

Curriculum Vitae (CV)



Asmaa Elhassan Ramadan Mohamed

Personal Information:

Academic Rank: Ass. professor

Department: Basic Science

Specialization: Laser Science

Position: Ass. professor

Google Scholar: <https://scholar.google.com/eg/citations?user=pGa4dnEAAAJ&hl=en>

Research Gate: <https://www.researchgate.net/profile/Asmaa-Elhassan>

ORCID Record: <https://orcid.org/0000-0003-4452-1660>

Scopus ID: <https://www.scopus.com/authid/detail.uri?authorId=23977559600>

Email asmaa.elhasan@hti.edu.eg

mobile/WhatsApp: 01551305834

Education:

Degree	Discipline	Institution	Year
Ph.D.	Laser Science	NILES, CAIRO UNIVERSITY	2009
M.Sc.	Laser Science	NILES, CAIRO UNIVERSITY	2005
B.Sc.	Physics & Chemistry	Faculty of Science, CAIRO UNIVERSITY	1998

Academic Experience:

Institution: Higher Technological institute

Rank: lecturer

Dates: 2012

Institution: Faculty of engineering, Martial Branch, Helwan University, Egypt

Rank: lecturer assistant

Dates: 2008-2009

Institution: NILES, Cairo University, Egypt

Rank: IT Technical support (Special units)

Dates: 2003 – 2004

Research interests:

- Laser Science
- Laser spectroscopy (Laser Induced breakdown spectroscopy, Laser induced fluorescence, Laser ablation)

Projects:

- Industrial wastewater treatment “May 2020-2022, funded by ministry of high education, KSA
- Fabrication and online monitoring of metal nanoparticles via double pulse femtosecond laser induced breakdown spectroscopy” March 2016, funded by Imam Abdulrahman Alfisal University.

- PROMET project (November 2004- November 2007) European commission in PF6 workfram.

Publications:

1. **A. Elhassan**, M. Abdelhamid, M. Abdelkreem, M. A. Harith, Using LIBS for monitoring and estimation of heavy elements in industrial wastewater during its remediation, "accepted ICPAP 2021 conference proceeding, AIP. Accepted.
2. Abdullah A.Manda, Q.A.Drmosh, Khaled A.Elsayed, Amal L.Al- IbrahimOlanrewaju, AladedSagheer, A.Onaizibf Hatim D.M.Dafalla, **A.Elhassan** "Highly Efficient UV-Visible Absorption of TiO₂/Y₂O₃ Nano composite Prepared by Nanosecond Pulsed Laser Ablation Technique", Arabian Journal of Chemistry 2022.
3. M. Harith, **A. Elhassan**, Z. Abdelsalam,M.Ali, "Back-Reflection-Enhanced Laser-Induced Breakdown Spectroscopy (BRELBS) on transparent materials: Application on archaeological glass" ,Analytica Chimica Acta, 2021
4. A. L. Alotaibi, N.Altamimi, E.Howsawi, k. A. Elsayed, I.Massoudi,, **A.E.Ramadan**, synthesis and characterization of MoO₃ for photocatalytic applications , Journal of inorganic and organic metallic polymers and materials , 2021.
5. M. Elfaham, O. Khalil, **A. Elhassan**, S. Salama, Determination of some Radionuclides and Heavy elements concentrations in concrete raw materials, Optics and Photonics - SPIE 2015- San Diego.
6. L. Pardini , **A. El Hassan** , M. Ferretti, A. Foresta, S. Legnaioli, G. Lorenzetti , E. Nebbia , F. Catalli , M.A. Harith , D. Diaz Pace , F. Anabitarte Garcia, M. Scutto , V. Palleschi , F.Catalli," X-Ray Fluorescence and Laser-Induced Breakdown Spectroscopy analysis of Roman silver denarii" spectrochimica acta BSpectrochimica Acta Part B: Atomic Spectroscopy, 2012, 74–75.
7. **A. Elhassan** "short review in LIBS Application in corrosion" Proceedings of the international conference in Laser Applications, May, 2011.
8. **A. Elhassan**, H. Abdelmoneam, M. AbdelHarith, "Characteristics of Laser Induced Plasma and Shock Waves under the Effect of Static Electric Field , Journal of advanced Research, 2010, 1.
9. L. Fornarin , R. Fantoni , F. Colao, A. Santagata, R. Teghil, **A. Elhassan**, M. A. Harith, Theoretical modeling of laser ablation of quaternary bronze alloys: Case studies comparing with fs and ns LIBS experimental data, J. Phys. Chem. A, 2009, 113 (52).

