

Curriculum Vitae



- **Name:** Mohamed Ibrahim Mostafa Hilal
- **Title:** Assistant Professor
- **Department:** Basic Science-Faculty of Engineering
- **E-mail:** mimhilal@yahoo.com, mohamed.hilal@su.edu.eg

A) Academic Qualifications:

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| - Bachelor's Degree in Mathematics | University: Zagazig | Year: 2005 |
| - Master's Degree in Applied Mathematics | University: Zagazig | Year: 2014 |
| - Ph.D. in Applied Mathematics | University: Zagazig | Year: 2016 |

B) Academic promotions:

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| - Demonstrator, | Date: 9/2011 to 8/2014. |
| - Assistant Lecturer, | Date: 9/2014 to 11/2016. |
| - Lecturer, | Date: 12/2016 to 12/2023. |
| - Assistant Professor, | Date: 1/2024 till now. |

C) Scientific Merit:

- Google Scholar:

<https://scholar.google.com/eg/citations?user=ojgAEBwAAAAJ&hl=en>

- Citations: 433

h-index: 15

i10-index: 17

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=56375278300>

- Citations: 316

h-index: 12

Orcid –N: **0000-0001-7701-5268**. <https://orcid.org/0000-0001-7701-5268>

D) Scientific Activities

1: Membership of Professional Organizations and Scientific Societies

- 1- Egyptian Mathematical Society.
- 2- Arab Physical Society.

2: Training Courses/workshops:

- 1- Journal Editor 1, in 20/12/2021.
- 2- Journal Editor 2, in 24/12/2019.
- 3- Publishing Culture in Journals Indexed within the Scopus Database, in 4/1/2022.

3: Conferences, Seminars and Workshops:

- 1- Computational Methods for Linear and Nonlinear Systems IV, in Faculty of Engineering- Cairo University, on 6/6/2013.
- 2- International Mathematical Day, in Arabic Academy for Science, Technology and Marine Transport – Alexandria, on 14/3/2022, Online (Zoom).

4: Teaching Scopes:

- 1- Engineering and Classical Mechanics – Quantum Mechanics – Fluid Mechanics.
- 2- Differentiation and Integration -Differential and Integral Equations- Discrete Mathematics
- 3- Algebra, Geometry and Statistics.
- 4- Thermoelasticity and Thermodynamics.

5: Peer reviewing of scientific research/ Projects:

- 1- Applied Mathematics and Computations (AMC)
- 2- Journal of Porous Media (JPM)
- 3- Archives of Thermodynamics (AOT)
- 4- Mechanics of Advanced Materials and Structures (MAMS)
- 5- Latin American Journal of Solids and Structures (LAJSS)
- 6- Journal of Mechanics-Cambridge Journals- (JM)
- 7- Journal of Vibration and Control (JVC)
- 8- Canadian Journal of Physics (CJP)
- 9- Waves in Random Complex Media (TWRM)
- 10- Results in Physics (RINP)

E) Scientific Publications:

Last 10 year of published Scientific Papers

- 1- Analytical solution of rotation and thermodiffusion of thermoelastic microstretch medium with microtemperatures, M.I.M. Hilal. (Journal of the Brazilian Society of Mechanical Sciences and Engineering BMSE) Vol. 41 (10), 2019, 447-458.
- 2- Fourier and Laplace transforms in micropolar thermoelastic solid with rotation and Hall current in case of energy dissipation and thermal shock, M.I.M. Hilal. (Indian Journal of Physics IJP) Vol. 94 (10), 2020, 1515-1525.
- 3- Reflection of plane waves in magneto micropolar thermoelastic medium with voids and one relaxation time due to gravity and two temperature theory, M.I.M. Hilal, E.M. Abd-Elaziz, and S. A. Hanoura (Indian Journal of Physics INJP) Vol. 95 (5), 2021, 915-924.
- 4- State-Space approach to a 2-D generalized thermoelastic medium under the effect of inclined load and gravity using a Dual-Phase-Lag model, M.I.A. Othman, E.M. Abd-Elaziz and M.I.M. Hilal. (Mechanics Based Design of Structures and Machines an International Journal MBDSM) Vol. 50 (2), 2022, 395-411.
- 5- Reflection waves phenomena in a rotating magneto-micropolar thermoelastic medium with temperature dependency and gravity using Green-Naghdi theory, M.I.M. Hilal. (Mechanics Based Design of Structures and Machines an International Journal LMBD) Vol. 50 (10). 2022, 3441-3451.

- 6- Diffusion, rotation and lagging behavior of a thermoelastic micropolar medium with voids and temperature gradient under mechanical pressure, M.I.M. Hilal. (Waves in Random and Complex Media TWRM). <https://doi.org/10.1080/17455030.2021.2011987>.
- 7- Thermodynamic modelling of a laser pulse heating in a rotating microelongated non-local thermoelastic solid due to (G-N) theory, M.I.M. Hilal. (Zeitschrift für Angewandte Mathematik und Mechanik-Journal of Applied Mathematics and Mechanics-ZAMM) Vol. 102 (1), 2022, 1-15.
- 8- Thermomechanical interactions of rotating thermoelastic magneto-microelongated medium heated by laser and initially stressed via non-local elasticity and GN III, M.I.M. Hilal. (Acta Mechanica ACME) Vol. 233 (10), 2022, 5183-5197.
- 9- Photothermal excitation and Thomson impact in a semiconductor microelongated thermoelastic medium with microtemperatures in the gravity, M.I.M. Hilal. (Zeitschrift für Angewandte Mathematik und Mechanik-Journal of Applied Mathematics and Mechanics-ZAMM) Vol. 102 (12), 2022, e202200175.
- 10- On Flamant-Boussinesq problem with dynamical flexoelectric effect and micro-inertia effect in dielectrics subjected to dynamical wave loading, A. R. El-Dhaba, A. F. Ghaleb, and M.I.M. Hilal. (Acta Mechanica ACME). <https://doi.org/10.1007/s00707-023-03647-7>.

F) Skills

- Language Skills:

- 1- Arabic Language: Native Language (Excellent).
- 2- English Language: 1st Foreign Language (Very Good).
- 3- French Language: 2nd Foreign Language (Good).

- Computer Skills:

- 1- Windows, Office (2019) WinWord – Excel – Access – PowerPoint.
- 2- Some computer languages: Basic – Visual Basic – (C) Language – (C +) Language.
- 3- Applications: Matlab, Mathematica, Maple.

- Presentation skills: I have a good talent in the presentation skill.