

CURRICULUM VITAE

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Nationality	Libyan
Sex	Male
Citizenship	Libyan
Marital Status	Married, four boys and one girl
Languages spoken	Arabic (native) English (fluently), Swedish

Research interest:

- Experimental investigations of the kinetic transport properties in solids, with emphasis on thermal and electrical properties during phase transition. The investigations include contributions of the various mechanisms of phonon and/or electron scattering in solids such as ferroelectric materials, high- T_C superconductors, and super-ionic conductors, . etc.
- The practical Engineering applications of using the natural rocks as insulating building materials are also of prime interest.
- Developing and improving several transient techniques to measure thermal properties of solids.
- Educational research in the role of applied physics within **medical sciences**, **health sciences** and **engineering** disciplines.
- Assessment of surface thermal properties using the Thermography of the infrared images.

I have published more than 50 articles in more than 25 different international journals and 30 international conferences. I am either solo or first author in 80% of these publications. I was the principle investigator in several research projects that won grants either in Sweden or in Sharjah.

Education & Qualifications

1975-1979	B.Sc., Nuclear Engineering University of California UCSB, Santa Barbara California, USA
1980-1983	M.Sc., Solid State Physics University of Garyounis Benghazi-Libya
Jan.-Aug., 1983	The research work for the M.Sc. thesis Chalmers University of Technology Gothenburg, Sweden
Nov/1989-Feb./1994	Ph.D. in Material Physics Gothenburg University and Chalmers University of Technology Gothenburg, Sweden
1998	Docent Diploma in Material Physics School of Physics and Engineering Physics Chalmers University of Technology, Gothenburg, Sweden

Work Experiences

Jan.-Sep., 1980	Nuclear Engineer at the Atomic Energy Institute Tripoli- Libya
1980-1983	Teacher Assistance (TA), Physics Department University of Garyounis Benghazi-Libya
1983-1987	Lecturer Assistance, Physics Department University of Garyounis Benghazi-Libya
1987-1989	Lecturer, Physics Department University of Garyounis , Benghazi-Libya
1989-Feb./1994	Ph. D., and researcher in the field of material physics, at the Physics Department Chalmers University of Technology and Gothenburg University Gothenburg, Sweden
Feb./1994-Feb/1998	Research Associate and Assistant Professor at the Physics Department, Chalmers University of Technology and Gothenburg University Gothenburg, Sweden
June.1998	Nominated as “ <u>Docent</u> ” at the Physics Department, Chalmers University of Technology and Gothenburg University Gothenburg, Sweden
Feb./1998-2002	A Faculty Member at the College of Arts and Sciences University of Sharjah, Sharjah United Arab Emirates
Sep 2002-Sep 2005	Department Chair and an Associate Professor Applied Physics Department, College of Sciences University of Sharjah, Sharjah United Arab Emirates
Sep 2005-June 2012	Associate Professor Applied Physics Department, College of Sciences University of Sharjah, Sharjah United Arab Emirates
July 2012-present	Professor Applied Physics Department, College of Sciences University of Sharjah, Sharjah United Arab Emirates
Jan- -August 2013	Acting Department Chairmen Applied Physics Department, College of Sciences University of Sharjah, Sharjah United Arab Emirates
Sep. 2011-Sep. 2012	Chairman of Research & Conferences committee at the College of Sciences, University of Sharjah, Sharjah, UAE.
Sep. 2012-present	The Chairman and Coordinator of the Petroleum Geosciences and Remote Sensing Program committee at the College of Sciences, University of Sharjah, Sharjah, UAE.
Sep. 2013-present	The Applied Physics Department’s representative in the College of Sciences council, University of Sharjah, Sharjah, UAE.

Teaching

During the period 1983-Present time, I have been involved in teaching physics courses. I was supervising the establishment of physics curriculum and the basic physics laboratories at the University of Sharjah. I have taught all the physics service courses offered by the Applied physics Department to all relevant colleges in UOS. Some of these courses are required by other colleges such as Engineering, Medicine, Dentistry Pharmacy and Health Sciences Colleges. Recently, I am involved in the developments of the teaching methodology using virtual teaching tools to implemented in the following:-

1. In our courses, we routinely use Blackboard and the wide range o tools included in it to communicate with the students. In addition to importing videos to facilitated the learning process for the students.
2. We have been a special online homework management system (Wiley Plus from Wiley) for several years now. We have compiled enough data to start studying student progress and the effect of online teaching on student performance.
3. Introducing case study for real live application to obtain a global picture on the involvement of thermal physics application in biology, space science and astronomy. Spring 2016
4. Physics 3 for the 2nd year of Applied Physics Department students at UOS. (The text book
5. "University Physics" the 13th Edition, by Young & Freedman)
6. Physics of Energy Resources for 3rd & 4th year Applied Physics Department students at UOS. The main text book "Energy: Its use and The Environment " the 5th Edition, by Hinrichs & Kleinbach,
7. 2014 along with several other references.
8. Thermal Physics for 3rd & 4th year Applied Physics Department students at UOS. (The main text book "An Introduction to Thermal Physics" by Daniel V. Schroeder, 2000 addition.
9. Remedial Physics, provided lecture notes & pp presentations for pre-engineering students at UoS.
10. Physics I & Physics II for the first year of Sciences and engineering students(The text book
11. "University Physics" the 11th Edition, by Young & Freedman.
12. Physics for medical imaging for the 1st year students of the Health Sciences College (The text book "Introduction to Physics" the 8th Edition by Cutnell and Johnson).
13. Phys. for Medical Sciences for the foundation year of the medical colleges' students includes Pharmacy, Dentistry, and Medicine Colleges. (The text book "Introduction to Physics" the 8th Edition by Cutnell and Johnson)
14. Phys. for Health Sciences for the 2nd year students of the Medical Imaging Department at the Health Sciences College(The text book "Medical Physics, " Marttin Hollins, Published by Thomas Nelson).

