

Assistant Professor in Mechanical Engineering**Structural Vibrations, Engineering Acoustics, and Finite Element Analysis**

Assistant professor and senior consultant in structural vibrations, noise, finite element analysis and engineering operation management in power generation sector.

Career Summary

Professor in the field of mechanical engineering. Results-oriented senior engineer with practical and experimental approaches to solving complex problems. Over 35 years of professional experience in Engineering, including mechanical vibrations testing and modeling, acoustics, modal analysis and numerical modeling and simulations. Extensive and strong skills in numerical simulations using Finite Element Analysis. A senior researcher and consultant in various mechanical engineering projects, with strong organizational and problem-solving abilities. Acted as supervisor and team leader of a team of engineers in engineering projects and research activities, and participated in project coordination. Ability to take leadership in the development of innovative techniques and products and work with inter-disciplinary team of engineers and scientists. Engineering project manager in power plants projects. Experience in boiler combustion using fuel oil, and gas turbines.

Areas of expertise include:

- Structural Vibrations & Acoustics
- Finite Elements Analysis
- Numerical Structural Modal Analysis
- Experimental Structural Modal Analysis
- Structural Health Monitoring
- Noise, Vibration and Harshness
- wave propagation in structures
- Engineering Acoustics

Teaching Experience

Feb/2022 – Date	Full-time professor at the dept. of Mechanical and Industrial Engineering, UoT	Tripoli, Libya
• Teaching: • Theory of Machines • Advanced theory of Vibrations • Engineering Acoustics • Theory of Machines • Advanced Numerical Methods (graduate level)		
Jan/2010 – 2021	Part-time teaching at the Libyan Academy for Graduate Studies	Tripoli, Libya
• Teaching: • Numerical Methods • MATLAB® programming • Basics of Finite Element Analysis using ANSYS, and CFD		
Mar/2017 – 2021	Part-time teaching at the dept. of Mechanical and Industrial Engineering, UoT	Tripoli, Libya
• Teaching: • Mechanics of Machines • Advanced theory of Vibrations • Engineering Acoustics		
Jul/2001 – Aug/2008	Researcher and teaching in Mechanical Engineering	Unicamp, Brazil

- Areas covered:
 - Structural Modal Analysis
 - Finite Element Analysis
 - Spectral Element Methods
 - Structural vibrations

Education

State University of Campinas-Unicamp	Post-doctoral fellowship	Project: <i>"Damage detection in airplane fuselage using high-frequency Lamb waves techniques"</i>
State University of Campinas-Unicamp	PhD degree in Mechanical Engineering	Thesis: <i>"Dynamic analysis of truss-type structures in medium and high frequencies"</i>
State University of Campinas-Unicamp	MSc degree in Mechanical Engineering	Dissertation: <i>"Study of acoustic cavities by Galerkin/least square finite element method"</i>
University of Tripoli	BSc degree in Nuclear Engineering	Project: <i>"Pressurized water reactors"</i>

Awards and Professional Affiliations

- Award of the best production of the faculty of mechanical engineering, State University of Campinas, for the year 2005, for the patent of invention "An Acoustical Excitation Device for Optical Scanners"
- Grant for Research (7 years) from FAPESP, Foundation for Scientific Research at the State of Sao Paulo, at the state University of Campinas
- Grant for Research (3 years) from the Center for Semiconductor Components, CCS, Campinas and FAPESP, Brazil
- Grant for Post-doctoral research from FAPESP, Foundation for Scientific Research at the State of Sao Paulo, Brazil
- PhD. grant from the federal research institute of Brazil, CNPq
- MSc. grant from the federal research institute of Brazil, CNPq
- Member in the American Society of Mechanical Engineering (ASME) since 1994.
- Reviewer for the International Journal of Solids and Structures
- Reviewer for the Shock and Vibration Journal
- Reviewer for the Journal of Sound & Vibration
- Reviewer for the Journal of Micromechanics and Micro-engineering
- Reviewer for the ASME Journal of Applied Mechanics
- Reviewer for the Journal of the Brazilian Society of Mechanical Sciences
- Reviewer for IEEE Control Systems Society Conference Management System
- Reviewer for SAGE Journal of Vibration and Control
- Reviewer for Springer Journal of Vibration Engineering & Technologies

