

## ***CURRICULUM VITAE***

### ***1. PERSONAL DATA***

**NAME** : Alaa Abdel Wahed Hassan Abdel Bary.  
**RANK** : Professor  
**ADDRESS** : Chairman of Basic and Applied Science Dept., Arab Academy for Science and Technology, P. O. Box 1029, Alexandria, Egypt.  
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**E-MAIL** : [aaelbary@aast.edu](mailto:aaelbary@aast.edu) , [aaelbary@yahoo.com](mailto:aaelbary@yahoo.com)  
**DATE OF BIRTH** : 27<sup>th</sup> of July 1966.  
**NATIONALITY** : Egyptian.

### ***2. LANGUAGES KNOWN***

- Arabic language : Mother tongue.
- English language : Very good (reading, writing and speaking).
- French language : Good (reading, writing and speaking).

### ***3. ACADEMIC QUALIFICATION***

PhD : In Applied Mathematics (November 1998) in the field of Applied Mathematics , Zagazig University, Faculty of Science, Egypt. Entitled “ Some problems of Fredholm integral equation with some application”

MSc : In Mathematics (Computational Mathematics), (June 1995) in the field of “Applied Math.” Alexandria University, Egypt.” **Some Boundary Problems of Two-dimensional motion of micropolar fluid in the half- space.”**

- HDCMT : High Diploma in Curricula and Methods of Teaching, Science ( math&physics) (Sep., 1998). “This Diploma is two years study after BSc”, Alexandria University, Faculty of Education.
- BSc : In Applied Mathematics with grade Excellent (May, 1988), Alexandria University, Egypt.

#### 4. **WORK EDUCATIONAL EXPERIENCE**

- i) “1989 – 2003” Lecturer of Mathematics in the three college of Arab Academy for Science and Technology, Alexandria, Egypt, as follows:
  - *College of Business Administration*  
Pure Mathematics, Financial Mathematics, Statistics, Operation research and Quantative Methods.
  - *College of Maritime Transport*  
Calculus, Linear Algebra, Advanced Calculus, Analytic and Solid Geometry, Spherical Trigonometric, Mathematics for Navigation, Marine Statistics.
  - *College of Engineering and Technology*  
Calculus, Linear Algebra, Advanced Calculus, Analytic and Solid Geometry, Differential equations, Mathematical Transformation, Vector Analysis, Complex Analysis, Boundary value problems, probability and Statistics, Advanced Theory of probability.
- ii) *City University, Alexandria Branch and Abu Dhabi Branch* Courses MA 160, BSK 200 and Math 180.
- iii) Long and deep experience for IGCSE and GCE Mathematics (O-level, As and A level) “10 years”.
- iii) *Ajman University ,Abu Dhabi Branch* , Courses Statistics (1) and Training (1) during the Second Semester of the Academic Year 2000- 2001.
- iv) *The Arab Academy For Banking and Financial Sciences*, Course Statistics Through the Two Semesters of the Academic Year 2000-2001.
- v) I have long Experience in teaching in Middle East especially in Egypt ( 17 Years) and United Arab Emirates ( 3 Years)
- vi) I have long and deep Experience in Research ( more than 40 Publication) in Journals and Conference .
- vii) I have 6 students study under my supervision for Master and PhD degrees .

## 5. *ACADEMIC AND EDUCATIONAL ACTIVITIES*

- i) Chairman of Basic and Applied Science Department ( 2007 – till Now )
- ii) Chairman of Business Administration Department ( 1999-2001) , Arab Academy for Science and Technology , Abu Dhabi Branch.
- iii) Mathematics Coordinator in all educational programs in Arab Academy since 1996 still now.
- iv) Training Courses in Mathematics for Instructors in The College of Business Administration (for 1 year), (Advanced statistics).
- i) Lecturers in Methods of Teaching Mathematics, Statistics, O.R and Quantative Methods.
- ii) Educational Program (Total quality management in Education - Applied Studies in Statistics).
- iii) Course Designer: Special Course for MSc in Marine Technology, Statistics, O.R and another course for Mathematical Modeling for Marine pollution.
- iv) Special course for Marine Engineers (Kuwait) in the field of Statistics.
- v) **Training Courses in the field of:**
  - 1) Descriptive Statistics.
  - 2) Applied Statistics.
  - 3) O.R
  - 4) Linear Programming.
  - 5) Quantitative Methods.
  - 6) Research Methodology .
  - 7) Report writing
  - 8) Quality Control
  - 9) Communication skills
  - 10) Quality management
  - 11) Development by Training
  - 12) Team Building
  - 13) Evaluation of Education
  - 14) Small Projects
  - 15) Presentation Skills
  - 16) Negotiation Skills
- vi) Academic Advisor for 1<sup>st</sup> year students in College of Engineering and Technology, for 12 years.
- vii) Long experience in Teaching for postgraduate as :
  - Statistics for Business ( MBA Program )
  - Quantitative Business Analysis ( Master degree in Logistics and Transportation )
  - Statistics for Management Decision ( Master in Quality Management )
  - Statistical Quality Control (Master in Quality Management)
  - Research Methodology (MBA )

