



CONTACT INFO

-  4.5 km ring road, Ismailia
-  +2 (012) 01908651
-  ahmed_abdel-
hamid@science.suze.edu.eg
-  <https://rb.gy/pz8d2k>
-  0000-0002-7734-1773

LANGUAGE

Arabic: Native

English: Speaker

French: Medium

EXPERTISE

Portal Office

Full Prof Suit

ImageJ, CSpot software

Google Data Studio

Origin Lab

Crystal Maker

MORE ABOUT ME



For more information about me, please scan the QR code.

Ahmed H. Ibrahim

ACADEMIC RESEARCHER, Ph.D.

<https://rb.gy/pz8d2k>

<https://rb.gy/2iydj5>

<https://rb.gy/v2b24d>



PERSONAL INFO

Full Name: Ahmed Hassan Ibrahim Abdel Hamid
Scientific Name: Ahmed H. Ibrahim
Home Address: 30 East of British Cemetery, El-Bahaey, 4th floor, Port said- EGYPT.
Marital Status: Married + 2
Religious Views: Muslim

Gender: Male
Birth Date: 23 / 11 / 1988
Nationality: Egyptian

EXECUTIVE SUMMARY

During my 15-year career in materials science and engineering, I worked at Suez Canal University in various roles, including demonstrator, assistant lecturer, and lecturer in materials science. I also travelled on scientific missions to different countries. My contributions were instrumental in developing and enhancing various academic courses and digital services at the Faculty of Science and managing educational systems. Furthermore, I have made significant research contributions to the field of materials science on a global scale.

ACADEMIC INFORMATION

Bachelor's degree in Physics (May 2009) Graduation

B.S. in Physics, Faculty of Science-Ismailia, Suez Canal University (Very good)

Pre-Master studies

(June 2010) Demonstrator

Solid State Physics, Physics Department, Faculty of Science-Ismailia, Suez Canal University.

M.Sc. in Solid State Physics

(May 2014) Assistant lecturer

Master of Science in Solid State Physics (Nanomagnetic Materials & Applications).

PhD in Solid State Physics

(Feb, 2018) Lecturer

Nanomagnetic Materials & Applications.



ACADEMIC DEGREES

Demonstrator at Physics dep., Faculty of Science, Suez Canal University (Feb. 2010 – June 2013).

Assistant literature at Physics dep., Faculty of Science, Suez Canal University (June 2013 – 2016).

Lecturer of Solid-State physics at Physics dep., Faculty of Science, Suez Canal University (Feb. 2018 - 2024).

Assistant Professor of Material Science (Nov. 2024 until now).



TRAINING & Sci. Missions

The use of neutron diffraction to characterize the crystal structure of polycrystalline materials, IINR, Dubna-Russia. (Summer, 2015)

SESAME meeting for Synchrotron users in Amman–Jordan. (Nov. 2015)

Synchrotron User – LAAMP training program for synchrotron users, ELETTRA- ITALY (2 months). (28 Dec. 2017 – 30 Feb. 2018)

- ◆ Synchrotron User Award- LAAMP training program for synchrotron users, ELETTRA- ITALY. (1st Jul – 1st Sep 2018)
- ◆ Safety training course_ SICUREZZA PER LAVORATORI FORMAZIONE GENERALE, ELETTRA- ITALY. (11 Jan 2018)
- ◆ Introduction to software testing concepts and techniques (Online course). (November 2019)
- ◆ Building Web Applications using PHP & MYSQL (Online course). (December 2019)
- ◆ E-Learning Fundamentals (online course). (Jan 2020)
- ◆ Python Programming Basics (online training). (Jan 2020)
- ◆ Java Development SE (online course). (Mar 2020)

COMPUTER & SOFTWARE SKILLS

- ◆ Deals with different applications and Operating Systems proficiently.
- ◆ Microsoft Windows (98 / 2000 / XP S.P. /ME/ 2003/2007/2010/ 2016 / 365 Server).
- ◆ ICDL certificate (May 2011).
- ◆ Internet- highly proficient.
- ◆ Advanced PowerPoint- highly proficient.
- ◆ I am highly proficient in the Origin Lab program, MATLAB.
- ◆ Highly proficient in Some scientific programs (FullProf, Espot, Cspot, ImageJ, Diamond, GSAS II, Crystal Maker, Single crystal, SPSS ...)
- ◆ Highly Qualified in distance learning through various platforms like Zoom, Microsoft Teams and Microsoft applications.

