

Curriculum Vitae



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PERSONAL INFORMATION

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Current Position & Affiliation

Assistant Vice-Chancellor for Postgraduate Studies and Scientific Research,

Hodeidah University, Al-Hudaydah, Yemen

Assistant Professor, Department of Mathematics, Faculty of Education,

Hodeidah University, Al-Hudaydah, Yemen

Vice Dean of the College of Education for Postgraduate Studies, Hodeidah

University, Al-Hudaydah, Yemen

Chairman of the Publication Ethics Committee at Hodeidah University.

WEBSITES

- **Scopus** ID: 57792663600 : H-Index=**19**, Papers=**114**, Citations=**1220**
<https://www.scopus.com/authid/detail.uri?authorId=57204354133>
- **Web of Science** Researcher ID- AAF-6594-2019 : H-Index=**17**,
Papers=**82**, Citations=**955**, Verified Reviews=**92**, Verified Editor
Records=**60** <https://publons.com/researcher/3246813/mohammed-s-abdo/>
- **Google Scholar**: H-Index=**23**, i10-index=**53**, Papers= **145**,
Citations=**1704** https://scholar.google.com/citations?user=TU_NoDYAAAAJ&hlar
- **ResearchGate** : H-Index=**24**, Papers= **165**, Citations=**1807**
https://www.researchgate.net/profile/Mohammed_Abdo12
- **ORCID** : <https://orcid.org/0000-0001-9085-324X>

EDUCATION

- 2016-2021** **Ph.D** in Nonlinear Analysis in Applied Mathematics,
Department of Mathematics, College of Science, Dr. Babasaheb Ambedkar
Marathwada University, Aurangabad, Maharashtra, India
Thesis title: Studies on Theory of Fractional Functional Differential Equations.
Supervisor: Prof. Satish K. Panchal.
- 2011-2015** **M. Sc.** in Mathematics Analysis,
Department of Mathematics, College of Science, King Faisal University,
Al-Ahsa, Saudi Arabia
Thesis title: Perturbed Sweeping Processes In Banach Spaces.
Supervisor: Prof. Ahmed Gamal Ibrahim.
- 2001-2005** **B. Sc.** In Mathematics,
Department of Mathematics, College of Education, Hodeidah University,
Al-Hudaydah, Yemen.

WEBSITES WORK EXPERIENCE

- 04/2021 to Present** Assistant Professor, Departement of Mathematics, Hodeidah University; Yemen
- 01/2019-01/2021** *Co-guide* at Dr. BAMU, Aurnagabad; India
- 12/2013-12/2014** Lecturer at King Faisal University; Al-Ahsa, Saudi Arabia
- 06/2005-10/2010** Lecturer in Mathematics, National University ; Yemen
- 06/2005-10/2010** Lecturer in Mathematics, Hodeidah University; Yemen

Teaching Experience

- ✓ Calculus I & II, B.Sc. (College of Computer Science and Engineering), 2006-2010.
- ✓ Linear Algebra, B.Sc. (All Departments-Hodeidah University), 2006-2010.
- ✓ Differential Equations, B.Sc.(College of Computer Science and Engineering), 2006-2010.
- ✓ General Mathematics I & II, B.Sc. (College of Marine Sciences), 2006-2010.
- ✓ Financial Mathematics, B.Sc. (College of Commerce and Economics), 2008-2010.
- ✓ Mathematics I & II, B.Sc. (National University), 2008-2010.
- ✓ Operations Research, B.Sc.(Department of Mathematics -Hodiedah University),2008-2010.
- ✓ Numerical analysis I & II, B.Sc.(Hodiedah University), 2007-2010.

RESEARCH INTERESTS

My research area focuses on the Fractional calculus, Theory of Fractional Differential Equations / Inclusions, and Fixed-point theorem. These topics concern the analytic study of fractional differential equations such as existence, uniqueness, continuous dependence, and stability results. Overall, the nonlinear analysis in applied mathematics is one of the main branches of my research point. My a particular interest also in mathematical models describing biological and medical phenomena. Throughout my research career, a professional in writing scientific papers and participating with international researchers in many collaborative research contributions. More than 110 research papers published in international journals with good impact factors and they were indexed in **Scopus**, and **Web of Science**.

