# **Khaled Abdelsabour Elsayed**

#### **Professor**

#### Personal Data

Nationality | Egyptian

Department | Basics Engineering Sciences

Official IAU Email |kaelsayed@uod.edu.sa

Office Phone No. |32062

## Language Proficiency

Language	Read	Write	Speak
Arabic	Excellent	Excellent	Excellent
English	Excellent	Excellent	Excellent
Others			

## Academic Qualifications (Beginning with the most recent)

Date	Academic Degree	Place of Issue	Address
2002	PhD	Virginia	USA
1996	M.Sc.	Cairo	Egypt
1991	B.Sc.	Cairo	Egypt

## PhD, Master or Fellowship Research Title: (Academic Honors or Distinctions)

PhD	PhD Development of an efficient TI: sapphire laser transmitter for atmospheric ozone Lidar measurements	
Master		
Fellowship		

#### Professional Record: (Beginning with the most recent)

Job Rank	Place and Address of Work	Date
Professor	College of Engineering, University of Dammam, KSA	2017
Associate Professor	College of Engineering, University of Dammam, KSA	2012
Associate Professor	Cairo University, Egypt	2011
Assistant Professor	Cairo University, Egypt	2004
Adjunct professor	NILES, Cairo University, Egypt	2004
Consultant & Member of a board of directors committee	Laser Technology Services center, Cairo University, Egypt	2005
Vice Director	Laser Technology Services center, Cairo University, Egypt	2005
Senior Research Scientist	Science and Technology Corp/City University of New York, USA	2003
Research Associate	Hampton University, USA	2002
Laser Systems Scientist	Laser Systems Branch, NASA Langley, USA	1999
Research assistant	ECE Dept., Old Dominion University, USA	1999
Teaching Assistant,	American University in Cairo, Egypt	1992
Teaching Assistant	Cairo University, Egypt	1992

# Administrative Positions Held: (Beginning with the most recent)

Administrative Position	Office	Date
Scientific Council Member	Scientific Council, University of Dammam	2016
Publication and Research committee	Scientific Council, University of Dammam	2016
Vice Director	Laser Technology Center, Cairo University	2007

#### Scientific Achievements

## **Published Refereed Scientific Researches**

(In the last five years)

#	Name of Investigator(s)	Research Title	Publisher and Date of Publication
---	-------------------------	----------------	-----------------------------------

		IMAM ARDULRAHMAN BIN FAISAL UNIVERSITY	
1	TS Kayed, AF Qasrawi, KA	Structural, Optical, Dielectric and	Journal of Electronic Materials,
	Elsayed	Electrical Properties of Al-Doped ZnSe Thin Films	2019
2	RM Hamad, TS Kayed, S Kunwar, KA Elsayed, E Abu- Ruz, Kh A Ziq	Effects of Iron Contents on the Vortex State in FexSe0.5Te0.5	Journal of Superconductivity and Novel Magnetism, <b>2018</b>
3	KH Mahmoud, KA Elsayed, TS Kayed	Optical properties of polyvinyl alcohol film irradiated with Nd: YAG laser	Spectrochimica Acta Part A: Molecular and Biomolecular spectroscopy, <b>2018</b>
5	R ElRashedy, H Imam, K Elsayed, M Mansour	Spectroscopic investigation of plasma evolution induced by double pulse laser in distilled water	Journal of Plasma Physics, <b>2017</b>
4	KA Hamam, KA Elsayed, YEE Gamal -	Numerical analysis of excimer laser- induced breakdown of Kr gas	Applied Physics B, <b>2017</b>
5	RM Hamad, TS Kayed, S Kunwar, KA Elsayed	Effects of Iron Contents on the Vortex State in FexSe0. 5Te0. 5	Journal of Superconductivity and Novel Magnetism, <b>2017</b>
6	Khaled A. Elsayed, Ahmed A. Elzatahry, Ruqaiah Nasser, K. A. Khalil, Tarek S. Kayed, and Aboubakr M. Abdullah4	Nonenzymatic Nitrogen-Doped Carbon Nanofiber-Supported NiOx Glucose Sensor	Sensors and Materials, 2017
7	A.M. Shehapa, Khaled. A. Elsayed, Dana S. Akila	Optical and structural changes of TiO2/ PVA nanocomposite induced laser Radiation	Physica E: Low-dimensional Systems and Nanostructures Volume 86, February <b>2017</b> , Pages 1–9
8	AF Qasrawi, TS Kayed, Khaled A Elsayed	Al/CdSe/GaSe/C resonant tunneling thin film transistors	Physica E: Low-dimensional Systems and Nanostructures Volume 86, February <b>2017</b> , Pages 124–128
9	AF Qasrawi, TS Kayed, Khaled A Elsayed	Properties of Se/InSe Thin-Film Interface	Journal of Electronic Materials June <b>2016</b> , Volume 45, Issue 6, pp 2763–2768
10	TS Kayed, AF Qasrawi, KA Elsayed	Band offsets and optical conduction in the CdSe/GaSe interface	Current Applied Physics 16 (7), 772-77, <b>2016</b>
11	KA Elsayed, NS Anad, G AbdelFattah, H Imam, TS Kayed, LZ Ismail	ZnO nanostructures induced by microwave plasma	Arabian Journal of Chemistry 8 (4), 553-5, <b>2015</b>

