

CURRICULUM VITAE

PERSONAL DATA

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EDUCATION

Year	Academic Degree	Institution
86	DES	Batna University Algeria
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93	Magister	Batna University Algeria
95-99	Doctorat D'Etat	Setif University Algeria

WORK EXPERIENCE

Period	Position	Address
2012- present	Professor	IMSIU, Riyadh
2005-2012	Associate Professor	IMSIU, Riyadh
2002-2005	Assistant Professor	KKU Saudi Arabia
1992-1995	Lecturer	University of Batna, Algeria

RESEARCH INTERESTS

Partial Differential Equations- Ordinary Differential Equations- Functional Analysis- Inequalities Analysis

PUBLICATIONS

- (1) N. Benouar and **L. Bougoffa**, *Problemes aux limites pour une classe d' equations composites du quatrieme ordre*, **Bull. Class. Sci. Acad.-Ro.** 6 serie Tome VI, pp. 207-214, 7-12 (1995).
- (2) **L. Bougoffa**, *Problemes aux limites pour une classe d' equations composites parabolo-elliptiques*, **Bull. Soci. Roy. Sc. Liege**, Vol. 65, 6, pp. 339-407 (1996).
- (3) **L. Bougoffa**, *Notes on Qi type integral inequalities*, **J. Inequal. Pure and Appl. Math.(JIPAM)**, Vol. 4, Issue4, Article 77 (2003).
- (4) **L. Bougoffa**, *Some estimations for the Integral Taylor's Remainder*, **J. Inequal. Pure and Appl. Math. (JIPAM)**, Vol. 4, Issue 5, Article 86 (2003).
- (5) **L. Bougoffa** and M. S. Moulay, *Generalized solutions to parabolic-hyperbolic equations*, **Electron. J. Diff. Eqns.**, Vol. 2003, No. 09, pp. 1-6 (2003).
- (6) **L. Bougoffa**, S. Hussein and Zhou Li, *A boundary value problem for a high order composite equation*, **Journal of Math. (PRC)**, Vol. 23, No. 1 (2003).
- (7) **L. Bougoffa**, *A third-order nonlocal problem of third with non-local conditions*, **International Journal of Mathematics and Mathematical Sciences**, Vol. 2004, No. 28, pp. 1503-1507 (2004).
- (8) **L. Bougoffa**, *A coupled system with integral conditions*, **Applied Mathematics E-Notes**, 4, pp. 99-105 (2004).
- (9) **L. Bougoffa**, *Mixed problem with an integral condition for first order hyperbolic equations*, **Journal of the Indonesian Math. Soc. (MIHJMI)**, Vol. 10, No. 1 (2004).
- (10) **L. Bougoffa**, *A weak solution for hyperbolic equations with a nonlocal condition*, **The Australian Journal of Mathematical Analysis and Applications (AJMAA)**, Vol. 2, Issue 1, pp. 1-7 (2005).
- (11) **L. Bougoffa**, *An integral inequality similar to Feng Qi's inequality*, **Journal Inequal. Pure and Appl. Math. (JIPAM)**, Vol. 6, Issue 1, Article 27 (2005).
- (12) **L. Bougoffa** and M. S. Moulay, *A class of composite type equations*, **Journal of the Indonesian Math. Soc. (MIHJMI)**, Vol. 10, No. 1 (2005).
- (13) **L. Bougoffa** and S. Bougouffa, *Adomian method for solving some coupled systems of two equations*, **Appl. Math. and Computation** Vol. 177, Issue 2, pp. 553-560 (2006).