Other Research Interests are

Mathematical Analysis; Functional Analysis; Nonlinear Analysis; Differential Equation;
Fractional Differential Equation; Fractional Calculus; Fixed Point Theory; Topology; Fuzzy Mathematics.

Current Research Activity

Based on the bedrock of my doctorate research, my current research attention involves the Theory of Fractional Differential Equations and mathematical models under recent fractional calculus.

Additional Collaborative Activities/Organizational Responsibilities

I have won a research project containing 4 research papers in Deanship of Scientific Research, Imam Mohammad Ibn Saud Islamic University (IMSIU), Saudi Arabia, Grant No. (21-13-18-057) and these

works have been published in the **Axioms (MDPI)**; **Boundary Value Problems (Springer)**; **Mathematics (AIMS)**; **Journal of function spaces (Hindawi)**. In addition, I am still involved in publishing scientific papers in partnership with active international researchers.

Editor-in-Chief

- 1- **Journal of Mathematical Analysis and Modeling (JMAM)**.
<http://www.sabapub.com/index.php/jmam/about/editorialTeam>
- 2- **Abhath Journal of Basic and Applied Sciences (AJOBAS)**
<https://ojs.abhath-ye.com/index.php/OJSRJBAS/about/editorialTeam>

Editorial Manager

- 3- **Journal of Fractional Calculus and Nonlinear Systems(JFCNS)**.
<https://www.sabapub.com/index.php/jfcns/about/editorialTeam>

Academic Editor

- 4- **Journal of Function Spaces** (Scopus, ISI, Q1, IF=1.807).
<https://www.hindawi.com/journals/jfs/editors/>
- 5- **Mathematical Problems in Engineering** (Scopus, ISI, Q2, IF=1.305).
<https://www.hindawi.com/journals/mpe/editors/>

Editorial Member

- 6- **PLOS ONE** (Scopus, ISI, Q1, IF=3.24) <https://journals.plos.org/plosone/static/editorial-board>
- 7- **Journal of Advances in Applied and Computational Mathematics**
<https://www.avantipublishers.com/editorial-board-member-jaacm/>
- 8- **Mathematical Modelling and Numerical Simulation with Applications (MMNSA)**,
<http://www.mmnsa.org/index.php/mmnsa/>

Journals Reviewer

Chaos, Solitons & Fractals (Elsevier); **Results in Applied Mathematics (Elsevier)**; **Alexandria Engineering Journal (Elsevier)**; **Mathematics and Computers in Simulation (Elsevier)**; **Advances in Difference Equations(Springer)**; **Boundary Value Problems (Springer)**; **International Journal of Applied and Computational Mathematics (Springer)**; **Fixed Point Theory and Applications (Springer)**; **Applicable Analysis (Taylor & Francis)**; **Mathematical Modelling and Analysis (Taylor & Francis)**; **Numerical Methods for Partial Differential Equations (Wiley)**; **Mathematical Problems in Engineering(Hindawi)**; **Complexity (Hindawi)**; **Journal of Function Spaces (Hindawi)**; **Journal of Mathematics (Hindawi)**; **Mathematics(MDPI)**; **Fractalfract(MDPI)**; **Symmetry (MDPI)**; **Axioms (MDPI)**; **Mathematics (AIMS)**.