Work and Professional Experience

Jan/2016 – to Date	General Manager at Mared for Oil & Gas and Engineering Consultancy Services Ltd.	Tripoli-Libya
	• Mared is an engineering consultancy company, founded to provide services to Oil & Gas sector as well as to other engineering disciplines.	
Feb/2017 – to Date	University of Tripoli, Faculty of Engineering	Tripoli-Libya
	• Teaching undergraduate Mechanical engineering courses	

Dec/2009 – Nov/2016	Branch Manager at Creative Power Solutions, CPS, Tripoli	Phoenix, AZ (HQ) & Tripoli, Libya (branch office)
- Engineering Consultancy & Operations Management - Creative Power Solutions is a technology-based group of companies with headquarters in Arizona, USA, specializing in energy sector conducting engineering consultancy. CPS conducts engineering consultation mainly with gas/steam turbines, heavy fuel oil combustion boilers, power plant management, and training.		
Dec/2009 – Date	The Libyan Academy for Graduate Studies	Tripoli-Libya
Part-time professor, teaching graduate mechanical engineering courses.		
Feb/2009 – Nov/2009	ERM/Eneramass	Tripoli, Libya
Consultant with Eneramass/ERM Oil Services Co. Environmental Resources Management Co. conducts Environmental Assessment and studies mainly for Oil & Gas companies in Libya and for other sectors.		
Aug/2007 – Oct/2008	Collaborating Researcher	Campinas, Brazil
Research collaboration with State University of Campinas in Structural Health Monitoring (SHM), which involves damage detection in structures using wave propagation techniques.		
Jul/2002 – Aug/2007	Researcher at Faculty of Mechanical Engineering	Campinas, Brazil
Research in Finite Element Analysis and vibration analysis. Research associate in mechanical engineering. The research project involves Structural Health Monitoring (SHM). Conducted research related to the use of Lamb waves techniques for structural damage detection. The research involves experimental damage detection as well as numerical simulations via Finite Element Analysis. The research was granted through the Foundation for Scientific Research at the State of Sao Paulo.		
Jul/2002 – Feb/2006	Researcher at Center for Semiconductor Components, CCS	Campinas, Brazil
Research and consultancy in Finite Element Analysis and vibration analysis. Research associate in mechanical engineering. Conducted research involving the development of an acoustic excitation device for a MEMS device described as a Double-Paddle single-crystal Laser Scanner (DPS). The DPS device is used in laser printers, laser bar-code readers and laser image projectors. Experimental analysis of the device is conducted. A numerical analysis is performed using Finite Element Analysis considering fluid-structure interaction. The research was granted through the Foundation for Scientific Research at the State of Sao Paulo.		
Jul/2001 – Jun/2002	Lecturer & Research Assistant/post-doctoral	Campinas, Brazil
Research/teaching activities in mechanical engineering. Conducted research related to structural dynamics, structural energy analysis. Received grant for post-doctoral activities.		
Jul/1996 – Jun/2001	State University of Campinas, Unicamp	Campinas, Brazil
- PhD work - Obtained PhD degree in Mechanical Engineering. - The thesis involved a research on the different methodologies for structural dynamic analysis at medium and high frequency ranges, such as spectral methods, statistical energy analysis and structural intensity methods, with comparison to finite elements method. Some experimental work was conducted as a validation for the numerical models.		
Aug/1993 – Jun/1996	State University of Campinas, Unicamp	Campinas, Brazil
MSc Work		

- Obtained MSc. degree in Mechanical Engineering.
- The dissertation involved a study of acoustic cavity vibrations at high frequencies using the Finite Element Analysis. Some computer programs were developed.

Oct/1991 – Apr/1992

Ministry for Scientific
Research

Tripoli, Libya

- Research and Project Engineer
- Research and project engineer in a research project for water desalination. The project involved the design of a seawater desalination plant powered by nuclear energy. The project was under the supervision of the International Atomic Energy Agency, IAEA.