- (14) **L. Bougoffa**, *Adomian method for a class of hyperbolic equations with an integral condition*, **Appl. Math. and Computation** Vol. 177, Issue 2, pp. 545-552 (2006).
- (15) **L. Bougoffa**, *Solvability of the predator and prey system with variable coefficients and comparison of the results with modi_ed decomposition*, **Appl. Math. and Computation** 383-387, 182 (2006).
- (16) **L. Bougoffa**, *On Minkowski and Hardy integral inequalities*, **Journal Inequal. Pure and Appl. Math. (JIPAM)**, Volume 7, Issue 2, Article 60 (2006).
- (17) **L. Bougoffa**, *New inequalities about convex functions*, **Journal Inequal. Pure and Appl. Math. (JIPAM)**, Volume 7, Issue 4, Article 148 (2006).
- (18) **L. Bougoffa**, *Some inequalities involving the gamma function*, **Journal Inequal. Pure and Appl. Math. (JIPAM)**, Volume 7, Issue 5, Article 179 (2006).
- (19) **L. Bougoffa** and S. Bougouffa, *Solvability of the nonlinear competition model with variable coefficients using modi_ed decomposition method*, **J. Math. Control Science and Applications (JMCSA)**, Vol. 1, No. 1, pp. 39-47 (2007).
- (20) **L. Bougoffa**, *The Cauchy problem for nonlinear hyperbolic equations of higher order using modified decomposition method*, **J. Math. Control Science and Applications (JMCSA)** Vol. 1, No. 1, 2007, pp. 11-19 (2007).
- (21) **L. Bougoffa**, *Note on an open problem*, **Journal Inequal. Pure and Appl. Math. (JIPAM)** Volume 8, Issue 2, Article 179 (2007).
- (22) **L. Bougoffa**, *Existence and uniqueness theorem of a coupled system of linear Schrodinger equations*, **J. Math. Control Science and Applications (JMCSA)** Vol. 1. No. 2, pp. 295-299 (2007).
- (23) **L. Bougoffa**, *Corrigendum of the paper entitled: Note on an open problem*, **Journal Inequal. Pure and Appl. Math. (JIPAM)** Volume 8, Issue 4, Article 121 (2007).
- (24) **L. Bougoffa**, *A note on the explicit solution for a boundary value problem of a second-order nonlinear equation*, **Appl. Math. Letters (AML)** 21, 275-278 (2008).
- (25) **L. Bougoffa** and Mohammed Al-Khadhi, *New explicit solution for Troesch's boundary value problem*, **Applied mathematics and Information Sciences (AMIS)** 3(1), 89-96 (2009).
- (26) **L. Bougoffa**, *A convergence analysis of an iterative method for a coupled nonlinear system of functional equations*, **AIP Conf. Proc.**, Vol. 1148, pp. 45-49 (2009).
- (27) **L. Bougoffa**, *Particular solutions to equations of sine-Gordon type*, **J. Appl. Math. Comput. (JAMC)** 32, 303-309 (2009).
- (28) **L. Bougoffa**, *On the exact solutions for initial value problems of second-order differential equations*, **Appl. Math. Letters (AML)** 22, 1248-1251 (2009).
- (29) **L. Bougoffa**, *On the traveling wave solutions for a parabolic - hyperbolic system in linear thermoelasticity*, **Appl. Math. and Computation (AMC)** 215, 850-853 (2009).