LIST OF PUBLICATIONS

• Journals

Publications in 2023

- [1] Leila Ait kaki, Nouria Arar, **Mohammed S. Abdo**, and M. Daher Albalwi, Existence of a Generalized Solution for the Fractional Contact Problem," *Journal of Mathematics* (Scopus, ISI, Q1, IF=1.55), vol. 2023, Article ID 8316373, 12 pages, 2023. <https://doi.org/10.1155/2023/8316373>.
- [2] Hojjat Afshari, **Mohammed S. Abdo** , M. N. Sahlan, Some New Existence Results For Boundary Value Problems Involving Ψ -Caputo Fractional Derivative, *TWMS Journal of Applied and Engineering Mathematics* (Scopus, Q2), 13(1), 246-255, 2023.
- [3] **Mohammed S. Abdo**, Shammakh, W.; Alzumi, H.Z.; Alghamd, N.; Albalwi, M.D. Nonlinear Piecewise Caputo Fractional Pantograph System with Respect to Another Function. *Fractal and Fractional* (Scopus, ISI, Q1, IF=3.577), 7, 162, 2023. <https://doi.org/10.3390/fractalfract7020162>
- [4] Sadek, L., Sadek, O., Alaoui, H. T., **Mohammed S. Abdo**, Shah, K. et al. Fractional Order Modeling of Predicting COVID-19 with Isolation and Vaccination Strategies in Morocco. *CMES-Computer Modeling in Engineering & Sciences* (Scopus, wos, Q3, IF=2.027), , 136(2), 1931–1950, 2023. <https://doi.org/10.32604/cmcs.2023.025033>
- [5] M. Begum Jeelani, A.S. Alnahdi, **Mohammed S. Abdo**, M. A. Almalahi, N. H. Alharthi and Kamal Shah, A generalized fractional order model for COV-2 with vaccination effect using real data, *Fractals*(Scopus, wos, Q1, IF=4.555), (2023) , <https://doi.org/10.1142/S0218348X2340042X>
- [6] **Mohammed S. Abdo**, Shammakh, W.; Alzumi, H.Z, New Existence and Stability Results for-Caputo-Fabrizio Fractional Nonlocal Implicit Problems. *Journal of Mathematics* (Scopus, ISI, Q1, IF=1.55), 2023, Article ID 6123608, (2023)  <https://doi.org/10.1155/2023/6123608>.
- [7] *Thabet Abdeljawad, Kamal Shah, Mohammed S. Abdo, Fahd Jarad*, An Analytical Study of Fractional Delay Impulsive Implicit Systems with Mittag-Leffler Law, *Applied and Computational Mathematics an International Journal* (Scopus, ISI, Q1, IF=4.771) (2023), vol. 22, no. 1, pp. 31-44.  [10.30546/1683-6154.22.1.2023.31](https://doi.org/10.30546/1683-6154.22.1.2023.31)
- [8] **Mohammed S. Abdo** , *AL-Kamarany Amood M., Suhail K.A., & Majam A. S.* (2022). *Vaccination-based Measles Outbreak Model with Fractional Dynamics*, *Abhath Journal of Basic and Applied Sciences*, (2023), 1(2), 6-10.
- [9] **Mohammed S. Abdo**, *Existence and stability analysis to nonlocal implicit problems with ψ -piecewise fractional operators*, *Abhath Journal of Basic and Applied Sciences*, (2023), 1(2), 11-17.
- [10] Oussama Melkemi, **Mohammed S. Abdo**, Wafa Shammakh, Hadeel Z. Alzumi. Yudovich type solution for the two dimensional Euler-Boussinesq system with critical dissipation and general source term. *AIMS Mathematics* (Scopus, ISI, Q1, IF=2.739) , 2023, 8(8): 18566-18580. doi: 10.3934/math.2023944
- [11] Bouhadjera, H., Alzumi, H. Z., Shammakh, W., Ali, S. M., **Mohammed S. Abdo**. (2023). Unique Common Fixed Points for Occasionally Weakly Biased Maps of Type in-Metric-Like Spaces. *Journal of Function Spaces*, vol. 2023 | Article ID 3937224, (2023) | <https://doi.org/10.1155/2023/3937224>

- [12] Mohammed N. Alkord, Sadikali L. Shaikh, Saleh S. Redhwan, **Mohammed S. Abdo**, Qualitative Analysis For Fractional-Order Nonlocal Integral-Multipoint Systems Via A Generalized Hilfer Operator, *Nonlinear Functional Analysis and Applications*, (Scopus), **28(2)**, 537-555, (2023).
- [13] Oussama Melkemi,¹**Mohammed S. Abdo**,²M.A. Aiyashi,³and M. Daher Albalwi: On the Global Well-Posedness for a Hyperbolic Model Arising from Chemotaxis Model with Fractional Laplacian Operator, *Journal of Mathematics*(Scopus, ISI, Q1, IF=1.555), **vol. 2023, Article ID 1140032**, <https://doi.org/10.1155/2023/1140032>
- [14] **Mohammed S. Abdo**, Sahar Ahmed Idris, Wedad Albalawi, Abdel-Haleem Abdel-Aty, Mohammed Zakarya, and Emad E. Mahmoud, Qualitative Study on Solutions of Piecewise Nonlocal Implicit Fractional Differential Equations, *Journal of Mathematics* (Scopus, ISI, Q1, IF=1.555), **vol. 2023, Article ID 2127600**, <https://doi.org/10.1155/2023/2127600>
- [15] Saleh Alshammari, Mohammad Alshammari, **Mohammed S. Abdo**, Nonlocal Hybrid Integro-Differential Equations Involving Atangana–Baleanu Fractional Operators, *Journal of Mathematics* (Scopus, ISI, Q1, IF=1.555), **vol. 2023 | Article ID 5891342** | <https://doi.org/10.1155/2023/5891342>
- [16] Lachouri, A., **Mohammed S. Abdo**, Ardjouni, A. *et al.* Investigation of fractional order inclusion problem with Mittag-Leffler type derivative. *J. Pseudo-Differ. Oper. Appl.* **14**, 43 (2023). <https://doi.org/10.1007/s11868-023-00537-3>

