



Curriculum Vitae (CV)

Mohamed ABD EL-NABY IBRAHIM ESSAWY

Personal Information:

Academic Rank: Lecturer

Department: Basic Sciences

Specialization: Applied Mathematics

Position: Lecturer

Google Scholar: <https://scholar.google.com/citations?user=sA3a9IsAAAAJ&hl=ar>

Research Gate: <https://www.researchgate.net/profile/Mohamed-Essawy-6>

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Scopus ID:

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## Education:

Degree	Discipline	Institution	Year
Ph.D.	Applied Mathematics (Fluid Mechanics)	FACULTY OF SCIENCE, BENI-SUIEF UNIVERSITY	2020
M.Sc.	Applied Mathematics (Fluid Mechanics)	FACULTY OF SCIENCE, BENI-SUIEF UNIVERSITY	2014
B.Sc.	Mathematics	FACULTY OF SCIENCE, FAYOUM UNIVERSITY	2008

## Academic Experience:

**Institution: Higher Technological institute**

**Rank: LECTURER**

**Dates: 2021**

**Institution: Higher Technological institute**

**Rank: ASSISTANT LECTURER**

**Dates: 2014**

**Institution: Higher Technological institute**

**Rank: DEMONSTRATOR**

**Dates: 2010**

## Research interests:

- Applied Mathematics.
- Numerical Analysis.
- Computational Fluid Mechanics.
- Heat and Mass Transfer.
- Brownian Motion & Thermophoresis diffusion.
- Transportation in Porous Media.
- Magneto-hydrodynamic Flows.
- Nano-fluids systems.

## Publications:

1. H.A. Attia, M.A.I. Essawy, A.H. Khater and A.A. Ramadan, "Effectiveness of Porosity and Inertia on the Unsteady Flow Between Two Parallel Plates with Heat Transfer Subject to Exponential Decaying Pressure Gradient", Intl. j. Basic. Sci. Appl. Res., Vol., 2 (7), 669-676, 2013.
2. H.A. Attia, M.A.I. Essawy, A.H. Khater and A.A. Ramadan, "Unsteady non-Darcian Couette flow and heat transfer in porous medium with exponential decaying pressure gradient subject to uniform suction or injection", Proceedings of ICFD11, December 19-21, 2013, Alexandria, Egypt.
3. H.A. Attia, M.A.I. Essawy, A.H. Khater and A.A. Ramadan, "Unsteady non-Darcian flow between two stationary parallel plates in porous medium with heat transfer subject to uniform suction or injection", Bulgarian Chemical Communications, Vol., 46(3), 616 – 623, 2014.
4. M.A.I. Essawy and H.A. Attia, "Unsteady non-Darcian Couette flow in a porous medium with heat transfer subject to uniform suction or injection", International Journal of Mathematical Engineering and Science (IJMES), Vol., 3 (2), 1-13, 2014.
5. H.A. Attia and M.A.I. Essawy, "Numerical analysis for a parametric study of a steady non-Darcian flow over a rotating disk in a porous medium", Intl. J. Basic. Sci. Appl. Res., Vol., 5 (1), 1-12, 2016.
6. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, A. A. Ramadan, and A. H. Abdel- Hamid, "Unsteady Magnetohydrodynamic Hartmann Flow of a Casson Nanofluid Through a Non-Darcian Porous Medium Under an Exponential Decaying Pressure Gradient", J. Nanofluids, Vol. 5, 384-398, 2016.



7. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, A. A. Ramadan, and A. H. Abdel- Hamid, "Nonlinear Heat and mass transfer in a MHD Homann nanofluid flow through a porous medium with chemical reaction, heat generation and uniform inflow", Eur. Phys. J. Plus, Vol. 131: 395, DOI 10.1140/epjp/i2016-16395-8, 2016.
8. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, A. A. Ramadan, and A. H. Abdel- Hamid, "Unsteady MHD non-darcian flow of a Casson nanofluid between two parallel plates with heat and mass transfer", Applied Mathematics & Information Sciences, Vol.11, No. 6, 1655-1671, 2017.
9. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, I. H. Abd-elmaksoud, A.A. Ramadan, and A.H. Abdel-Hamid, "Non-linear heat and mass transfer in a thermal radiated MHD flow of a power-law nanofluid over a rotating disk", SN Applied Sciences, 1: 551. <https://doi.org/10.1007/s42452-019-0557-6>, 2019.
10. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, A. A. Ramadan, and A. H. Abdel-Hamid, "Time dependent MHD Couette flow of a Casson nanofluid in a non-darcian porous medium under an exponential decaying pressure gradient ", (under publication).
11. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, A. A. Ramadan, and A. H. Abdel-Hamid, "Unsteady MHD Couette flow with heat and mass transfer of a non- Newtonian Casson nanofluid through a non-darcian porous medium ", (under publication).
12. N. T. El-dabe, H.A. Attia, M.A.I. Essawy, A. A. Ramadan, and A. H. Abdel-Hamid, " Unsteady two-phase flow of a nanofluid through a circular pipe in a porous medium with Brownian motion and thermophoretic diffusion", (under publication).

