

1. Name: Mohammed Hassan Ali Mohammed, Teaching Assistant, Department of Engineering Mathematics and Physics, Higher Institute of Engineering, Elshorouk Academy.

2. Degrees:

- B.S. (Mathematics and Computer Science), Faculty of Science, Helwan University, Egypt. 2015
- M.S. (Pure Mathematics), Faculty of Science, Helwan University, Egypt. 2022

3. Years of Service on Faculty: 9

- 10/2015 - present "Teaching Assistant".

4. Other Experience:

- 03/2022 – present Assistant Lecturer, Faculty of Engineering, Elshorouk Academy.
- 10/2015 – 03/2022: Teaching Assistant at the Faculty of Engineering, Elshorouk Academy.
- 10/2015-10/2015: Assistant Lecturer at the Faculty of Engineering, Misr University for Science and Technology.
- 09/2015 – 10/2015: Assistant Lecturer at the Faculty of Science, Helwan University.

5. States in which registered:

- Cairo, Egypt.

6. Principal publications of last 5 years (selected):

- Adel Darwish, Hamdy M. Ahmed¹, Medhat Ammar, Mohammed H. Ali, and Ahmed H. Arnous, " SOLITONS AND OTHER SOLUTIONS FOR THE (2+1)-DIMENSIONAL HEISENBERG FERROMAGNETIC SPIN CHAIN EQUATION USING IMPROVED MODIFIED EXTENDED TANH-FUNCTION METHOD ", Advances in Mathematics: Scientific Journal 10 (2021), no.11, 3491–3504 .
- Adel Darwish , Hamdy M. Ahmed , Medhat Ammar , Mohammed H. Ali , Ahmed H. Arnous, " General Solitons and other solutions for coupled system of nonlinear Schrödinger's equation in magneto-optic waveguides with anti-cubic law nonlinearity by using improved modified extended tanh-function method ", Optik, 35 (2021), Number 13, 2150168.
- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , " Solitons and other wave solutions for (2+1)-dimensional perturbed nonlinear Schrödinger equation by modified extended direct algebraic method", Journal of Optics, (2023) 1-9.
- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , " Analytic Wave Solutions of Nonlinear Maccari System Using Modified Extended Mapping Method", International Journal of Theoretical Physics (2023) 62:203.
- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , Construction of solitons in nano optical fibers with dual-power law nonlinearity using MEDAM", Optical and Quantum Electronics (2023) 55:1220.
- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , " Optical solitons and complexitons for generalized Schrödinger–Hirota model by the modified extended direct algebraic method", Optical and Quantum Electronics (2023) 55:675.
- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , " Optical solitons for fourth order nonlinear Schrödinger's equation with cubic–quintic–septic–nonic nonlinearity using improved modified extended tanh-function scheme ", Ain Shams Engineering Journal, 15 (2024) 102413.
- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , " New analytic wave solutions to (2 + 1)-dimensional Kadomtsev–Petviashvili–

Benjamin–Bona–Mahony equation using the modified extended mapping method", *Optical and Quantum Electronics* (2024) 56:320.

- Mohammed H. Ali , Hassan M. El-Owaidy , Hamdy M. Ahmed , Ahmed A. El-Deeb , Islam Samir , " Exploration new solitons to generalized nonlinear Schrödinger equation with Kudryashov's dual form of generalized non-local nonlinearity using improved modified extended tanh-function method", *Journal of Optics*, (2024) 1-12.