## 5. **BOOKS PREPARATION**

- i) Pure Mathematics with applications (Alexandria, 2002).
- ii) Financial Mathematics (Alexandria, 2003).
- iii) Probability and Statistics (Alexandria, 2006).

## 6. **Editor**

I'm editor in the following journals

1. **J. Applied Science Research**
2. **Australian j. Basic and Applied Sciences**

## 7. **Reviewer**

I'm reviewer in the following journals

1. **Abstract and Applied Analysis**
2. **Applied Mathematics and Computation**
3. **Journal of Applied Polymer Sciences**
4. **Advances Modeling A**
5. **J. Applied Science Research**
6. **Australian j. Basic and Applied Sciences**
7. **Letters of Applied Mathematics**

## 8. **CONFERENCES**

1. Fourth Conference of Mathematics and its Applications (Alexandria University 1988).
2. International Conference in hydrodynamics (Alexandria University 1994).
3. First Arab Conference for Marine pollution (AAST, 1995).
4. Third International Conference in Eng. Mathematics (Cairo University 1997).
5. Conference of Statistics "Egyptian Mathematical Society" (Zagazig University, April 1998).
6. Eighth International Conference in Applied Mechanics (Military Technical College, Egypt, May 1998).

7. Ninth International Colloquium Differential Equations (Bulgaria, Aug., 1998).
8. Third conference on Science curricula the Egyptian Society for science Education July , 1999.
9. International conference in mathematical Analysis ad applications, American university of Sharjah, United Arab Emirates, May 2001.
10. International conference in the future of humanities and social sciences in education, university of United Arab Emirates, Alain April 2001.
11. Alazhr international conference of computers and Application in Mathematics, Nov. 2002.
12. First International Conference of Eng. Mathematics and physics (Military Technical College, Egypt, May 2002).
13. Applications of e- Learning in Egypt “ First Conference “ ( American University in Cairo – 18- 18 , January 2002 )
14. International Conference on mathematics , nuclear physics and Applications. Atomic Energy Authority , Cairo, March 8-13, 2003.
15. The 13 International Conference on COMPUTER THEORY AND APPLICATIONS . ( The computer Scientific Society & IEEE Alexandria Chapter, Alexandria 26-28 August 2003 )
16. The 15 International Conference on COMPUTER THEORY AND APPLICATIONS . ( The computer Scientific Society & IEEE Alexandria Chapter, Alexandria ,August 2005 )
17. School on Algebraic Approach to Differential Equations , 12-24 November 2007. Bibliotheca Alexandrina – Alexandria , Egypt. Organized by ICTP.
18. Local organizer of “ Recent Development in the theory of Elliptic PDE “  
CIMPA – UNESCO- EGYPT.  
January 26 – February 3, 2009, Alexandria – Egypt.
19. The 19 International Conference on COMPUTER THEORY AND APPLICATIONS . ( The computer Scientific Society & IEEE Alexandria Chapter, Alexandria , August 2009 )
20. The third Arab International Conference in physics & Materials Science. Alexandria, Egypt. October 20-22 , 2009.

