engineering,7(2),316-327. (ISI Cited Publication)
- ¹¹ Y. A. Amer and Usama H. Hegazy (2012) . Chaotic Vibration and Resonance Phenomena in a Parametrically Excited String-Beam Coupled System ,Meccanica (Springer),47(4) ,969-984. (ISI/SCOUPS Cited Publication)
- 12 M. Siewe Siewe and Usama H. Hegazy (2011) . Homoclinic bifurcation and chaos control in MEMS Resonators, Applied Mathematical Modelling, 35(12) ,5533-5552. (ISI/SCOUPS Cited Publication)
- 13 U. H. Hegazy (2010). Nonlinear Vibrations of a Thin Plate Under Simultaneous Internal and External Resonances, Journal of Vibration and Acoustics, 132(051004), 9. (ISI Cited Publication)
- ¹⁴ U. H. Hegazy (2010). 3:1 Internal Resonance of a String-Beam Coupled System with Cubic Nonlinearities ,Communications in Nonlinear Science and Numerical Simulation (Elsevier),15(12) ,4219-4229. (ISI/SCOUPS Cited Publication)
- ¹⁵ Hongkui Chen and U. H. Hegazy (2010). Nonlinear Dynamic Behavior of a Rotor Active Magnetic Bearing,International Journal of Bifurcation and Chaos (World Scientific),20(12),1-34. (ISI/SCOUPS Cited Publication)
- 16 U. H. Hegazy (2009). Single-Mode Response and Control of a Hinged-Hinged Flexible Beam, Archive of Applied Mechanics (Springer), 79(4), 335-345. (ISI/SCOUPS Cited Publication)
- ¹⁷ U. H. Hegazy (2009). Dynamics and Control of a Self-sustained Electromechanical Seismographs With Time-Varying Stiffness, Meccanica (Springer), 44(4), 355-368. (ISI/SCOUPS Cited Publication)

- ¹⁸ M. H. Eissa, U. H. Hegazy and Y. A. Amer (2008). A time-varying stiffness of a rotor AMB under combined resonance, Journal of Applied Mechanics (American Society of Mechanical Engineers), 75(011011), 12. (ISI/SCOUPS Cited Publication)
- 19 U. H. Hegazy, and Y. A. Amer (2008). A time-varying stiffness of a rotor AMB under parametric excitation, Journal of Mechanical Engineering Science, ,222(C3) ,447-458. (ISI/SCOUPS Cited Publication)
- 20 M. H. Eissa, U. H. Hegazy and Y. A. Amer (2008) . Dynamic behavior of an AMB supported rotor subject to harmonic excitation, Applied Mathematical Modelling, 32(7) ,1370-1380. (ISI/SCOUPS Cited Publication)
- 21 Y. A. Amer and U. H. Hegazy (2007). Resonance behavior of a rotor-active magnetic bearing with time-varying stiffness, Chaos Solitons & Fractals, Elsevier, 34(4), 1328-1345. (ISI/SCOUPS Cited Publication)
- 22 Y. A. Amer, M. H. Eissa, U. H. Hegazy and A. S. Sabbah (2006) . Dynamic behavior of an AMB/ supported rotor subject to parametric excitation, Journal of Vibration and Acoustics, American Society of Mechanical Engineers, 128(5) ,646-652. (ISI/SCOUPS Cited Publication)

PRESENTATIONS

(TITLE , EVENT , DATE , ORGANISER , LEVELL)

- Presenter
- Dynamics and Control of a Self-sustained Electromechanical Seismographs With Time-Varying Stiffness, The Second International Conference of Natural & Applied Sciences, May 30-31, 2011, Al Aqsa University, Gaza, Palestine (National).
- * Single-Mode Response and Control of a Hinged-Hinged Flexible Beam ,The first International Conference on Basic & Applied Sciences (ICBAS2010) ,October 10-12, 2010 ,AI-Azhar University-Gaza, Gaza, Palestine (International).
- * Dynamic behavior of an AMB/ supported rotor subject to parametric excitation ,The first International Conference on Basic & Applied Sciences (ICBAS2010) ,October 10-12, 2010 ,AI-Azhar University-Gaza, Gaza, Palestine (University).

SUPERVISION

Completed

(DEGREE , CANDIDATES , THESIS , SESSION , YEAR)

- * Master ,H. F. Hamato ,Nonlinear Resonances in The Response of Excited Dynamical Systems ,2017 ,
 - * Master ,N. A. Salem ,On The Stability and Control of Vibrations in Nonlinear Dynamical Systems ,2015 ,
 - * Master ,M. A. ALshaweesh ,On The Solutions of Differential Equations Describing The Motion of Nonlinear Systems ,2014 ,
 - * Master ,H. F. Alsultan ,Analytical Predictions and Numerical Simulations of Nonlinear Differential Equations ,2012 ,
 - * Master ,J. Y. Abu Ful ,Study of the Oscillations of Nonlinear Dynamic System Subject to Different Excitations ,2012 ,

EVALUATION ACTIVITIES

(DESCRIPTION ,	EVALUTION	,YEAR)
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Examiner PhD /Msc Thes	 * On Fourth Painleve Hierarchies ,2016 		
	 Methods of Integral Transform for Solving some Differential Equations of Fractional Order ,2015 Second Bainlaws Ulicemetrics Derivation and Basic Branartics 2015 		
	* Second Painleve Hierarchies: Derivation and Basic Properties. ,2015		
	 * On Cauchy Problem of Painleve II-IV Equations ,2013 		
	 Divide-and-Conquer Algorithms for Computing Matrix Inverse ,2013 		
Others	 * Tehnical Reviewer for Different International Journals (Elsevier, Springer,etc) ,2007 		
TEACHING			
(LEVEL ,COURSE)			
First Degree	* Calculus I, II, III		
	* Ordinary Differential Equations		
	* Introduction to Statistics		

- * Bio-Statistics
- * Linear Algebra
- * Programming Language-Fortran 77
- * Numerical Analysis
- * Vector Analysis
- * Introduction to Computer