Publications 2022

- [17] A.M. Saeed, M.A. Almalahi, and **Mohammed S. Abdo**. Explicit iteration and unique solution for ϕ -Hilfer type fractional Langevin equations. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), **7(3)**, (2022), 3456-3476. doi: 10.3934/math.2022192
- [18] B. Abdellatif, A. Naas, B. Maamar, and **Mohammed S Abdo**. Analysis of a fractional boundary value problem involving Riesz-Caputo fractional derivative. *Advances in the Theory of Nonlinear Analysis and its Application* (Scopus, IF=0.8), **6(1)**, (2022), 14 – 27. <https://doi.org/10.31197/atnaa.927938>
- [19] S.S. Redhwan, S. L. Shaikh, **Mohammed S. Abdo**, W. Shatanawi, K. Abodayeh, M.A. Almalahi, and T. Aljaaidi. Investigating a generalized Hilfer-type fractional differential equation with two-point and integral boundary conditions. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), **7(2)**, (2022), 1856-1872. doi: 10.3934/math.2022107
- [20] I. Suwan, **Mohammed S. Abdo**, T. Abdeljawad, M.M. Matar, A. Boutiara, and M. A. Almalahi. Existence theorems for Ψ -fractional hybrid systems with periodic boundary conditions. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), **7(1)**, (2022), 171-186. doi: 10.3934/math.2022010
- [21] M.B.Jeelani, A.S. Alnahdi, M.A. Almalahi, **Mohammed S. Abdo**, H.A. Wahash, and M. A. Abdelkawy. Study of the Atangana-Baleanu-Caputo type fractional system with a generalized Mittag-Leffler kernel. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), **7(2)**, (2022), 2001-2018. doi: 10.3934/math.2022115
- [22] R. Saleh, A. Suad, **Mohammed S Abdo**, and S.A. Sadikali. coupled non-separated system of Hadamard-type fractional differential equations. *Advances in the Theory of Nonlinear Analysis and its Application* (Scopus, Q2,IF=0.8), **6(1)**, (2022), 33-44. <https://doi.org/10.31197/atnaa.925365>