WORKSHOPS & CONFERENCES

- ◆ X-ray diffraction anatomy workshop in Ras Sedr, Egypt (2011).
- ◆ International Conference of X-ray crystallography in Hurghada, Egypt (2012).
- ◆ Synchrotron radiation and its applications in life science in National Centre of Research (NCR)- Egypt (2013).
- ◆ International Year of Crystallography in El-Gona, Egypt (2014).
- ◆ Training school in JINR, Dubna, Russia (2015).
- ◆ 2nd Young Researchers Conference (YRC)- Suez Canal University, Egypt (2015).
- ◆ Introduction to 13th SESAME Users Meeting, AMMAN (2015).
- ◆ SESAME International meeting, Jordon-AMMAN (2016).
- ◆ Bioinformatics and synchrotron radiation in life science- The Egyptian National Committee of Crystallography (ESCA) and Helwan University (2017).
- ◆ Synchrotron User Award- LAAMP training program for synchrotron users, ELETTRA- ITALY (2 months) (2017).
- ◆ Synchrotron User Award- LAAMP training program for synchrotron users, ELETTRA- ITALY (2 months) (2018)
- ◆ Enhance your research with ELSEVIER: Author Workshop: How to publish an eBook (2020).
- ◆ EndNote X9 Workshop (2020).
- ◆ Management of Electronic cloud files using Microsoft OneDrive (2020).
- ◆ Scientific Research Ethics Workshop (online Workshop IFAD platform) (2020).
- ◆ Preparing electronic tests - the Measurement and Evaluation Center in the Higher Education Development Project Management Unit (2020).
- ◆ Organizing the 7th Young Researchers Conference (2020).
- ◆ Organizing the 8th Young Researchers Conference (electronically through Microsoft Teams 2021).
- ◆ Organizing the 4th Annual postgraduate research conference- Faculty of Science, S.C.U, (EGYPT 2021).
- ◆ Organizing the 5th Annual postgraduate research conference- Faculty of Science, S.C.U, (EGYPT 2022).