12	F Madkour, H Imam, K Elsayed, G Meheina	Elemental Analysis Study of Glazes and Ceramic Bodies from Mamluk and Ottoman Periods in Egypt by Laser- Induced Breakdown Spectroscopy (LIBS)	PERIODICO DI MINERALOGIA 84 (1), 107-121, <b>2015</b>
13	TS Kayed, AF Qasrawi, KA Elsayed	Optical characterization of the MgO/InSe interface	physica status solidi (b) 252 (3), 621-625, <b>2015</b>
14	M Mansour, H Imam, KA Elsayed, AM Elbaz, W Abbass	Quantitative mixture fraction measurements in combustion system via laser induced breakdown spectroscopy	Optics & Laser Technology 65, 43-49, <b>2015</b>

## **Completed Research Projects**

#	Name of Investigator(s) (Supported by)	Research Title	Report Date
1	Khaled Elsayed, Tarek Kayed et al Dammam University	Fabrication and Characterization of nanocompsoite based Carbon nanofiber for sensors applications , Dammam University	2015
2	Tarek Kayed, Khaled Elsayed, et al Dammam University	Production of Indium and Gallium Selenide nano layers for optoelectronic device applications	2015
3	Dammam University	Fabrication and Synthesis Control of Metallic Nanoparticles via Laser Ablation in Aqueous Solution,	2014
4	Tarek Kayed, Khaled Elsayed, et al Dammam University	Synthesis, characterization, and enhancing the properties of Iron based	2014
5	Mohy Mansour, Khaled Elsayed, Hisham Imam US-Egypt funding – STDF 2009-2011	Computational and Experimental Studies of the Structure and Dynamics of Premixed Flame Kernels under Turbulent Conditions	2011
	LTS, Cairo University,	Optical Amp-3	2010
6	Mohy Mansour, Khaled Elsayed, Hisham Imam (SIDA) Swedish International Development Agency -Sweden	Detailed Studies of Premixed and Partially Premixed Burners Using Highly Advanced Laser- Based Techniques	2009
7	LTS, Cairo University	Optical Amp-2	2008
	LTS, Cairo University	Optical Amp-1	2007
8	NOAA-CREST -CCUY, NY, USA	Development of Mobile LIDAR system	2003

9	Khaled Elsayed	Development of an Efficient Ti:sapphire Laser	2002
	NASA Langley-ODU, VA, USA	Transmitter	

## **Current Researches**

#	Research Title	Name of Investigator(s)
1	Optical induced morphology control of silver nanoparticles	Khaled Elsayed, Tarek Kayed, et al
2	Fabrication, Optical and Electrical Characterizations of GaSe/ CdSe Nano-Thick Heterojunction Devices	Tarek Kayed, Khaled Elsayed, et al
3	Post annealing effects on the physical properties of Al doped ZnSe thin films	Tarek Kayed, Khaled Elsayed, et al
4	Fabrication and online monitoring of metal nanoparticles via double pulse femtosecond laser induced breakdown spectroscopy	Khaled Elsayed, Tarek Kayed, et al

## **Contribution to Scientific Conferences and Symposia**

#	Conference Title	Place and Date of the Conference	Extent of Contribution
1	First International Conference of Laser & Applications, NILES 94,	Cairo University, Egypt, 1994	
2	CLEO:2001, Laser Source to Photonics Applications, Baltimore	Maryland, USA, 2001	
3	SPIE Photonics West, Solid State Lasers XI, .	San Jose, CA, USA, 2002	
4	Fifth International Conference on Laser Science and Applications, ICLSA-06,	NILES, Cairo University, Egypt, 2005	
5	The Fifth Southern Europe School of the European physical society, "Physics for the environmental" (SES V)	Cairo, Egypt, March 2005	
6	Second International Conference on Modern Trends in Physics Research, MTPR-06,	Cairo/Luxor, Egypt, 2006	
7	Sixth International Conference on Laser Science and Applications, ICLSA-07, NILES,	Cairo University, Egypt, 2007	

		IMPAN ACCOUNTS TRAIN BITS PAIGAL OF INCOME.
8	First International Workshop on Prospectives	NILES, Cairo University, Egypt
	of High Density Short Pulse Lasers, HDSP,	(2008).
9	Third International Conference on Modern Trends in Physics Research, MTPR-08,	Cairo, Egypt, 6-10April 2008
10	Laser Induced Breakdown Spectroscopy, LIBS2008,	Berlin, Germany. 2008
11	2nd International Workshop on Ultra Fast Laser Technology and Application UFLTA- 2009	Cairo, Egypt 2009
12	3rd International Workshop on Ultra Fast Laser Technology and Application, 18 (UFLTA- 2010)	Cairo, Egypt, 2010
13	Laser Induced Breakdown Spectroscopy, LIBS2010,	Memphis, TN, USA. 2010
14	Fourth International Conference on Modern Trends in Physics Research, MTPR-10,	Sharm El Sheikh, Egypt, 2010