- [23] A. Lachouri, **Mohammed S. Abdo**, A. Ardjouni, B. Abdalla, and T. Abdeljawad. On a class of differential inclusions in the frame of generalized Hilfer fractional derivative. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), **7(3)**, (2022), **3477-3493**. doi: [10.3934/math.2022193](https://doi.org/10.3934/math.2022193)
- [24] F. Fredj, H. Hammouche, **Mohammed S. Abdo**, W. Albalawi, and A. H. Almaliki. A Study on -Caputo-Type Hybrid Multifractional Differential Equations with Hybrid Boundary Conditions. *Journal of Mathematics* (Scopus, ISI, Q2, IF=0.971), **2022**, (2022), **ArticleID 9595398**. <https://doi.org/10.1155/2022/9595398>
- [25] S.S. Redhwan, S.L. Shaikh, and **Mohammed S. Abdo**. Caputo-Katugampola type Implicit fractional differential equation with two-point anti-periodic boundary conditions. *Results in Nonlinear Analysis* (Scopus), **5(1)**, (2022), **12-28**. <https://doi.org/10.53006/rna.974148>
- [26] S.M. Ali, W. Shatanawi, M.D. Kassim, **Mohammed S. Abdo**, and S. Saleh. Investigating a Class of Generalized Caputo-Type Fractional Integro-Differential Equations. *Journal of Function Spaces* (Scopus,ISI, Q1, IF= 1.807), **2022**, (2022), **Article ID 8103046**. <https://doi.org/10.1155/2022/8103046>
- [27] M. Alesemi, N. Iqbal, and **Mohammed S. Abdo**. Novel Investigation of Fractional-Order Cauchy-Reaction Diffusion Equation Involving Caputo-Fabrizio Operator. *Journal of Function Spaces* (Scopus,ISI, Q1, IF= 1.807), **2022**, (2022), **Article ID 4284060**. <https://doi.org/10.1155/2022/4284060>
- [28] C. Derbazi, Z. Baitiche, **Mohammed S. Abdo**, K. Shah, B. Abdalla, and T. Abdeljawad. Extremal Solutions of Generalized Caputo-Type Fractional-Order Boundary Value Problems Using Monotone Iterative Method. *Fractal and Fractional* (Scopus, ISI, Q1, IF=3.313), **6(3)**, (2022), **146**. <https://doi.org/10.3390/fractalfract6030146>
- [29] S. M. Ali, W. Albalawi, **Mohammed S. Abdo**, H.Y. Zahran, and A-H Abdel-Aty. Theory of Fractional Hybrid Problems in the Frame of Ψ -Hilfer Fractional Operators. *Journal of Function Spaces* (Scopus,ISI, Q1, IF= 1.807), **2022**, (2022), **Article ID 1079214**. <https://doi.org/10.1155/2022/1079214>.
- [30] M.A. Almalahi, S.K. Panchal, **Mohammed S. Abdo**, and F. Jarad. On Atangana–Baleanu-Type Nonlocal Boundary Fractional Differential Equations. *Journal of Function Spaces* (Scopus,ISI, Q1, IF= 1.807), **2022**, (2022), **Article ID 1812445**. <https://doi.org/10.1155/2022/1812445>
- [31] A. Upadhyaya, M.S. Thakur, A. Mashat, G. Gupta, and **Mohammed S. Abdo**. Prediction of Binder Content in Glass Fiber Reinforced Asphalt Mix using Machine Learning Techniques. *IEEE Access* (Scopus,ISI, Q1, IF=3.367), **10**, (2022), **33866-33881** DOI: [10.1109/ACCESS.2022.3157639](https://doi.org/10.1109/ACCESS.2022.3157639)
- [32] S. M. Ali, and **Mohammed S. Abdo**. Qualitative Analysis for Multiterm Langevin Systems with Generalized Caputo Fractional Operators of Different Orders. *Mathematical Problems in Engineering* (Scopus,ISI, Q2, IF= 1.305), **2022**, (2022), **Article ID 1879152**. <https://doi.org/10.1155/2022/1879152>
- [33] M.K. Neamah, A. Ibrahim, H.S. Mehdy, S.S. Redhwan, and **Mohammed S. Abdo**. Some New Fractional Inequalities Involving Convex Functions and Generalized Fractional Integral Operator. *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), **2022**, (2022), **Article ID 2350193**. <https://doi.org/10.1155/2022/2350193>
- [34] A. Dilshad, M. Haris , M. Aslam, P. Hammachukiattikul, and **Mohammed S. Abdo**. Mobius Group Generated by Two Elements of Order 2, 4, and Reduced Quadratic Irrational Numbers. *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), **2022**, (2022), **Article ID 6320243**. <https://doi.org/10.1155/2022/6320243>