10. **A. Elhassan**, A. Giakoumaki, D. Anglos, M. A. Harith, "Semi Quantitative analysis of Euro and 50 cent via Femtosecond LIBS technique" Proceedings of the international conference in Laser Applications , May,2009.
11. **A. Elhassan**, A. Giakoumaki, D. Anglos, G. M. Ingo, L. Robbiola, M. A. Harith, "Nanosecond and Femtosecond LIBS Analysis of Simulated Artifacts Bronze Alloys" Spectrochimica Acta part B, 2008, 63 (4) .
12. **A. Elhassan**, G. Cristoforetti, S. Legnaioli, V. Palleschi, A. Salvetti, E. Tognoni, G.M. Ingo, M.A. Harith, "Construction of LIBS calibration curves and determination of limits of detection (LOD) in single and double pulse configuration for quantitative LIBS analysis of ancient bronze coins", Proceedings of the international conference in conservation strategies for saving indoor metallic collections, February, 2007, Cairo, Egypt.
13. Vasilike Argyropoulos, Maria Giannoulaki, Demetrios Anglos, Paraskevi Pouli, Mohamed Abdel Harith, **Asmaa Elhassan**, Andreas-Germanos Karydas, Charalambos Zarkadas, V. Kantarelou, eer Arafat, Naseem Haddad, "Developing Innovative Portable Diagnostic Techniques and Approaches for the Analysis of Metal Artefacts from Museum Collections", Proceedings of the 7th EC conference on Safeguarded Cultural Heritage Understanding & Viability For the Enlarged Europe, 31 May – 3 June 2006, Prague, Czech Republic.
14. M. A. Ismail, H. Imam, **A. Elhassan**, W. T. Youniss and M. A. Harith, LIBS limit of detection and plasma parameters of some elements in two different metallic matrices, JAAS, 19, 2004.

Awards

- **Distinguished poster in** Hands on Research and Complex Systems School 2014.
- **ENEA International short – term mobility** program. Three month international grant in the framework, at UTAPRAD Unit, ENEA Frascati Center, Roma, Italy2012.
- **Best PhD. these awards** from Cairo University on the academic year 2009-2010.
- **Travel Grant IUPAP** women for Science to Attend EMSLIBS conference, Praise 2007.
- **Training** in FORTH for three months in Femto second laser lab, Iraklion, Create, Greece2005.
- **PhD scholarship**, European commission in PF6 workfram PROMET project (November, 2004- November 2007).
- **IT professional training program**, Egypt Graduates Project, ministry of communications and information Technology (January 2001).

Certifications or Professional Registrations:

Conferences, Workshops and Exhibition

December 2021 academy of scientific research & Technology **Egypt (oral presentation)**

- *The international conference on Pure and applied physics*

April 2021 IAU **Al Khobar, KSA (invited talk)**

- *International Webinar on Science, Sustainable Development and Ecosystems in Saudi Arabia 2021*

September 2020 Kyoto **web conference Japan**

- *11 Conference on laser induced breakdown spectroscopy*

June 2017 CNR **Pisa, Italy (invited talk)**

- *9th Euro-Mediterranean Symposium on Laser-Induced Breakdown Spectroscopy*

March 2015 NILES **Cairo Egypt**

- *African international conference on laser spectroscopy*

September 2014 , Yerevan - Ashtarak, **Armenia**

- *The 2nd International Symposium OPTICS and its applications*

July 2014 International Center of Theoretical Physics **ICTP, Trieste, Italy**

- *School on Hands-On Research in Complex System*

November 2013 National Center for Physics **NCP, Islamabad, Pakistan**

- *First ICTP-NCP International College of Plasma Physics*

May 2013 German Science Center **DAAD, Zamalek, Cairo ,Egypt**

- *THE Exhibition of Max Planck Society*

May 2013 Tadweer Misr **Movenpick Media City Resort 6th October**

- *The first energy saving solutions and recycling*

May 2013 ESR I **Minufiya Univ., Sadat city, Egypt**

- *The International Workshop on Environmental Nanotechnology and Advanced Optical Spectroscopic Applications*

September 2012 NILES **Luxor, Egypt**

- *The 8th international conference laser induced breakdown spectroscopy(LIBS2012).*