## 8. PUBLICATIONS

1. M.A.Abdou, A.S.Sabaah and **A.A.El-Bary**, Integral Equation of contact problems with potential kernel “Jan. 1997, Bulletin electronic Eng. Monefia University, Egypt).
2. A.S.Sabaah, M.A.Abdou and **A.A.El-Bary**, Integral Equation of the Three Dimensional Contact problem in a half – space ( April 1997 Far East Jour. of applied Math., India).
3. **A.A.El-Bary** and etl. Steady Free Convection in the Boundary layer flow of Micropolar fluid over a vertical flat plate. Third International Conference of Eng. Math. (Dec. 1997, Cairo University, Egypt).
4. A.S.Sabaah, M.Farghly, M.A.Abdou and **A.A.El-Bary**, Applications of integro Differential Equations in the Problems of the infinite Plate with a curvilinear Hole. (May 1998, Eighth Conference on Applied Mech., M.T.C., Egypt).
5. M.Farghly A.S.Sabaah M.A.Abdou and **A.A.El-Bary**, Solution of integro Differential Equation problems of The infinite Plate with a curvilinear Hole .9<sup>th</sup> Int. Colloquium on differential equation Plovdiv, Bulgaria, (1998 )
6. **A.A.El-Bary**, Some Boundary problems of two-dimensional motion of micro polar fluids in the half- space, Unpublished MSc. thesis, Alexandria university, 1996 .
7. **A.A.El-Bary**, Some problems of Fredholm integral equation with some applications, unpublished PhD thesis, Zagazig university, Egypt (1999) .
8. **A.A.El-Bary** and I.H.El-Sirfy An Infinite plate with a curvilinear hole in s-plane, Estratto da “ Le Matematiche” Vol LIV – Fasc II (1999) pp261-274.
9. M.Farghly and **A.A.El-Bary** On the system of differential equations of motion for ship maneuvering, Math.Sci. Res Vol4 ,No 6, (2000), 49-55.
10. **A.A.El-Bary**, Chebshev Polynomial solution for Volterra- Fredholm integro-differential equation with Cauchy kernel. Int. J. Appl. Matht. Vol.2, No.12 (2000) pp. 1399-1406.
11. **A.A.El-Bary**, Solution of first and second fundamental problems of an elastic infinite plate, Int.J. Appl. Math Vol4 No.3(2000) pp247-259.
12. **A.A.El-Bary**, First and second fundamental problems of an elastic infinite plate with holes, Korean J. comp. Appl. Math. Vol.8, No.3, pp675-684 (2001) .
13. M.A.Abdou and **A.A.El-Bary**, Fredholm- Volterra Integral equation with potential kernel , Int.J. Math and Mathematical sciences Vol 26, no. 6, pp.321-330, (2001) .

14. M.A.Abdou and **A.A.El-Bary** Fundamental problems for infinite plate with a curvilinear hole having finite poles, Math. Prob. In Eng. Vol. 7, no. 6 , pp485-501 (2001).
15. M.A.Abdou and **A.A.El-Bary** On Asymptotic method in contact problems of Fredholm integral equation, Int. Conf. in Math.Anal. Appl. American university of Sharjah (united Arab Emirates) (May 2001)
16. **A.A.El-Bary** and M.A.Darwish On mixed integral equation of the first kind with logarithmic kernel. Al-Azhar first Conf. In Comp. Science (Nov 2002), Cairo, Egypt.
17. **A.A.El-Bary** Solution of Applied Fredholm integro differential equation in the theory of elasticity, Presented in 1<sup>st</sup> Int conf. Eng. Math and physics (EMS) , Military Technical collage, Cairo, Egypt, May 2002.
18. **A.A.El-Bary** Stress components for infinite thermoplastic plate with curvilinear hole. Presented in 1<sup>st</sup> Int conf. Eng. Math and physics (EMS) , Military Technical collage, Cairo, Egypt, May 2002.
19. **A.A.El-Bary** ,Fredholm – Volterra integral equation in the contact problem. J. of Comp. and Math. Application. Vol 7 No 2 ,2002
20. **A.A.El-Bary** Fredholm – Volterra integral equation in one dimension. Bull. Of Pure and Applied Science ,Sec. E. Math & Statistics Vol21, No.1 PP.203-211 ( 2002)
21. Magdy A.Ezzat, Angail A.Samaanan and **Alaa Abd-El Bary**, State space formulation for boundary layer magnetohydrodynamic free convection flow with one relaxation time. Canadian Journal of Physics. Vol. 80, pp 1157-1174 (2002).
22. Wagdy G.Elsayed, Mohamed Abdalla. Darwish and **A.A.El-Bary**, On an existence theorem for Urysohn integral equation via measure of no compactness. Math . Sci. Res.Vol. 6, No. 9, pp441-448 (2002)
23. Wagdy G.Elsayed, Mohamed Abdalla. Darwish and **A.A.El-Bary** Solvability of Urysohn integral Equation. journal of Applied Mathematics and Computation Vol. 145, no.2 pp.487-493 (Dec. 2003).
24. **A.A.El-Bary** Fredholm- Volterra integral equation in three dimensional problem with Macdonald kernel. , MATEMATYKA z.26 pp59-65, (poland)2002.
25. **A.A.El-Bary** Legendre Polynomials Solution for Volterra-Fredholm Integro Differential Equation. Int. J .Diff. Equ. Appl. Vol 4, No.1 2002 pp.1-9.
26. Magdy A.Ezzat, M.Z.Abdelaal and **A.A.El-Bary**, Generalized thermoelasticity With Temperature Dependent Modulus Of Elasticity Under Three Theories. J. Appl. Math& Computing Vol 14, No. 1 (2004).
27. **A.A.El-Bary**, Stress Components for Thermoelastic infinite plate with a curvilinear hole by using complex variables method , Global journal of Mathematical Sci..Vol. 3 , No. 2 , 2004