Mar/1983 – Sep/1991

Tajoura Research Center,
TNRC

Tripoli, Libya

- Research Engineer
- Research engineer handling data acquisition systems connected to the research reactor. The work involved operating, maintenance and programming of such systems and the analysis of the output data.

Engineering Projects: Short-term

Assessment and analysis for black emissions problems in Foster Wheeler water desalination plant, Zuara-Libya	Jun/2011
Engineering, installation and commissioning of Fuel pre-treatment systems for the Khums Power Plant, Libya	Jan/2011
Root cause analysis of bearing failure assessment in Siemens 4000F gas turbine unit	Dec/2010
Root cause analysis of a generator rotor/stator damage of a Siemens V94.2	Nov/2010
Assessment and consultancy of NOx emissions from Tripoli-south Alstom 13D Gas Turbine power plant	Nov/2010
Lower emission from Tobruk power plant, Libya	Oct/2010
Lowering emission from Derna power plant, Libya	Oct/2010
General assessment and consultancy work for emissions in desalination plants in Libya	Oct/2010
Managerial project for Restructuring of Generation Department at the General Electricity Company of Libya, GECOL	Oct/2010
Consultancy & assessment of black emissions of Alstom Tripoli-west power plant	Jun/2010
Consultancy for cold startup problems in Zawia/Libya Alstom 13E2 machines	Mar/2010

Engineering Projects: Long-term

Study of economic advantage of rehabilitation of old power stations; small & big sized	Aug/2012-2014
Improving environmental emissions from Steam & Gas Turbine plants in Libya	Aug/2012-2013
Training of GECOL engineers to create pool of experts, Libya	Jan/2012-2015
Project manager and consultancy in Zawia/Libya natural gas heating system for Alstom 13E2 machines	Jul/2010-2013
Fault Detection and Passive and Active Structural Patches	2006-2007
Wave-guide Finite Element Method, WFEM	2007-2008
Dynamic Characterization of Micro-systems using LDV microscope	2003-2007

Vibration and sound radiation in reinforced panels	2003-2005
Design, Micro-fabrication and Characterization of Microelectromechanical Oscillators with Electromagnetic Actuation	2002-2004
Dynamics of Microelectromechanical Systems (MEMS)	2001-2005
Modeling, Analysis, Construction and Testes of Micro- and Meso-Mechanical Oscillators using acoustic Actuation for use in Optical Scanners	2001-2005
Active Control via Structural Intensity	1998-2002
Study and Modeling of Fluid-Structure Interaction Dynamic Problems	1995-1996
Laser Doppler Vibrometer scanner	1995-1998

Consultancy Work

- Vibro-acoustic Analysis of General Motors Engine Block, for SmartTech Inc., using Laser Doppler Vibrometer and finite element analysis
- Simulation and analysis of mechanical stress of some gas pipeline schemes, for Petrobras (the Brazilian Oil & Gas company) using Ansys for finite element analysis
- Modal Analysis of an electronic injection gallery, for Bosch Inc., using Laser Doppler Vibrometer and cada-x of LMS
- Modal analysis of hermetic compressors used in refrigeration, for Tecumseh of Brazil, using optical methods and acoustical holography
- Dynamic analysis of Pirelli tires under pneumatic conditions
- Vibro-acoustic analysis of hermetic compressors used in refrigeration, for Tecumseh of Brazil
- Development of a Laser Doppler Vibrometer for teaching and research purposes
- Dynamic modal analysis of Daimler Chrysler truck using tri-dimensional accelerometers and cada-x of LMS
- Analysis of mechanical vibrations in rotary machines and usage of vibration measurements techniques