December 2011 E-Just **6th of October, Egypt**

- Arab forum 2011 Industrial application of nanotechnology



Higher Technological Institute

10th of Ramadan City

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|-----------------------|--|-----------------------------------|
| July 2011 | Bibliotheca Alexandria | Egypt |
| | <ul style="list-style-type: none"> • <i>Research Industry Day: From Lab to Reality Seminar</i> | |
| September 2011 | Izmir Institute of technology | Izmir , Turkey |
| | <ul style="list-style-type: none"> • <i>7th Euro-Mediterranean Symposium on laser induced breakdown spectroscopy (EMSLIBS).</i> | |
| August 2011 | Higher Technological Institute (HTI) | 10th of Ramadan |
| | <ul style="list-style-type: none"> • <i>Conference of Scientific Research and Industry</i> | |
| August 2010 | Ctiaes | Stellenbosch, South Africa |
| | <ul style="list-style-type: none"> • <i>First Biannual School in particle physics</i> | |
| May 2010 | National laser Center(NLC) | Pretoria, South Africa |
| | <ul style="list-style-type: none"> • <i>Seminar in laser in chemistry</i> | |
| December 2009 | Italian culture center | Cairo, Egypt |
| | <ul style="list-style-type: none"> • <i>the 4th international congress on science and technology for the safeguard of cultuteral heritage in the Mediterranean basin</i> | |
| May2009 | Laser Research Institute | Captown, South Africa |
| | <ul style="list-style-type: none"> • <i>Introduction into Lasers</i> | |
| May 2009 | NILES | Cairo, Egypt |
| | <ul style="list-style-type: none"> • <i>7th international conference on laser applications.</i> | |
| February 2009 | Ras Al Khaimah Center for Advance Materials | Ras Al Khaima, UAE |
| | <ul style="list-style-type: none"> • <i>International Workshop on Advanced Materials - IWAM 2009</i> | |
| January 2008 | NILES | Cairo, Egypt |
| | <ul style="list-style-type: none"> • <i>The US–African Advanced Studies Institute, Environmental and Biological Applications of Lasers(EBAL)</i> | |
| September 2007 | CEA | Paris, France |
| | <ul style="list-style-type: none"> • <i>4th Euro-Mediterranean Symposium on laser induced breakdown spectroscopy (EMSLIBS2007).</i> | |
| February 2007 | NILES | Cairo, Egypt |

- *International conference in international conference in conservation strategies for saving Indoor metallic collections, February, 2007, Cairo, Egypt.*

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|-----------------------|---------------------------|---|
| January 2007 | EBASI | I Themba LABS, Cape Town, South Africa |
| | | • <i>6th Edward Boucher-Abdus Salam Institute International Conference</i> |
| May 2005 | ASRT | Cairo, Egypt |
| | | • <i>Short advanced intensive tanning course on "conservation of culture heritage"</i> |
| April 2005 | NILES | Cairo, Egypt |
| | | • <i>5th Southern Europe School of the European Physical Society (SES V) "Physics of the Environment"</i> |
| January 2005 | NILES | Cairo, Egypt |
| | | • <i>5th international conference on laser applications.</i> |
| October 2003 | AEA | Cairo, Egypt |
| | | • <i>1st Cairo conference on plasma physics and applications.</i> |
| September 2003 | FORTH | Create, Greece |
| | | • <i>2nd Euro-Mediterranean Symposium on laser induced breakdown spectroscopy (EMSLIBSII).</i> |
| December 2002 | Faculty of science | Gamertk, Tunisia |
| | | • <i>6th international workshop on laser physics and its applications.</i> |
| June 2002 | NILES | Cairo, Egypt |
| | | • <i>ICS training course on laser diagnostics of combustion processes.</i> |
| November 2001 | NILES | Cairo, Egypt |
| | | • <i>1st Euro-Mediterranean Symposium on laser induced breakdown spectroscopy (EMSLIBSII).</i> |
| June 2001 | NILES | Cairo, Egypt |
- 4h international conference on laser applications*

Organizing Committees

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|-------------------|--------------|--|
| March 2015 | NILES | Cairo Egypt |
| | | • African international conference on laser spectroscopy |

September 2012 **NILES** **Cairo, Egypt**

- 8th international conference on laser induced breakdown spectroscopy (LIBS-2012)

May 2011 **NILES** **Cairo, Egypt**

- 8th international conference on laser applications.