PUBLICATION LIST

1. Y. M. Abbas, A. Bakry, A. Hassan, Super paramagnetism and polymorphism in nanolithium ferrite; Magnetic and structural study, *American Journal of Materials Science*, 4(2) (2014) 84–96.
2. Y. M. Abbas, A. Bakry, A. Hassan, The effect of Tin addition on Structural and magnetic properties of the stannoferrite $\text{Li}_{0.5+0.5x}\text{Fe}_{2.5-1.5x}\text{Sn}_x\text{O}_4$, *Journal of advances in physics*, 12(3) (2016).
3. Y. M. Abbas, A. Hassan, Sara Mosaad, M. Orabi, Hydrogen production using Al-Sn alloys prepared by rapid solidification; *Journal of Advances in Physics*, 13 (6) (2017).
4. Yehia M. Abbas, Ahmed B. Mansour, Shehab E. Ali, Ahmed H. Ibrahim. Synthesis, *Journal of advances in physics*, 14(2), (2018).
5. Yehia M. Abbas, Ahmed B. Mansour, Shehab E. Ali, Ahmed H. Ibrahim, *Journal of Magnetism and Magnetic Materials*, 482 (2019) 66–74. <https://doi.org/10.1016/j.jmmm.2019.03.056>.
6. D.G. El-Damhogi, E. Elesh, Ahmed H. Ibrahim, S. Mosaad, M.M. Makhlof, Z. Mohamed. The impact of radiation on the morphological, structural properties, linear and nonlinear optical parameters of gallium phthalocyanine chloride thin films for optoelectronic devices, *Radiation physics and chemistry*, 195 (2022) 110060, <https://doi.org/10.1016/j.radphyschem.2022.110060>.
7. M.S. Sadeq, Magdy Y. Elashry, AA El-Daly, Ahmed H. Ibrahim. Environmental influence of high Na_2O additions on microstructure and ligand field parameters of Cr^{3+} inside borosilicate glass, *Ceramics International*, 49(16)(2023) 27201-27213, <https://doi.org/10.1016/j.ceramint.2023.05.268>.
8. Ahmed H. Ibrahim, Yehia M. Abbas, Randa A. Abdel Aziz & S. Mosaad, *Journal of Materials Science: Materials in Electronics*, 34 (2023) 830, <https://doi.org/10.1007/s10854-023-10200-8>.
9. Ahmed H. Ibrahim, Yehia M. Abbas, H.A. Ayoub, Marwa H. Ali, Mustafa Aldoori. Novel synthesis of stabilized $\text{Bi}_{1-x-y}\text{Gd}_x\text{Dy}_y\text{O}_{1.5}$ solid electrolytes with enhanced conductivity for intermediate temperature solid oxide fuel cells (SOFCs), *Journal of Rare Earths* (2023), <https://doi.org/10.1016/j.jre.2023.10.003>.
10. S. Mosaad, Ahmed H. Ibrahim, E. Elesh, D. G. El-Damhogi & Elsayed Elgazzar. Synthesis of prussian blue analog (Co/TCNi/HCCr) nanoparticles using a facile co-precipitation approach and evaluation of their dielectric characteristics for electronic applications. *J Mater Sci: Mater Electron* **34**, 2204 (2023). <https://doi.org/10.1007/s10854-023-11606-0>.
11. Ahmed M. Nawar, S. Mosaad, Ahmed H. Ibrahim, *Physica B Condens. Matter*. 676 (2024) 415624, <https://doi.org/10.1016/j.physb.2023.415624>.
12. Ahmed H. Ibrahim, S. Mosaad, E. Elesh, *J Mater Sci: Mater Electron* **35**, 400 (2024) <https://doi.org/10.1007/s10854-024-12110-9>.
13. M.S. Sadeq, A.A. El-Daly, S. Mosaad, Ahmed H. Ibrahim, *Optical Materials*, 149 (2024) 115106, <https://doi.org/10.1016/j.optmat.2024.115106>.
14. Ahmed H. Ibrahim, Yehia M. Abbas, Marwa H. Ali, H.A. Ayoub, Mustafa Aldoori, *J Mater Sci: Mater Electron* **35**, 676 (2024) <https://doi.org/10.1007/s10854-024-12371-4>.
15. Ahmed M. Nawar, S. F. Mansour, S. Mosaad, and Ahmed H. Ibrahim, *Journal of Materials Science: Materials in Electronics* (2024) <https://doi.org/10.1007/s10854-025-14354-5> (In press)

SCHOLARSHIPS & AWARDS

1. Best poster award at **El-Gona/ Egypt (2014)** international conference (superparamagnetism in the two polymorphic modifications of spinel Lithium iron oxide).
2. Best oral award at JINR, **Dubna-Russia (2015)** Summer school (Magnetoresistivity in polycrystalline LaMnO_3).
3. Light Sources for Africa, the Americas, and Middle East Project (LAAMP) Award from Professor Sandro Scandolo, Chair of the LAAMP Executive Committee, with the fund (1818 Euros) by the Abdus Salam International Centre for Theoretical Physics (ICTP) **Trieste, Italy 12 June (2017)**.
4. Light sources for Africa, the Americas and Middle East Project (LAAMP) Award from Professor Sandro Scandolo, Chair of the LAAMP Executive Committee, with the fund (1818 Euros) by the Abdus Salam International Centre for Theoretical Physics (ICTP) **Trieste, Italy 1st Jul (2018)**.
5. Completing the **2021** Foundational Teaching Excellence in Physics Education Workshops with Distinction.

PRESENTATIONS AT PROFESSIONAL CONFERENCES

1. Study some nano-magnetic mixed ferrites' structural and magnetic properties (SCU University Conference on Material Science). **November (2015).**
2. TRANSPORT PHENOMENA AND MAGNETIC/CRYSTALLINE STRUCTURE OF Perovskite LaMnO_3 in **(Joint Institute of Nuclear Research (JINR)), DUBNA -Russia, (2015).**
3. I was the lecturer for an "Image Processing and Microstructural Analysis using ImageJ Program" workshop in **2020.**