- (30) **L. Bougoffa**, *Hyperbolic equations for fourth order with multiple characteristic*, **J. Appl. Math. & Informatics (JAMI)** Vol. 28, No. 3-4, pp. 837-844 (2010).
- (31) **L. Bougoffa**, *New exact general solution of Abel equation*, **Appl. Math. and Computation (AMC)** Vol. 216, pp. 689-691 (2010).
- (32) **L. Bougoffa**, Hind K. Al-Jeaid and Ammar Khanfer, *On the solutions of a boundary value problem of linear thermoelasticity system with nonlocal conditions*, **Appl. Math. and Computation (AMC)** Vol. 217, pp. 4227-4233 (2010).
- (33) **L. Bougoffa** and Hind K. Al-Jeaid, *Solving Cauchy problem for a class of sixth-order hyperbolic equations with triple characteristics*, **Transylvanian Journal of Mathematics and Mechanics(TJMM)**, No. 1, 25-36, 2 (2010).
- (34) **L. Bougoffa**, A. El-khalil and S. El-Manouni, *Some results on strongly nonlinear anisotropic differential equations*, **Applicationes Mathematicae (AM)** 37, 3, pp. 375-386 (2010).
- (35) **L. Bougoffa** and Hind K. Al-Jeaid, *Solvability of Luikov's system of heat and mass diffusion in one-dimensional case*, **J. Appl. Math. & Informatics (JAMI)** Vol. 29, No. 1-2, pp. 369-380 (2011).
- (36) **L. Bougoffa** and Jamal I. Daoud, *On type Opial inequalities with nonlocal conditions and applications*, **KYUNGPOOK Math. J.**, Vol. 51, pp. 165-175 (2011).
- (37) **L. Bougoffa**, Randolph C. Rach and Abdelaziz Mennouni, *An approximate method for solving a class of weakly-singular Volterra integro-differential equations*, **Appl. Math. and Computation (AMC)** Vol. 217, pp. 8907-8913 (2011).
- (38) **L. Bougoffa**, Randolph C. Rach and Abdelaziz Mennouni, *A convenient technique for solving linear and nonlinear Abel integral equations by the Adomian decomposition method*, **Appl. Math. and Computation (AMC)** Vol. 218, pp. 1785-1793 (2011).
- (39) **L. Bougoffa**, Manal Al-Haqbani and Randolph C. Rach, *A convenient technique for solving integral equations of the first kind by the Adomian decomposition method*, **The International Journal of Cybernetics, Systems and Management Science**, Vol. 41 Iss: 1 pp. 145 - 156 (2012).
- (40) **L. Bougoffa**, Randolph C. Rach and Said El-Manouni, *A convergence analysis of the Adomian decomposition method for an abstract Cauchy problem of a system of first-order nonlinear differential equations*, **International Journal of Computer Mathematics** Vol. 90, pp. 360-375 2(2013).
- (41) **L. Bougoffa** and M. Al-Mazmumy, *Series solutions to initial-Neumann boundary value problems for parabolic and hyperbolic equations*, **J. Appl. Math. & Informatics**, Vol. 31, No. 1 - 2, pp. 87-97(2013).
- (42) **L. Bougoffa**, Abdelaziz Mennouni and Randolph C. Rach, *Solving Cauchy integral equations of the first kind by the Adomian decomposition method*, **Appl. Math. and Computation**, Vol. 219, pp. 4423-4433 (2013).