Developed Software

- "DUCT3D_SPEC" - dynamic analysis of acoustic ducts network using Spectral Element Method (SEM)
- "TRUSS3D_SPEC_X" - Dynamic and potential energies calculation using measured vibration data and SEM formulations
- "TRUSS3D_SPEC" - Structural dynamics, power flow and energy analysis of truss-type structures via Spectral Element Method
- "TRUSS3D_FEA" - Structural dynamics, power flow and energy analysis of truss-type structures via Finite Element Analysis
- "TRUSS3D_mesh" - Automatic mesh generation for truss structures
- "SAMUD" - Model Updating of truss-type structures via Spectral Analysis
- "SEA_TRUSS3D" - Analysis of truss-type structures using Statistical Energy Analysis

Computer Skills

- MATLAB® of the MathWorks Inc.
- ANSYS, the general-purpose Finite Element Program
- Maple®, Mathematica® and MS-Office (
- Familiar with ABAQUS
- NASTRAN/PATRAN of the MacNeal-Schwendler Corporation (been a while since last used)
- AutoSEA (Statistical Energy Analysis package)
- Structural-vibration data acquisition systems, such as HP analyzer, LMS CADA-X and CADA-PC

- Experience with experimental vibration, vibration measurements and modal analysis programming

Language Skills

- English: Fluent (reading, writing, speaking)
- Portuguese: Fluent (reading, writing, speaking)
- Spanish: Basic
- Arabic: Native Language

Short Courses & others

- "Power plants: gas turbines, steam turbines, boilers combustion, gas turbine combustion", CPS offices
- "Mathematical modeling application in industry", by Alistair Fitt
- "Dynamic analysis using MSC/NASTRAN", by Eduardo Araujo, MSC Brasil
- "Linear and nonlinear system techniques and applications", by Julius S. Bendat
- "Active noise control applications", by Franco Cotana
- "Stochastic finite elements", by Roger Ghanem
- Work presentation and participation in various international engineering conferences
- Member of some examining board for Master's engineering degree dissertations

Some of My Publications

Patent of Invention: "An Acoustical Excitation Device for Optical Scanners", register No. PI/MU/DI/WO: PI0504353-0, 2005. This patent was awarded as the best production of the year of the faculty of Mechanical Engineering - State University of Campinas in 2005.

Nunes, R. F. ; Ahmida, K. M. ; Arruda, J. R. F. . Applying a Fuzzy-Set-Based Method for Robust Estimation of Coupling Loss Factors. *Journal of Sound and Vibration*, V307(1-2), pp. 38-51, 2007.

Oliveira, L. C. M.; Ahmida, K. M.; Ferreira, L. O. S., Dynamic Analysis of Silicon Micro-machined Double-Rotor Scanning Mirror. *Journal of the Brazilian Society of Mechanical Sciences*, v. XXVIII, p. 443-447, 2006.

Khaled M. Ahmida and Luiz Otávio S. Ferreira, "Design and modeling of an acoustically excited double-paddle scanner", *Journal of Micromechanics and Microengineering*, 14, pp. 1337-1344, 2004.

Ahmida, K. M. and Arruda, J. R. F., "Exact Modeling of Kinetic Energy in Truss-Type Members", *Journal of Sound and Vibration*, V267(1), pp. 167-177, 2003.

Ahmida, K.M. and Arruda, J.R.F., "Estimation of the SEA Coupling Loss Factor by Means of Spectral Element Modeling", *J. Braz. Soc. Mech. Sci.*, V25, no.3, pp. 259-263, ISSN 0100-7386, 2003.

Ahmida, K. M. and Arruda, J. R. F., "On the Relation Between Complex Modes and Wave Propagation Phenomena", *Journal of Sound and Vibration*, V255(4), pp. 663-684, 2002.

Ahmida, K. M. and Arruda, J. R. F., "Spectral Element-Based Prediction of Active Power Flow in Timoshenko Beams", *International Journal of Solids and Structures*, V38, No. 10-13, pp. 1669-1679, 2001.

Freschi, A. A. ; Pereira, A. K. ; Ahmida, K. M. ; Frejlich, J. ; Arruda, J. R. F. . Analyzing the Total Structural Intensity in Beams Using a Homodyne Laser Doppler Vibrometer. *Shock and Vibration*, v. 7, n. 5, p. 299-308, 2000.