INVITED SEMINARS

1. Radiation protection and medical therapy Meeting of the Frank lab of Neutron Physics, Joint Institute for Nuclear Research) **Dubna- Russia, (2015).**
2. Synchrotron radiation and its application in life science, Physics Department- National research center- **Egypt, (2013).**
3. Bioinformatics and synchrotron radiation in life science- The Egyptian National Committee of Crystallography (ESCA) and **Helwan University, (2016).**
4. Image Processing and Microstructural analysis using the ImageJ program **(2020).**

ACADEMIC & ADMINISTRATION ACTIVITIES

- ◆ I reviewed article manuscripts for the American Journal of Material Science from **2014 to 2016.**
- ◆ Reviewer for the Journal of Advances in Physics JAP **(2015 until now).**
- ◆ Director of the Ibn Al-Haytham System for Student Affairs Administration at the Faculty of Science - Suez Canal University **(2019 until now).**
- ◆ Director of Al-Farabi System for Teaching and Learning Quality Management at the Faculty of Science - Suez Canal University **(2019 until now).**
- ◆ Director of Al Farouq System for Human Resources at the Faculty of Science - Suez Canal University **(2019 until now).**
- ◆ Galactic local judgment of the NASA International Space Apps competition, **7–8 October (2023).**
- ◆ Judgment of the International Science and Engineering Fair (ISEF) competition **2020, 2022, and 2023.**

FIELDS OF EXPERTISE & TEACHING

- ◆ Computer software (EndNote- MATLAB), Microsoft Office 365.
- ◆ Scientific Software (Full Prof, Single Crystal, Diamond, Mercury, C spot Trial, ImageJ, e spot, Mathematica, Origin, crystal maker, Powder cell, Electron Diff).
- ◆ Experimental Physics and Instrumentations for Undergraduate students from lvl 1 – 4.
- ◆ Electron diffraction in polycrystalline materials.
- ◆ General Physics I, II and III for undergraduate students.
- ◆ Waves and Oscillations for the 1st level students- Faculty of Science.
- ◆ Waves and Electromagnetism for 2nd level Geophysics students, **(2019, 2020, 2022, and 2023).**
- ◆ Electricity and Magnetism for 1st level University students- Faculty of Science.
- ◆ X-ray Crystallography for postgraduate students.
- ◆ Magnetism and Magnetic Materials for post-graduate students.
- ◆ Material science for 4th lvl students- Faculty of Science.
- ◆ Material characterization 4th lvl students- Faculty of Science.
- ◆ Radiation protection for (Ismailia Technical Health Institute) students.
- ◆ Polymer and nanocomposites for 4th level students- Faculty of Education.
- ◆ Nanoscience and Nanotechnology for 4th level students- Faculty of Education.
- ◆ Biophysics I for 1st level Students- Faculty of Applied Health Sciences and Technology- Ismailia New University, **2022 and 2023.**



FIELDS OF EXPERTISE & TEACHING

Research Supervision

- **Undergraduate Research Supervision:** Supervised a research and essay project for fourth-year students on *Hydrogen Generation by the Corrosion of Al-Sn Alloys Prepared by Rapid Solidification Technique* (Summer 2017).
- **Master's Thesis Supervision:** Supervising a master's thesis titled *Synthesis, Characterization, and Properties Studies of Chromium-Substituted Lanthanum Orthoferrites of Nano Trimetallic Perovskite-Related Structure* (2020 – Present).
- **Ph.D. Thesis Supervision:**
 - *Study of Microstructure and Physical Features of Oxide Glasses Doped with Transition Elements* (2020 – Present).
 - *Synthesis of Solid Electrolyte Systems Based on Bi_2O_3 Doped with V_2O_5 , Gd_2O_3 , and Dy_2O_3 , and Application in Solid Oxide Fuel Cells (SOFC) via Solid-State Reaction* (2022 – Present).

Teaching Experience

- **Physics Courses:**
 - Physics I & II
 - Waves
 - Electromagnetism
 - Molecular Spectroscopy
 - Semiconductor Physics
 - Photonics
 - Biophysics
- **Material Science & Nanotechnology:**
 - Crystallography
 - X-ray Diffraction
 - Material Science
 - Thin Films
 - Nanotechnology & Nanoscience
- **Instrumentation & Applied Physics:**
 - Practical Physics & Instrumentation
 - Darkroom Techniques & Radiography