- (43) **L. Bougoffa**, *An efficient method for solving nonlocal initial-boundary value problems for linear and nonlinear first-order hyperbolic partial differential equations*, **J. Appl. Math. Comput. (JAMC)** Vol. 43, Issue1, pp. 31-54 (2013).
- (44) **L. Bougoffa**, Randolph C. Rach and Abdul-Majid Wazwaz, *Solving nonlocal initial-boundary value problems for the Lotka-von Foerster model*, **Appl. Math. and Computation (AMC)**, Vol. 225, pp. 715 (2013).
- (45) **L. Bougoffa**, and Randolph C. Rach, *Solving nonlocal initial-boundary value problems for linear and nonlinear parabolic and hyperbolic partial differential equations by the Adomian decomposition method*, **Appl. Math. And Computation (AMC)**, Vol. 225, pp.50-61 (2013).
- (46) **L. Bougoffa**, and Randolph C. Rach, *Solving nonlocal boundary value problems for first- and second-order differential equations by the Adomian decomposition method*, **Kybernetes** Vol. 42 No. 4, 641-664 (2013).
- (47) **L. Bougoffa** and Smail Bougouffa, *New parametric approach for the general Lorenz system*, **Phys. Scr.**, 89, 8pp, (2014).
- (48) **L. Bougoffa**, *New conditions for obtaining the exact solutions of the general Ricatti equation*, **The Scientific World Journal**, Vol. 2014 (2014), Article ID 401741, 8 pages, (2014).
- (49) **L. Bougoffa**, *Further solutions of the general Abel equation of the second kind: use of Julia's condition*, **Applied Mathematics E-Notes**, 14, pp. 53-56 (2014).
- (50) **L. Bougoffa**, *On the Solutions of a Stefan Problem with Variable Latent Heat*, **Mathematical Problems in Engineering**, Vol. 2014 (2014), Article ID 180764, (2014).
- (51) **L. Bougoffa**, *The Adomian decomposition method for solving a moving boundary problem arising from the diffusion of oxygen in absorbing tissue*, **The Scientific World Journal**, Vol. 2014 (2014), Article ID 579628, 7 pages, (2014).
- (52) **L. Bougoffa**, *On the solutions of an oxygen absorption model*, **International Journal of biomathematics**, Vol. 7, No. 6, (2014).
- (53) R. Rach, A.M.Wazwaz, **L. Bougoffa** and J.S. Duan, *Solving the Lane Emden-Fowler type equations of higher orders by the Adomian decomposition method*, **Computer Modeling in Engineering Sciences**, Vol. 100, No. 6, pp. 507-529, (2014).
- (54) **L. Bougoffa**, R. Rach, A. Wazwaz and J. Duan, *On the Adomian decomposition method for solving the Stefan problem*, **International Journal of Numerical Methods for Heat and Fluid Flow**, Vol. 5, Issue 4, pp. 912-928, (2015).
- (55) **L. Bougoffa** and R. Rach, *Approximate analytical solutions of the Thomas -Fermi equation by a direct method*, **Romanian Journal of Physics**, Vol. 60, Nos. 7-8, pp. 1032-1039, (2015).