28. **A.A.El-Bary**, Solution of Fredholm – Volterra integral equation of the second kind in series form, J. of Applied Sciences Vol. 4 , pp. 537- 538 , 2004.
29. **A.A.El-Bary**, Solution of Fredholm integrodifferential equation for an infinite elastic plate. Discussiones Math.Vol. 24 , pp. 5-11, 2004 .
30. **A.A.El-Bary**, Nasser M. El-Maghraby and H.M.Youssef, ◦A Numerical method for solving non- linear integral equation of the second kind . 13\_th int.conf.on comp. theory and Appl., AAST , Sept. 2003.
31. **A.A.El-Bary** ,Singular integrdifferential equation for infinite thermoelastic plate. Reports on Mathematical Physics. Vol. 55 , No.2 , 2005 .
32. N.M.El-Maghraby, . **A.A.El-Bary** and H.M.Youssef, State Space approach to thermoelastic problem with vibrational stress. Computational and Mathematical Modeling , Vol. 17, No.2 (2006) pp 243-253.
33. **A.A.El-Bary** Exponential solution of a problem of two – dimensional motion of micropolar fluid in a half – plane, Applied Mathematics and computation .Vol 165, pp. 81- 93 , (2005).
34. **A.A.El-Bary** Computational treatment of free convection effects on perfectly conducting viscoelastic fluid . Applied Mathematics and computation .Vol 170, pp. 801-820 , (2005)
35. **A.A.El-Bary** The stability in an inclined layer of viscoelastic fluid flow of hydroelectric natural convection The Korean Soc. Ind. Appl. Math. Vol. 9 , No . 2 pp. 17-27 , (2005)
36. **A.A.El-Bary** Sobolev's method for Hammerstein integral equations. Math. And Comput. Appl. Vol. 11, No.2, pp.91-94 , 2006
37. H.M.Youssef and **A.A.El-Bary**, Thermal shock problem for one dimensional generalized thermoelastic layered composite material, Math. And Comput. Appl. Vol. 11, No.2, pp.91-94 , 2006
38. **A.A.El-Bary**, An Infinite thermoelastic long annular cylinder with variable thermal conductivity . J. Applied Sciences Research Vol.2 N0.6 ,2006
39. M.Ezzat, M.Zakaria, A.Samaan and **A.Abd-ElBary**, Free Convection effects on a perfectly conducting Couple stress fluid . J. Tech. Phys., vol.47, No.1 , pp.5-30. , 2006.
40. **A.A.El-Bary** and H.M.Youssef Generalized thermoelsticity for an infinite material with variable thermal conductivity . Advances in Math. Sci. & Appl. Vol. 16, N0. 1 , pp. 339-353 ,2006.
41. Mohamed Abdalla Darwish and **A.A.El-Bary** ,.Existence of fractional integral equation with hysteresis. Applied Mathematics and computation .Vol 176, pp. 684-687 , (2006).