May 2009 **NILES** **Cairo, Egypt**

- 7th international conference on laser applications.

January 2008 **NILES** **Cairo, Egypt**

- The US–African Advanced Studies Institute, Environmental and Biological Applications of Lasers(EBAL), Cairo, Egypt

February 2007 **NILES** **Cairo, Egypt**

- International conference in international conference in conservation strategies for saving indoor metallic collections, February ,2007, Cairo, Egypt

April 2005 **NILES** **Cairo, Egypt**

- 5th Southern Europe School of the European Physical Society (SES V) "Physics of the Environment"

January 2005 **NILES** **Cairo, Egypt**

- 5th international conference on laser applications.

November 2001 **NILES** **Cairo, Egypt**

- 1st Euro-Mediterranean Symposium on laser induced breakdown spectroscopy (EMSLIBS)

Training Courses:

- "Learning through Projects", DAAD, 25th of August 2022
- "Employability of Egyptian Graduates"" , DAAD, 18th -19th of July 2022
- "ToT Proposal Writing"" , DAAD, 13th -14th of June
- 2021 "Constructive Assessment for Learning"" , DAAD, 01st of December
- "Fundraising skills and best practices " , DAAD, 21st of November 2021 "
- "Taking your classroom online"" , DAAD, 28th of October 2021
- "university exams and digital question banks"" , DAAD, 21st of October 2021
- "preparation of the course and stuff portfolio" ", IAU, 27th of October 2020,
- ," How to publish your research" ", IAU, 17th November 2019

- “the pursuit of excellence in the monitoring in higher education”. IAU, 7th of February 2018
- “providing Constructive Feedback”, IAU, 21st of Feb 2017
- “التفكير الإيجابي مفتاح التميز”. IAU, 27th of March 2016
- “Developing core competencies in teaching and learning in higher education” <IAU> From 30th of March – 5th of April, 2016
- “How to write a journal article”, IAU, 24th of April 2016
- “Nanotechnology for sustainable world “Nano technology on Germany” ,IAU, 1st of May 2016
- “Analyze Research Performance & Identify Significant Trends & InCites: Benchmark and Analyze research & Generate Reports ”, IAU, 9th of June 2016
- How to present Scientific Data, DAAD Kairo Akademia, . June 2014
- Interactive Lectures, DAAD Kairo Akademia May 2014
- Proposal Writing Post Docs, April 2014, DAAD Kairo Akademia.
- Management and Leadership Skills Training Program (MLSTP) for Women , MLSTP, Faculty of Engineering , Cairo university
- Scientific Thinking and Argumentation Skills for Problem Solving, March 2014, DAAD Kairo Akademia.
- Critical Scientific and creativity, October 2013, Information Research Center, U.S. Embassy Cairo.
- Emotional Intelligence & Career Development Agenda, September 2013, Info Research Center, U.S. Embassy Cairo and Goal Oriented Learners.
- Tools for Self Marketing, Career Development Workshop, June 2013, Info Research Center, U.S. Embassy Cairo and Goal Oriented Learners.
- Entrepreneurial Development , June 2013, the DAAD Kairo Akademie
- Path Ways to Higher Education, Faculty of Engineering, Cairo University (APSCU), Training of Trainers (TOT), January 2013 .
- Curriculum Map, at HTI Quality Assurance Unit 2013.
- Scientific Thinking and Argumentation Skills for Problem Solving, November 2012, the DAAD Kairo Akademie.
- Creativity and Innovation Techniques, May 2012, the DAAD Kairo Akademie.
- Practical tanning course in preparation of nano materials January 2012, RCFF, Giza, Egypt.
- Program witting, at HTI Quality Assurance Unit, 2011.

- First Biannual School in particle physics, August 2010 ,Ctiæes , Stellenbosch, South Africa.
- Learning Outcomes and Curriculum Map, May 2010, National Authority for quality Assurance and Accreditation of Education.
- Training on "Presentation Skills" June 2007, British Council.

Membership

- IEEE
- Optical Society of America (OSA)
- European Physical Society(EPS)
- Arab Materials Science and Nanotechnology Network

Courses taught

- Physics (1) General physics
- Physics (2) Electricity and Magnetism physics
- Physics (c) Modern physics
- Analytical and Research Skills
- Communication and presentation skills