- (56) **L. Bougoffa** and A.M. Wazwaz, New approximate solutions of the Blasius equation, **International Journal of Numerical Methods for Heat and Fluid Flow**, Vol. 25, No. 7, pp. 1590 -1599, (2015).
- (57) R. Rach, **L. Bougoffa** and A. Khanfer, *Approximate analytic solutions for the influence of mass flux on mixed convection in a saturated porous medium*, **Applied Mathematics and Information Sciences**, Vol. 9, No. 6, pp. 1-10, (2015).
- (58) **L. Bougoffa**, R. Rach and J. Duan, *Exact and approximate analytic solutions of the thin film flow of fourth-grade fluids by the modified Adomian decomposition method*, **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 26, Issue 8, pp. 1-10, (2016).
- (59) **L. Bougoffa**, R. Rach and Samy Mziou, *Exact and approximate analytic solutions of the Jeffery-Hamel ow problem by the Duan-Rach modified Adomian decomposition method*, **Mathematical Modelling and Analysis**, Volume 21, Issue 2, pp. 174-187, (2016).
- (60) Abdul-Majid Wazwaz, R. Rach and **L. Bougoffa**, *Dual solutions for nonlinear boundary value problems by the Adomian decomposition method*, **International Journal of Numerical Methods for Heat and Fluid Flow**, Volume 26, Issue 8, pp. 1-18, (2016).
- (61) **L. Bougoffa**, R. Rach and Abdul-Majid Wazwaz, *On solutions of boundary value problem for fourth-order beam equations*, **Mathematical Modelling and Analysis**, Volume 21, Issue 3, pp. 304-318, (2016).
- (62) **L. Bougoffa**, *Exact solutions of a generalized Bratu equation*, **Romanian Journal of Physics**, Volume 62, Numbers 3-4, 110, (2017).
- (63) **L. Bougoffa**, Samy Mziou and R. Rach, *Exact and approximate analytic solutions of the nonlinear convective fin problem with temperature-dependent thermal conductivity*, **International Journal of Computational Methods in Engineering Sciences and Mechanics**, Vol. 18, Nos. 2-3, 128-134, (2017).
- (64) Smail Bougouffa and **L. Bougoffa**, *Solvability of the generalized system of stochastic differential equations in driven cavity single mode*, **Acta Physica Polonica B**, Vol. 48, No. 5, 869-881, (2017).
- (65) **L. Bougoffa** and Abdul-Majid Wazwaz, *On the solutions of the problem of viscous flow over shrinking*, **J. Appl. Math. & Informatics (JAMI)** Vol. 35, No. 5-6, pp. 505-512, (2017).
- (66) **L. Bougoffa** and Rubayyi T. Alqahtani, *Further Solutions of the Falkner- Skan Equation*, **Romanian Journal of Physics**, Vol. 63, Numbers 1-2, 102 (2018).
- (67) **L. Bougoffa** and Ammar Khanfer, *Existence and uniqueness theorems of second-order equations with integral boundary conditions*, **Bulletin of the Korean Mathematical Society**. 55, No. 3, pp. 899-911, (2018).
- (68) **L. Bougoffa**, Saud Al-Aw_ and Smail Bougouffa, *A complete and partial integrability technique of the Lorenz system*, **Results in Physics**, Vol. 9, pp. 712-716, (2018).
- (69) **L. Bougoffa**, *A note on the existence and uniqueness solutions of the modified error function*, **Mathematical Methods in the Applied Sciences**, Vol. 41, pp. 5526-5534, (2018).
- (70) **L. Bougoffa** and Randolph C. Rach, *Note on the paper: A table of definite integrals from the marriage of power and Fourier series*, **SCIENTIA, Series A: Mathematical Science**, Vol. 28, 23-27, (2018).
- (71) **L. Bougoffa**, *Comments on the paper: New transform iterative method for solving some Klein-Gordon equations by Aisha Abdullah Alderremy and et al. Results in Physics 10 (2018) 655-659*, **Results in Physics**, Vol. 11, pp 510-511, (2018).
- (72) Samy Mziou, **L. Bougoffa** and Randolph C. Rach, *Generalized Blasius equation: existence, uniqueness and analytical approximation solution*, **Transylvanian Journal of Mathematics and Mechanics**, Volume 10, Number 2 (2018).
- (73) **L. Bougoffa** and Ammar Khanfer, *On the solutions of the generalized Lotka-Volterra system*, **ITM Web of Conferences 29, 01016 (2019)**.
- (74) Rowaida Alrajhi and **L. Bougoffa**, *Existence and uniqueness theorems for fourth-order equations with boundary conditions*, **Transylvanian Journal of Mathematics and Mechanics**, 11, No. 1-2, 15-24.(2019).
- (75) Smail Bougouffa and **L. Bougoffa**, *Solvability of the Caldeira-Leggett Model*, **Canadian Journal of Physics**, 98(7): 683-688, (2020).
- (76) **L. Bougoffa** and Randolph C. Rach, *Evaluation of Gaussian integrals by Adomian decomposition*, **SCIENTIA, Series A: Mathematical Science**, Volume 30 (2020), 1-5.
- (77) **L. Bougoffa** and Smail Bougouffa, *Solutions of the two-wave interactions in quadratic nonlinear media*, **Mathematics**, Volume 8, 1867; (2020).
- (78) **Lazhar Bougoffa** and Ammar Khanfer, *On the solutions of a phase change problem with temperature-dependent thermal conductivity and specific heat*, **Results in Physics**, 19, (2020).
- (79) **Lazhar Bougoffa** and Ammar Khanfer, *Solutions of a non-classical Stefan problem with nonlinear thermal coefficients and a Robin boundary condition*, **AIMS Mathematics**, 19, (2021).
- (80) **L. Bougoffa**, Randolph C. Rach and A. Mennouni, *On the existence, uniqueness and new analytic approximate solution of the modified error function in two-phase Stefan problems*, **Mathematical Methods in the Applied Sciences**, 2021; 44 (14): 10948-10956 (2021).
- (81) **Lazhar Bougoffa**, *Comments on the paper: Bilinear form and exact solutions for a new extended (2+1)-dimensional Boussinesq equation by Ping Cui [Results in Physics 22 (2021) 103919]*, **Results in Physics**, 25 (2021) 104185.