Arruda, J. R. F. ; Ahmida, K. M. . Computing structural energy density and power flow using spectral elements. *Journal of the Acoustical Society of America*, v. 112, n. 5, p. 2300-2301, 2002.

Arruda, J. R. F. ; Ahmida, K. M. ; Ichchou, M. N. ; J. M. Mencik . Investigating the relations between the wave finite element and spectral element methods using simple waveguides. In: 19th International Congress of Mechanical Engineering-COBEM, 2007, Brasilia. Proceedings of COBEM2007, 2007.

Camino, J. F. ; Ahmida, K. M. ; Ferreira, L. O. S. . Track-following controller for an acoustically excited double-paddle scanner. In: The 45th IEEE Conference on Decision and Control, 2006, San Diego. Proceedings of the 45th IEEE Conference on Decision and Control, 2006.

Nunes, R. F. ; Ahmida, K. M. ; Arruda, J. R. F. . A SEM/Fuzzy Method for the Estimation of the SEA Coupling Loss Factors. In: International Congress on Noise and Vibration Emerging Technologies, 2005, Saint Raphael. Proceedings of NOVEM. Lyon : INSA, 2005. v. 1. p. 1-12.

Oliveira, L. C. M. ; Ahmida, K. M. ; Ferreira, L. O. S. . Electromagnetic and structural FEA modeling of induction actuated scanning mirrors. In: Optical Scanning, 2005, San Diego. Proc. of the International Society for Optical Engineering, SPIE. San Diego : Stephen F. Sagan, Gerald F.; Eds., 2005. v. 5873. p. 65-71.

Ahmida, K. M. ; Arruda, J. R. F. ; Ferreira, L. O. S. . A tapered acoustic duct spectral element. In: International Congress on Sound and Vibration, 2003, Stockholm. Proceedings of the 10th ICSV. Stockholm, 2003. v. 1. p. 3901-3908.

Ahmida, K. M. ; Arruda, J. R. F. . Hybrid SEM-FEA-Experimental Dynamic Models of Frame Structures. In: International Conference on Structural Dynamics Modelling, 2002, Funchal. Proc. of the International Conference on Structural Dynamics Modelling. Lisbon : Instituto Superior Técnico de Lisboa, 2002. v. 1. p. 1-9.

Ahmida, K. M. ; Arruda, J. R. F. . The Relation Between Complex Vibrational Modes and Wave Propagation Phenomenon. In: The IX International Symposium on Dynamic Problems of Mechanics, DINAME IX, 2001, Florianópolis. Proceedings of the IX International Symposium on Dynamic Problems of Mechanics, 2001. v. 1. p. 359-364.

Pereira, A. K. ; Ahmida, K. M. ; Arruda, J. R. F. . Active Vibration and Noise Control using a Generalized Intensity Controller. In: The International Symposium on Active Control of Sound and Vibration, ACTIVE, 1999, Fort Lauderdale. Proceedings of the 1999 International Symposium on Active Control of Sound and Vibration, 1999. p. 1035-1046.

Ahmida, K. M. ; Arruda, J. R. F. . Spectral Element Modeling of the Power Flow in a T-Beam Structure: A Computational Experiment. In: The 17th Biennial ASME Conference on Mechanical Vibration and Noise, ASME Design Engineering Technical Conference, 1999, Las Vegas. Proc. of the 17th Biennial Conference on Mechanical Vibration and Noise, 1999. p. 1-7.

Freschi, A. A. ; Pereira, A. K. ; Ahmida, K. M. ; Frejlich, J. ; Arruda, J. R. F. . Analyzing the Total Structural Intensity in Beams Using a Homodyne Laser Doppler Vibrometer. In: The 3rd International Conference on Vibration Measurements by Laser Techniques, Advances and Applications, 1998, Ancona. Proc. of the 3rd Int. Conference on Vibration Measurements by Laser Techniques. Ancona : |, 1998. v. 3411. p. 366-375.