## Certifications or Professional Registrations

1. **A training Course "Pathways to Higher Education – Managerial Behavior"**  
*Faculty of Engineering at Fayoum, Egypt, from 5 to 14 July 2008.*
2. **International Conference in Prospects of Engineering Solutions and The Challenges of The Times (PESCT), (Oral Presentation).**  
*Faculty of Engineering, Fayoum University, Egypt, from 27 to 29 Nov. 2013.*
3. **The Eleventh International Conference Of Fluid Dynamics (ICFD 11), (Oral Presentation).**  
*Alexandria, Egypt, from 19 to 21 Dec. 2013.*
4. **The Third International Conference On Mathematics & Information Science (ICMIS 2013), (TWO Oral Presentations).**  
*Luxor, Egypt, from 28 to 30 Dec. 2013.*
5. **A Training Workshop "Scientific Thinking and Argumentation Skills for Problem Solving".**  
*DAAD "Kairo Academie", Cairo, Egypt, 20 March 2014.*
6. **A Training Workshop "Proposal Writing Post Docs".**  
*DAAD "Kairo Academie", Cairo, Egypt, 17 April 2014.*
7. **A Training Workshop "Developing and Course Specification According to Quality Assurance and Accreditation".**  
*Quality Assurance and Accreditation Advisory Group (QAAAG), International Center for Systems (ICS), Cairo, Egypt, 23-24 April, 2014.*
8. **A Training Workshop "Interactive Lectures".**  
*DAAD "Kairo Academie", Cairo, Egypt, 15 May 2014.*
9. **A Training Workshop "How to Present Scientific Data".**  
*DAAD "Kairo Academie", Cairo, Egypt, 26 June 2014.*

- 10. A Training Workshop "Project management".**  
*American Academy for training courses, Egypt, November 2014.*
- 11. A Training Workshop "Self Marketing".**  
*DAAD "Kairo Academie", Cairo, Egypt, 4 December 2014.*
- 12. The Fourth International Conference in "Mathematics & Information Science" (ICMIS 2015), (Oral Presentation).**  
*University of Science and Technology, Zewail City, Giza, Egypt, from 5 to 7 Feb. 2015.*
- 13. Invited to the international activity "Hands on Research in Complex Systems School", (Poster & Oral Presentations).**  
*ICTP Center, Trieste, Italy, from 28 June to 10 July 2015.*
- 14. International Conference on Basic Science and Environmental Applications (ICBSEA).**  
*Faculty of Science, Fayoum University, Fayoum, Egypt, April 3 – 4, 2016.*
- 15. A Training Course "Strategic Planning for H.E. Institutes".**  
*National Authority for Quality Assurance and Accreditation of Education, Cairo, Egypt, May 17 – 18, 2017.*
- 16. Invited speaker in "The VIII Symposium in Computational Methods for Linear and Nonlinear Systems".**  
*Faculty of Science, Cairo University, Egypt, 3 May 2018.*
- 17. A Training Course "Quality Assurance of Education for Academic Leaders: Faculties and Institutes of Higher Education".**  
*National Authority for Quality Assurance and Accreditation of Education, Cairo, Egypt, December 12 – 13, 2018.*
- 18. A Training Course "Examination systems and student evaluation of higher education institutions".**  
*National Authority for Quality Assurance and Accreditation of Education, Cairo, Egypt, December 25 – 26, 2022.*



- 19. Quality Coordinator, Department of Basic Science, HTI, 6<sup>th</sup> of Oct. Branch 2012-2019.**
- 20. Academic Guide for the preparatory year students, HTI, 6<sup>th</sup> of Oct. Branch 2012 - Now.**
- 21. Coordinator of the (Human Resources, Academic Hours and Schedules) committees, Department of Basic Science, HTI, 6<sup>th</sup> of Oct. Branch.**
- 22. Holds the International Computer Driving license (ICDL).**
- 23. Experience in using many computer programs (Microsoft office, Origin, Matlab, Chemdraw) in addition to good internet skills.**
- 24. Good in English Language (Writing – Reading – Speaking), TOEFL Certificate.**
- 25. A member of Optical Society of America (OSA).**

## Scientific Reviewer for the following international Journals

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1. "Association for the Advancement of Modeling & Simulation Techniques in Enterprises", (A.M.S.E), France, [www.amse-modeling.org](http://www.amse-modeling.org).
2. "World Journal of Modelling and Simulation", (WJMS), England, UK, [www.wjms.org.uk](http://www.wjms.org.uk).
3. "Journal of Nanofluids", (JON), USA, [www.aspbs.com/ion.htm](http://www.aspbs.com/ion.htm).
4. "Nanoscience & Nanotechnology-Asia", (NNA), Bentham Science Publishers, UAE, <https://benthamscience.com/journals/nanoscience-and-nanotechnology-asia/#top>.
5. "International Journal of Heat and Technology", (IJHT), Edizioni ETS, Italy, <http://iieta.org/ojs/index.php/IJHT/index>.
6. "Advancement in Science and Technology Research", (ASTR), **NET JOURNALS**, Nigeria, [www.netjournals.org](http://www.netjournals.org).
7. "Journal of Mathematical and Statistical Analysis (JMSA)", Scholarena-group, USA, <http://www.scholarenagroup.com/journals/journal-of-mathematical-and-statistical-analysis/jhome.php>.
8. "SN Applied Sciences", (SNAS), Springer Nature Switzerland AG, <https://www.springer.com/journal/42452>.
9. "International Journal of Energy for a Clean Environment", (IJECE), Begell House, inc. publishers, United states, <https://www.begellhouse.com/journals/energy-for-a-clean-environment.html>.
10. "International Journal of Ambient Energy", Taylor & Francis LTD, England, <https://www.tandfonline.com/journals/taen20>.
11. Member in the editorial board of "Insight – Energy Science", Singapore, <http://insight.piscomed.com/index.php/i-es/about/editorialTeam>.



## Courses taught

- Calculus.
- Advanced calculus
- linear Algebra
- Numerical methods
- Numerical Analysis
- Statistical methods
- Complex Analysis
- Operations Research
- Differential Equations].