- (82) **Lazhar Bougoffa**, *Comments on the paper: "On the solution of a parabolic PDE involving a gas ow through a semi-infinite porous medium" by Daniel N. Pop and et al. [Results in Physics 22 (2021) 103884]*, **Results in Physics**, 25 (2021) 104234.
- (83) **L. Bougoffa** and Ammar Khanfer, *Radial solutions of the elliptic Liouville equation*, **Results in Physics**, 25 (2021) 104276.
- (84) Ammar Khanfer and **L. Bougoffa**, *On the fourth-order nonlinear beam equations of a small deflection with nonlocal conditions*, **AIMS Mathematics**, 6(9): 9899-9910 (2021).
- (85) **L. Bougoffa** and Panagiotis T. Krasopoulos, *Integral inequalities in probability theory revisited*, **The Mathematical Gazette**, 105, No. 563 July 2021, pp. 263{270 (2021).
- (86) Panagiotis T. Krasopoulos and **L. Bougoffa**, *New optimal bounds for logarithmic and exponential functions*, **Journal of Inequalities and Special Functions**, Volume 12 Issue 3, Pages 24-32 (2021).
- (87) Ammar Khanfer and **L. Bougoffa**, *On the nonlinear system of fourth-order beam equations with integral boundary conditions*, **AIMS Mathematics**, 6(10): 11467-11481 (2021).
- (88) **Lazhar Bougoffa**, *Comments on the paper: Analytical and semi-analytical solutions for Phi-four equation through three recent schemes by Mostafa M.A. Khater and et al. [RINP, 22 (2021) 103954]*, **Results in Physics**, 30, November 2021, (2021) 10481825.
- (89) **L. Bougoffa** and Randolph C. Rach, *An adaptation of the modified decomposition method in solving nonlinear initial-boundary value problems for ODEs*, **Journal of Applied Mathematics and Computing**, Vol. 28, 23-27, (2021).
- (90) Ammar Khanfer and **L. Bougoffa**, *A Cantilever Beam Problem With Small Deflections and Perturbed Boundary Data*, **Journal of function spaces**, Volume 2021, Article ID 9081623, 9 pages, (2021).
- (91) **L. Bougoffa**, Abdelaziz Mennouni, Abdul-Majid Wazwaz, *Further real dark and complex bright solitons to the new coupled Konno-Oono system*, **Romanian Journal of Physics**, In press, (2022).
- (92) **L. Bougoffa**, Abdelaziz Mennouni, Abdul-Majid Wazwaz, *Families of exact soliton solutions to the AB nonlinear system*, **Romanian Reports in Physics**, 74, 106, (2022).
- (93) **L. Bougoffa**, Abdelaziz Mennouni, *A new recursive scheme for solving a fractional differential equation of the nonlinear Lienard's equation*, **International Journal of Numerical Methods for Heat and Fluid Flow**, 32(11): 3470-3483, (2022).
- (94) Abdelaziz Mennouni, **L. Bougoffa**, Abdul-Majid Wazwaz, *A new recursive scheme for solving a fractional differential equation of ray tracing through the crystalline lens*, **Optical and Quantum Electronics**, 54, 373 (2022).
- (95) **L. Bougoffa**, *Evaluation of Special definite integrals related to Gamma function*, **Scientia, Series A, Mathematical Sciences**, Vol. 32 (2022), 16, (2022).
- (96) PANAGIOTIS T. KRASOPOULOS and **L. Bougoffa**, *Reverse Holder and Minkowski type integral inequalities for n functions*, **Aust. J. Math. Anal. Appl.**, 19, No. 1, Art. 9, 8 pp., (2022).
- (97) **Lazhar Bougoffa**, Smail Bougouffa and Ammar Khanfer *On a generalization of a coupled integrable dispersionless system*, **Results in Physics**, 39, June 2022, (2021) 105761.
- (98) Smail Bougouffa, Ammar Khanfer and **Lazhar Bougoffa**, *On the approximation of the modified error function*, **Mathematical Methods in the Applied Sciences**, 1-9, (2022).
- (99) Ammar Khanfer and **Lazhar Bougoffa** *A Stefan Problem With Nonlinear Thermal Conductivity*, **Mathematical Methods in the Applied Sciences**, 2023; 46:4602-4611, (2022).
- (100) Ammar Khanfer, **Lazhar Bougoffa** and Smail Bougouffa *Analytic approximate solution of the extended Blasius equation with temperature-dependent viscosity*, **Journal of Nonlinear Mathematical Physics**, Published: 05 October 2022, (2022).
- (101) **Lazhar Bougoffa**, Ammar Khanfer and Smail Bougouffa *New explicit and approximate solutions of the Newton-Schrodinger system*, **Journal of Nonlinear Mathematical Physics**, Published: 23 January 2023, (2023).
- (102) Abdelaziz Mennouni **L. Bougoffa**, *A new recursive scheme for solving the general dispersive fractional PDE*, **Romanian Reports in Physics**, In press, (2023).
- (103) **Lazhar Bougoffa**, Smail Bougouffa and Ammar Khanfer *Generalized Thomas- Fermi equation: Existence, uniqueness, and analytic approximation solutions*, **AIMS Mathematics**, Volume 8, Issue 5, (2023).
- (104) **Lazhar Bougoffa**, *A Note on Bolzano's Intermediate Value Theorem*, **The American Mathematical Monthly**, In press, (2023).