Ahmida, K. M. ; Arruda, J. R. F. . Predicting the Power Flow in Beam Structures using the Spectral Element Method. In: Computational Mechanics: New Trends and Applications, 1998, Buenos Aires. Proceedings of the 4th World Congress on Computational Mechanics, WCCM IV. Barcelona : CIMNE, 1998. p. 13p.

Ahmida, K. M. ; Pereira, A. K. ; Arruda, J. R. F. . Predicting the Total Structural Intensity in Beam Structures using the Spectral Element Method. In: The International Congress on Noise Control Engineering, Inter-Noise, 1998, Christchurch. Proceedings of the 1998 International Congress on Noise Control Engineering. Christchurch, 1998. p. 6p.

Khaled M. Ahmida, Abdulbaset M. Alemam, Ezzedine G. Allaboudi, "Investigating Rotational vibration characteristics of A centrifugal casting machine", International Science and Technology Journal ISTJ, V20, pp. 90-109, 2019.

Ezzedine G. Allaboudi, Khaled M. Ahmida, Hasan M. Nagiar, Mohammed Ali Hjaji, "Improving Dynamic Characteristic of a Truss Structure Using the Structural Dynamic Modification Technique", International Science & Technology Journal ISTJ v24, pp. 1-13, 2021.

Khaled M. Ahmida, Ezedine G. Allaboudi, Otman A. Elbizanti, "Damage evaluation in beam structures using vibration data", Journal of Engineering Research JER, issue 34, pp. 45-58, 2022.

Khaled M. Ahmida, Ezedine G. Allaboudi, Sulaiman N. Abuaisha and Mohamed S. Abead, Deformation Analysis of a Chimney at Tripoli-West Power Plant, International Conference on Mechanical and Industrial Engineering ICMIE 2022, Nov. 15-17, Tripoli.

Khaled M. Ahmida, Explicit Formulations of Mass and Stiffness Matrices for Vibration Analysis of Tapered Elements, International Journal of Engineering and Information Technology IJEIT, Vol.10, No.2, pp. 189-194, 2023.

Khaled M. Ahmida, "Novel closed-form expressions for potential energy estimation in 3D", Springer Nature, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 45, 529, 2023. doi.org/10.1007/s40430-023-04446-w

Abdulbaset M. Alemam, Khaled M. Ahmida, Mohammed M. Benhusien, Eco-design and Mechanical Strength Analyses of a Brake Pad, International Journal of Engineering and Information Technology IJEIT, Vol.11, No.1, 2023.

Khaled M. Ahmida, Spectral analysis of acoustic plane waves in ductworks with uniform and varying cross-section waveguides", Journal of Vibration and Control, 2024; 30(9-10):2124-2138. doi:10.1177/10775463231175258.

Khaled M. Ahmida, Nada H. Shnfier, Investigating Noise Pollution Levels in Tripoli City, International Science and Technology Journal ISTJ, 2024; 34(1):1-11. doi:/10.62341/kman0749.

Ezedine G. Allaboudi, Khaled M. Ahmida, Investigation of the Dynamic Behavior of a Chimney, International Science and Technology Journal ISTJ, 2024; 36(1):1-14. doi:/ 10.62341/egkm1145.

Ezedine G. Allaboudi, Khaled M. Ahmida, Vibrations Diagnosis and Condition Monitoring of Centrifugal Pumps at Al-Brega Oil Company, African Journal of Advanced Pure and Applied Sciences AJAPAS, 2024, 4(1), pp.225-232.

Ezedine G. Allaboudi, Khaled M. Ahmida, Impact of Elbow Angles on Flow-Induced Vibration in Crude Oil Pipelines, International Science and Technology Journal ISTJ, 2025; 36(2):1-16. doi:/10.62341/agkm0504.