- [35] M.B. Jeelani, A.S. Alnahdi, M.A. Almalahi, **Mohammed S. Abdo**, H.A. Wahash, and N.H. Alharthi, Qualitative Analyses of Fractional Integrodifferential Equations with a Variable Order under the Mittag-Leffler Power Law. *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), 2022, (2022), Article ID 6387351. <https://doi.org/10.1155/2022/6387351>
- [36] **Mohammed S. Abdo**. Qualitative Analyses of ψ -Caputo Type Fractional Integrodifferential Equations in Banach Spaces. *Journal of Advances in Applied & Computational Mathematics*, 9, (2022), 1–10. <https://doi.org/10.15377/2409-5761.2022.09.1>
- [37] J. Patil, B. Hardan, **Mohammed S. Abdo**, and A. Bachhav. A new fixed point results on (Q,P)-contractive mappings with applications. *Palestine Journal of Mathematics* (Scopus, Q4), 11(2), (2022), 318–334.
- [38] L.A. Palve, **Mohammed S. Abdo**, and S.K. Panchal. Fractional functional differential equations with delay involving Hilfer-Hadamard type. *Palestine Journal of Mathematics* (Scopus, Q4), 11(3), (2022), 614–625.
- [39] N. Iqbal, A. M. Albalahi, **Mohammed S. Abdo**, and W.W. Mohammed. Analytical Analysis of Fractional-Order Newell-Whitehead-Segel Equation: A Modified Homotopy Perturbation Transform Method. *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), 2022, (2022), Article ID 3298472. <https://doi.org/10.1155/2022/3298472>
- [40] S. Saleh, R. Abu gadiri, T. Al-shami, **Mohammed S. Abdo**. On Categorical Property of Fuzzy Soft Topological Spaces. *Applied Mathematics & Information Sciences* (Scopus), 16(4), (2022), 635-641.
- [41] M.A. Almalahi, S.K. Panchal, F. Jarad, **Mohammed S. Abdo**, K. Shah, and T. Abdeljawad. Qualitative analysis of a fuzzy Volterra-Fredholm integrodifferential equation with an Atangana-Baleanu fractional derivative. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), 7(9), 15994-16016. doi: 10.3934/math.2022876
- [42] X. Luo, M. Nadeem , M.I. Asjad , and **Mohammed S. Abdo**. A Computational Approach for the Calculation of Temperature Distribution in Casting-Mould Heterogeneous System with Fractional Order, *Computational and Mathematical Methods in Medicine* (Scopus, ISI, Q2, IF=2.809), Volume 2022, Article ID 3648277, <https://doi.org/10.1155/2022/3648277>
- [43] Jiao Zeng, Asma Idrees, and **Mohammed S. Abdo**. A New Strategy for the Approximate Solution of Hyperbolic Telegraph Equations in Nonlinear Vibration System, *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), 2022, (2022), Article ID 8304107 <https://doi.org/10.1155/2022/8304107>
- [44] **Mohammed S. Abdo**. Boundary value problem for fractional neutral differential equations with infinite delay, *Abhath Journal of Basic and Applied Sciences*, 1(1),(2022), 1-14.
- [45] A. Boutiara, **Mohammed S. Abdo**, M. A. Almalahi, K. Shah, B. Abdalla, T. Abdeljawad. Study of Sturm-Liouville boundary value problems with pp -Laplacian by using generalized form of fractional order derivative, *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.739), 7(10), (2022), 18360-18376 doi: 10.3934/math.20221011
- [46] S. Hussain, E. N. Madi, H. Khan, **Mohammed S. Abdo**. A Numerical and Analytical Study of a Stochastic Epidemic SIR Model in the Light of White Noise, *Advances in Mathematical Physics* (Scopus, ISI, Q3, IF=1.3.64), 2022, 1638571 <https://doi.org/10.1155/2022/1638571>