#### **Membership of Scientific and Professional Societies and Organizations**

- Member, American Physics Society, APS, 2001.
- Member, The International Society for Optical Engineering, SPIE, 2001.
- Reviewer, Optical Society of America, OSA, 2002
- Member, IEEE, Laser and Electro-Optical Society, 2002
- Reviewer, ITEDA, Egypt, 2008
- Reviewer, National Telecom Regulatory Authority (NTRA), 2008
- Reviewer, Journal of Optics and Laser Technology
- Member, International Center of Scientific and Applied Sciences of High Density Lasers, NILES, Cairo University, 2006
- Member, Egyptian Laser Society, (1991)
- Member, Industrial and Engineering laser applications Society

#### **Teaching Activities**

#### Undergraduate

#	Course/Rotation Title	No./Code	<b>Extent of Contribution</b>
			(no. of lectures/Tutorials. Or labs, Clinics)

1.		
۷.	Physics II	
3.	Laser physics	
4.	Optics	
	Quantum	
3.	mechanics	
6.	Classical	
	mechanics	
7.		
/.		
	magnetism	
8.	Circuit	

# Postgraduate

#	Course/Rotation Title	No./Code	Extent of Contribution (no. of lectures/Tutorials. Or labs, Clinics)
	<ol> <li>Geometrical Optics</li> <li>Interaction of light with matter</li> <li>Interaction of Laser with materials</li> <li>Laser Engineering I</li> <li>Laser Engineering II</li> <li>Instrumentation</li> <li>Optical Detectors</li> <li>Ultrafast lasers</li> </ol>		

# **Brief Description of Postgraduate Courses Taught: (Course Title – Code: Description)**

1	
2	

#### **Course Coordination**

#	Course Title and Code	Coordination	Co-coordination	Undergrad.	Postgrad.	From	to
	Physics 271	x		x			
	Physics 272		x	x			

# **Guest/Invited Lectures for Undergraduate Students**

#	Activity/Course Title and Code	Subject	College and University or Program	Date

## **Student Academic Supervision and Mentoring**

#	‡	Level	Number of Students	From	to
		2th			
		4th			

## **Supervision of Master and/or PhD Thesis**

#	Degree Type	Title	Institution	Date
1	M.Sc.	Design and construction of Nd:YAG laser system for LIBS measurements,		
2	M.Sc.	Diagnosis of solid objects under water using laser induced breakdown spectroscopy		2010
3	M.Sc.	Experimental and theoretical study of laser induced plasma spectroscopy in water,		2010
4	M.Sc.	Development of pulsed laser rangefinder	Cairo University	2011
5	M.Sc.	. Monitoring of heavy metals in sea water using high energy pulsed solid state laser		2010
6	<b>Ph.D.</b> Application of LIBS technique for turbulent combustion,		Cairo University	2012
7	Ph.D.	Laser spectroscopic techniques used to study the effect of gravel media and some additives on the removal efficiency of heavy metals from irrigation water	Cairo University	2017

8	Ph.D	Study of the physical properties of Co-Ti substituted rare earth ferrite prepared by standard ceramic	Cairo University	2012
		technique		
9	Ph.D	Polarized light and its applications in optical measurements,	Cairo University	2012
10	M.Sc.	Laser-induced morphology changes of Silver colloid Prepared by Laser Ablation in aqueous solution,	Cairo University	2012
11	M.Sc.	Fabrication and size control of metallic nanoparticles by laser ablation in aqueous solution,	Cairo University	2012
12	M.Sc.	Effect of Partial Premixing on Flame Kernel Propagation in High Turbulent Jet	Cairo University	2012
13	M.Sc.	Synthesis of ZnO thin film induced by microwave	Cairo University	2011

## **Ongoing Research Supervision**

#	Degree Type	Title	Institution	Date
14	Ph.D	Aerosols detection by spectroscopic techniques,	Cairo University	
15	M.Sc.	Preparation of Al Nanoparticle used in IR Polymeric Material Shielding by Pulsed Laser Ablation.	Cairo University	
16	M.Sc.	Fabrication of metal nanoparticles via Laser ablation,	Cairo University	
17	M.Sc.	Comparative study on structural and optical properties of ZnO thin films prepared by PLD,	Cairo University	

# Administrative Responsibilities, Committee and Community Service

(Beginning with the most recent)

## **Administrative Responsibilities**

#	From	То	Position	Organization
	2006	2010	Vice Director	Laser Technology Center, Cairo University
	2016	-	Scientific Council Member	Scientific Council, University of Dammam
	2016	-	member	Publication and Research committee

# **Committee Membership**

# From To Position Organization	
---------------------------------	--

Scientific Consultations						
#	From	То	Institute	Full-time or Part-time		
Volunteer Work						
#	From	То	Type of Volunteer	Organization		
			. , , , , , , , , , , , , , , , , , , ,			
Personal Key Competencies and Skills: (Computer, Information technology, technical, etc.)						
1						
2						
Last Update						
1/1/2019						