Newspaper articles

Ahmida, K. M. and Netto, C. G., "A new optical micro-scanner: simpler and cheaper". Jornal da Unicamp, "Unicamp Newspaper", Unicamp, Campinas, p. 9 - 9, 24, abr. 2006. (in Portuguese)

Ahmida, K. M. and Netto, C. G., "A researcher from Unicamp creates an optical micro-scanner cheaper than the conventional ones". Diario Oficial Executivo do Estado de Sao Paulo, "Executive Official Gazette of the State of Sao Paulo", Campinas, 24 abr. 2006. (in Portuguese)

Presentations at Conferences

- Keynote speaker at the International Conference on Mechanical & Industrial Engineering ICMIE 2022, Tripoli
- The 6th Pan American Congress of Applied Mechanics, PACAM. Computing the Flexural Power Flow in Timoshenko Beams using Spectral Element and Finite Element Methods. 1999
- The IX International Symposium on Dynamic Problems of Mechanics, DINAME IX. The Relation Between Complex Vibrational Modes and Wave Propagation Phenomenon. 2001
- The 22nd Iberian Latin-American Congress on Computational Methods in Engineering. Estimation of the SEA Coupling Loss Factors by Means of Spectral Element Modeling. 2001
- Workshop on Semiconductors and Micro & Nano-Technology - Seminatec 2005
- International Congress on Noise and Vibration Emerging Technologies, NOVEM, Lyon. A SEM/Fuzzy Method for the Estimation of the SEA Coupling Loss Factors, 2005

- The 19th International Congress of Mechanical Engineering-COBEM, 2007, Brasilia. Investigating the relations between the wave finite element and spectral element methods using simple waveguides
- The X International Symposium on Dynamic Problems of Mechanics DINAME. Dynamic Analysis of Silicon Micromachined Double-Rotor Scanning Mirror. Rio de Janeiro, 2005
- The International Congress on Sound and Vibration ICSV. A tapered acoustic duct spectral element, Stockholm, 2003
- The X International Symposium on Dynamic Problems of Mechanics. The Structural Dynamics Mid-Frequency Challenge: Bridging the Gap Between FEA and SEA, Rio de Janeiro, 2003
- The 17th International Congress of Mechanical Engineering, COBEM, Investigation of the Dynamic Behavior of a Double-Paddle Scanner, ABCM Symposium Series in Mechatronics. Rio de Janeiro, 2003
- The IX International Symposium on Dynamic Problems of Mechanics, DINAME IX, The Relation Between Complex Vibrational Modes and Wave Propagation Phenomenon. Florianopolis, 2001
- The 4th World Congress on Computational Mechanics, WCCM IV: New Trends and Applications, Predicting the Power Flow in Beam Structures using the Spectral Element Method, Buenos Aires, 1998
- The IV Congresso de Engenharia Mecânica Norte Nordeste, Análise acústica de cavidades utilizando um Método dos Elementos Finitos do Tipo Galerkin/Mínimos Quadrados, Recife, 1996

Volunteer courses/Seminars

- Presentations of papers at various International Scientific Conferences, around the world
- Keynote speaker at the International Conference on Mechanical & Industrial Engineering ICMIE 2022, Tripoli
- Various volunteer lectures/seminars:
 - advanced MS Excel capabilities
 - 6-sigma for trouble-shooting
 - MS Power BI
 - Matlab for engineering students
 - and others

Extra-curriculum activities

- Founding and board member of the Assembly of Libyan Academics and Experts, ALAE, Libya
- Founding and board member of the Libyan Society for Automation and Robotics, Libya
- Member of the Editorial Board for the Journal of Engineering Research, University of Tripoli (jer.ly)
- Graduate studies coordinator for applied mechanics, faculty of Engineering, University of Tripoli
- Member of UNESCO Charter of Ethics in Science & Technology, 2018
- Webmaster of the ALAE website, among others
- A member of various conferences committees; scientific and preparatory committees

Names used in bibliographic citations:

Ahmida, K. M.; Khaled M. Ahmida; Khaled Mohamed Ahmida; K. M. A

https://www.researchgate.net/profile/Khaled_Ahmida3

<https://scholar.google.com.br/citations?user=xs8PLHAAAAAJ&hl=en>

<https://www.linkedin.com/in/ahmida>

<http://buscatextual.cnpq.br/buscatextual/visualizacv.do?id=K4799321H6>

<http://www.escavador.com/sobre/358954/khaled-mohamed-ahmida>