SHAIMAA MONEM

Department of Laser Applications in Metrology, National Institute of Laser Enhanced Science, 12613, Cairo University.
☎ *: 002 0100 501 34 36;* ✉ *: sh.abdalmonem@niles.edu.eg*

Education

- **M.Sc.**— National Institute of Laser Enhanced Science (NILES), Cairo, Egypt.
  Majoring in Laser Physics
    - Graduation Date: May, 2014
    - M.Sc Title: Comparison of Optical Properties Calibration Models using Solid Phantoms and Bacterial Suspensions Adopting Integrating Sphere Systems
    - Main Supervisor: Prof. Mohamed A. Harith , NILES, Cairo University

- **AIMS Post-Graduate Diploma**—African Institute for Mathematical Sciences and University of Cape Town, Cape Town, South Africa.
  Majoring in Mathematical Sciences
    - Graduation Date: June, 2012
    - Essay Title: Hausdorff Dimension of Cantor Sets
    - Supervisor: Prof. Alan Beardon, University of Cambridge

- **Pre-M.Sc.**—National Institute of Laser Enhanced Science, Cairo, Egypt.
  Majoring in Laser Physics
    - Graduation Date: January, 2010

- **Diploma in Laser Applications in Metrology**— National Institute of Laser Enhanced Science
  Cairo, Egypt.
    Majoring in Laser Applications in Metrology
    - Grad: B$^+$
    - Graduation Date: June, 2009

- **B.Sc.**—Faculty of Science, Cairo University, Cairo, Egypt.
  Majoring in Mathematics
    - Grad: 75%
    - Graduation Date: May, 2006

Experience

- **National Institute of Laser Enhanced Science**—Cairo, Egypt.
  Assistant Lecturer: June 2014–Present

- **African Institute for Mathematical Sciences**—Cape Town, South Africa.
  Graduate Student: August 2011–June 2012
    - Courses on Theoretical Physics & Mathematical Sciences

- **Council of Science and Industerial Research (CSIR)**—Pretoria, South Africa.
  Visiting Research Student: March–May 2010, October 2010
    - Integrating spheres
    - Light Transmission Imaging

- **National Institute of Laser Enhanced Science**—Cairo, Egypt.
  Demonstrator: December 2007–June 2014

- **Mathematics Department, Faculty of Science, Cairo University**—Cairo, Egypt.
  Graduation project: September 2005–May 2006
    - Multiresolution Approximation with Orthonormal Wavelet Basis
    - Grad: 90%

- **Central Laboratory for Agricultural Climate, Ministry of Agriculture**—Cairo, Egypt.
  Summer Internship: Summer 2005
  – Mathematical Modelling in Agriculture

Seminars, Schools, Conferences & Workshops

- **2013**—44th IFF-Spring School in Quantum Information Processing, **Jülich, Germany**.

- **2012**—Laser Induced Breakdown Spectroscopy (LIBS), **Luxor, Egypt**.

- **2012**—South African School and Workshop on Theoretical Aspects of Quantum Information and Quantum Computing, **Cape Town, South Africa**.

- **2011**—8th International Conference on Laser Applications (Oral Presentation), **Cairo, Egypt**.

- **2010**—55th Annual Conference of the South African Institute of Physics (Poster Presentation), **Pretoria, South Africa**.

- **2010**—African Laser Center Workshop (Poster Presentation), **Stellenbosch, South Africa**.

- **2010**—Second Workshop on Mathematical Epidemiology, **University of Pretoria, South Africa**.

- **2009**—7th International Conference on Laser Applications, **Cairo, Egypt**.

Publication

- **Study of the optical properties of solid tissue phantoms using single and double integrating sphere systems** — S Monem, A Singh, A Karsten, R Amin and M Harith
  Under review
- **Hausdorff Dimension of Cantor Sets** —Shaimaa Monem and Alan Berdon
  AIMS Thesis Diploma (2012)

Awards & Scholarships

- **2011**—AIMS BURSARY
  To attend AIMS Post-Graduate Diploma(**Accepted**)

- **2005**—Schlumberger AWARD FOR DISTINCTION
  Distinction during undergraduate studies

Skills
- **Teaching Skills:**
  – Mathematics: Calculus, Differential Equations, Functional Analysis, Numerical Analysis
  – Physics: Optics, Laser Physics, Electromagnetism, Spectroscopy

- **Operating Systems:**
  – Linux (Ubuntu), Windows

- **Computer Languages and Programs:**
  – Python, Mathematica, Sage, C, C++, Maple, Matlab, Origin, LaTeX

- **Languages**
  – Arabic: Mothertongue

- English: Fluent
- French: Basic Knowledge
- German: Basic Knowledge

References

Available upon request