42. H.M.Youssef and **A.A.El-Bary**, Thermal shock problem for a generalized thermoelastic layered composite material with variable thermal conductivity .Thermal, Mathematical problems in Engineering . 2006 .
- 43.**A.A.El-Bary** Numerical solution of electro-magneto-thermo-mechanical shock problem. Compt. Methods in Sci. & Tech.Vol. 12 , No.2 , pp.5-12 ,2007 .
44. Magdy A.Ezzat and **Alaa Abd ElBary** State space approach of two – temperature magneto-thermoelasticity with thermal relaxation in a medium of perfect conductivity, Int. J. Eng. Sci. Vol. 47, pp. 618-630.(2009)
- 45.Magdy A.Ezzat, **Alaa Abd ElBary** and Ahmed S.ElKaramany, Two-temperature theory in generalized magnetothermo- viscoelasticity. Canadian . J. Phy. Vol.87 , pp.329-336.(2009)
- 46.Magdy A.Ezzat,A.S.El-Karamany and **A.A.Bary**, State space approach to one-dimensional magneto-thermoelasticity under the Green – Naghdi theories. Canadian . J. Phy. Vol.87 , pp.867-878(2009)
47. Magdy A.Ezzat, **Alaa Abd ElBary**,On three models of magneto- hydrodynamic free- convection flow, Canadian . J. Phy. Vol.87 , pp.1213-1226.(2009)
- 48.Hamdy M.Youssef and **A.A.El-Bary**, generalized thermoelastic infinite layer subjected to ramp- type thermal and mechanical loading under three theories - State space approach. J. thermal Stresses, Vol. 32, PP. 1293-1310.(2009)
49. Hamdy M.Youssef and **A.A.El-Bary**, Two – Temperature generalized thermoelasticity with variable thermal conductivity J. thermal Stresses, Vol. 33, PP. 187-201 (2010).
50. Magdy A.Ezzat, **A.A.El-Bary**, Space approach to the hydro-magnetic flow of a dusty fluid through a porous medium, Computers and Mathematics with Applications , Vol.59, pp. 2868-2879 (2010)
51. M,A.Ezzat M.Zakaria, and **A.A.El-Bary**. Thermo-Electric-Visco-Elastic Material , Journal of applied Polymer Science, Vol.117, pp. 1934-1944(2010)
52. M.Ezzat, A.A.El-Bary and S.Ezzat, Combined heat and mass Transfer for unsteady MHD flow of perfect conducting, Energy Conversion and Management 52 (2011) 934-945.
53. . Hamdy M.Youssef and **A.A.El-Bary**, Generalized Magneto-Thermoelastic Medium with Variable Material Properties Subjected to Ramp-Type Heating, Journal of Applied Polymer Science, Vol. 124, 5209–5219 (2012).
54. . M,A.Ezzat M.Zakaria, and **A.A.El-Bary**. Two-Temperature Theory in Thermo-Electric Viscoelastic Material Subjected to Modified Ohm's and Fourier's Laws, *Mechanics of Advanced Materials and Structures*, 19:453–464, 2012.

## **9. ARTICLES IN ARABIC**

1. A.A.El –Bary, Application of Total quality principle for teaching statistics in Engineering colleges, conf. Of statistics, Zagazig university, Egypt, April 1998.
2. A.A.El –Bary and et al, Environment principles and problems and its relation with curricula in the twenty first century, 3<sup>rd</sup> conf. On science curricula, the Egyptian society for science education Jul 1999.
3. A.A.El –Bary, probability distributions Applications in policing, Al –Fkr Al- Shurti (scientific periodical in police and security research) vol.9 No. 1 April 2001.
4. A.A.El –Bary, statistical quality control as an approach for measuring the quality of police pertains, Al- Fikr Al- shurti (scientific periodical in policed security research) vol.10 No.1 April 2001.
5. A.A.El –Bary, Evaluation for curricula of humanities sciences in educational program in Arab Academy for science & Technology and maritime Transport, Int. Conf. humanities and social science in education, faculty humanities and social science, university of united Arab Emirates, April 2001
6. A.A.EL-Bary . Quality Assurance in Education and Training . will appear in Int. Conf for Evaluation in Education ( Ain Shms university July 2002 )