- [47] Thabet Abdeljawad, Nabil Mlaiki and **Mohammed S. Abdo**. Caputo-Type Fractional Systems With Variable Order Depending On The Impulses And Changing The Kernel, *Fractals* (Scopus, ISI, Q1, IF= 4.555), (2022) (Online Ready), <https://doi.org/10.1142/S0218348X22402198>
- [48] S. M. Ali, **Mohammed S. Abdo**, B. Sontakke, K. Shah, T. Abdeljawad. New results on a coupled system for second-order pantograph equations with ABC fractional derivatives[J]. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.739),, 2022, 7(10): 19520-19538. doi: 10.3934/math.20221071
- [49] **Mohammed S. Abdo**, H. Y. Zahran, El Sayed Yousef, E E. Mahmoud, and Abdel-Haleem Abdel-Aty. Positive Solutions of a Generalized Nonautonomous Fractional Differential System, *Journal of Mathematics* (Scopus, ISI, Q1, IF= 1.555), 2022, (2022), Article ID 8597779 <https://doi.org/10.1155/2022/8597779>
- [50] Muath Awadalla, **Mohammed S. Abdo**, Hanan A. Wahas , Kinda Abuasbeh, Qualitative study of linear and nonlinear relaxation equations with ψ -Riemann-Liouville fractional derivatives, *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.739),, 2022, 7(11) 20275-20291, doi: 10.3934/math.20221110
- [51] **Mohammed S. Abdo**, Mohammed Zakarya, Emad E Mahmoud, Abdel-Haleem Abdel-Aty, On ψ -Caputo Partial Hyperbolic Differential Equations with a Finite Delay, *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), (2022), Article ID 1399951, <https://doi.org/10.1155/2022/1399951>
- [52] M. Awadalla, K. Abuasbeh, Y.Y.Y. Noupoue, **Mohammed S. Abdo**, Modeling Drug Concentration in Blood through Caputo-Fabrizio and Caputo Fractional Derivatives, *Computer Modeling in Engineering & Sciences*, (Scopus, ISI, Q2, IF= 2.027), (2022), <https://doi.org/10.32604/cmes.2023.024036>
- [53] Almalahi, **Mohammed A., Abdo**, Mohammed S., Abdeljawad, Thabet and Bonyah, Ebenezer. "Theoretical and numerical analysis of a prey–predator model (3-species) in the frame of generalized Mittag-Leffler law" *International Journal of Nonlinear Sciences and Numerical Simulation* (Scopus, ISI, Q1, IF= 2.156), (2022). <https://doi.org/10.1515/ijnsns-2021-0288>

Publications in 2021

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1. M.B. Jeelani, A.S. Alnahdi, M.A. Almalahi, **Mohammed S. Abdo**, H.A. Wahash, and N.H. Alharthi, Qualitative Analyses of Fractional Integrodifferential Equations with a Variable Order under the Mittag-Leffler Power Law. *Journal of Function Spaces* (Scopus, ISI, Q1, IF= 1.807), 2022, (2022), Article ID 6387351. <https://doi.org/10.1155/2022/6387351>
2. M.B. Jeelani, A.S. Alnahdi, M.A. Almalahi, **Mohammed S. Abdo**, H.A. Wahash, and M. A. Abdelkawy. Study of the Atangana-Baleanu-Caputo type fractional system with a generalized Mittag-Leffler kernel. *AIMS Mathematics* (Scopus, ISI, Q2, IF=2.1), 7(2), (2022), 2001-2018. [doi: 10.3934/math.2022115](https://doi.org/10.3934/math.2022115)
3. A.S. Alnahdi, M.B. Jeelani, **Mohammed S. Abdo**, et al. On a nonlocal implicit problem under Atangana–Baleanu–Caputo fractional derivative. *Boundary Value Problems* (Scopus, ISI, Q2, IF= 1.74), 2021, (2021), 104. <https://doi.org/10.1186/s13661-021-01579-6>
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5. Muath Awadalla, **Mohammed S. Abdo**, Hanan A. Wahash, Kinda Abuasbeh. Qualitative study of linear and nonlinear relaxation equations with psi-Riemann-Liouville fractional derivatives, *Aims Mathematics* (Submitted), (2022).
6. Muath Awadalla, Kinda Abuasbeh, Yves Yannick Yameni Noupoue, **Mohammed S. Abdo**. Modeling Drug Concentration in Blood through Caputo-Fabrizio and Caputo Fractional Derivatives, *Computer Modeling in Engineering & Sciences* (Submitted), (2022).

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Professional and Computer Skills

Programming Packages:

- ❖ MiKTeX
- ❖ LaTeX
- ❖ Scientific WorkPlace (Tex)
- ❖ Beamer

Programming Languages:

- ✚ Microsoft Office Packages
- ✚ Matlab
- ✚ Maple
- ✚ Mathematica

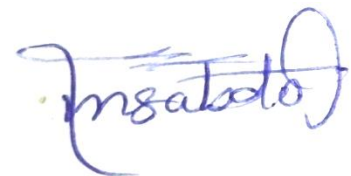
Languages

- _ Arabic (native)
- _ English (good)

Declaration

I hereby declare that all the above statements given by me are true to the best of my knowledge and belief.

ALL CERTIFICATES ARE AVAILABLE UPON YOUR REQUEST



Dr. Mohammed S. Abdo