Before joining the UOS, I had taught the following courses for Science, Engineering and Pre-Medical students

1. General Physics I and Basic Lab I (Properties of Matter, Heat, Mechanics) The text book "Physics Part I" of the combined edition by Halliday and Resnick
2. General Physics II and Basic Lab II (Optics, Electricity and Magnetism, Modern Physics) The text book "Physics Part II" of the combined edition by Halliday and Resnick
3. Electricity and Magnetism, for the 2nd year for Science students

- (The text book "Physics for Science and Engineering" by J. B Marion and W. F. Hornyak)
4. Quantum Physics I, for the 3rd year for Science students
The text book "Quantum physics of atoms, molecules, solids nuclei, and particles" the 2nd edition, by Eisberg)
 5. Solid State Physics I, for the 3rd year for Physics students
(The text book "Introduction to Solid State Physics" the 5th Edition, by C. Kittel)
 6. Solid State Lab., for the 3rd year for Physics students (X-ray diffraction, Hall Effect, Magnetic Susceptibility and Plastic deformation in metals).
 7. Statistical Mechanics, for the 3rd year for Physics students (The text book "Thermodynamics, Kinetic Theory, and Statistical Thermodynamics" the 3rd Edition by F. W. Sears and G. L. Salinger)
 8. Physics I & Physics II for the first year of Sciences and engineering students (The text book "University Physics" the 11th Edition, by Young & Freedman.
 9. Physics for medical imaging for the 1st year students of the Health Sciences College (The text book "Introduction to Physics" the 8th Edition by Cutnell and Johnson).
 10. Phys. for Medical Sciences for the foundation year of the medical colleges' students includes Pharmacy, Dentistry, and Medicine Colleges. (The text book "Introduction to Physics" the 8th Edition by Cutnell and Johnson)
 11. Phys. for Health Sciences for the 2nd year students of the Medical Imaging Department at the Health Sciences College (The text book "Medical Physics, " Marttin Hollins, Published by Thomas Nelson).

The major part of our duties at UOS is teaching, therefore, most of my time is devoted to it. My broad educational background in engineering and physics, gave me the advantage to teach a wide variety of courses at all levels both in physics and engineering physics fields.

As an enhancement to my teaching and learning activities & use of information

technology, I have contributed in curriculum development in several areas including my

participation in the following activities:-

- (1) The Second Annual Training Program for Faculty Members : Effective Teaching Assessment and Grading of Students Learning, August 29-30, 2007 Auditorium M2, UOS
- (2) Blackboard Summit, Middle East 2007, 04-06 Sep. 2007 at the Higher Institute of Technology, Dubai, UAE.
- (3) Workshop on Optimized Scientific Desktop How to go beyond office and email, 31/1/2008, UOS. (4) Workshop & Seminar on mastering physics Pearson Education Gulf, Feb. 20 & 26th 2008, UOS (5) Blackboard training session, Building your Course, spring 2008 at UoS
- (6) Blackboard training session, Enhancing Communication, spring 2008 at UoS (7) Blackboard training session, Online Tests & Surveys, spring 2008 at UoS
- (8) Multiphysics High Performance Computing Workshop, Intel Corporation(UK) LTD., IBM Bldg. No. 5, Dubai Internet City January 20th 2011.
- (9) Several workshops related to using Excel as a tool in attendance and grades managing programs.

My contributions as a participant and/or organizer of some the activities mentioned above lead to enhance my knowledge in applying outcome assessment plans based on guided critical thinking methods to improve teaching and enhance curriculum development. I consider myself to be a versatile instructor, who has been teaching different physics courses using IT tools extensively, including regular use of the Blackboard (BB) software system. One of my recent publications, on teaching methods in UAE at higher education,

was published in the Journal of the Association of Arab Universities, a specialized issue on modern university education, (ISSN 1680-6549), Vol 5, 447-463(2009). This article won the Bank of Sharjah award for the best article to serve the educational community. It has been a recognized achievement in teaching methodology.

I have supported my lectures with problem solving sessions and students' group work. I believe that the students' group and problem solving are important part of the learning process. Moreover, I have often stressed several aspects of application of physics in real life since it is the most effective ways for attracting students' interest. According to the department evaluation annual reports, I have been approaching my duties with dedication and enthusiasm, and have established a reputation to be very

competent, understanding and cooperative.

Supervision & Scientific projects

(a)STUDENTS SUPERVISION

I have participated in supervising students and lead various projects during my academic work in Libya, Sweden and UAE. I have supervised and Co-supervised several graduate students projects in Master as well as PhD levels both in Sweden and in UOS, some of those projects are listed below:

In spite of the fact that we do not have graduate physics program at UOS, however, I have managed to help and supervised Marwan Elfatih Al Zaylaie, a Master student from the Civil Engineering Department at UOS to measure thermal properties of clay samples, as part of his master thesis to fulfill the MSc. degree requirements (2007-2008).

I was a co-supervisor to Izhar-ul-Haq, a Ph. D visiting graduate student to Chalmers from Quaid-i- Azam University, Islamabad, Pakistan. The Ph. D thesis entitled "Preparation and Thermal Transport Properties of Insulators and High-Tc Superconductors" This thesis was defended successfully on fall 1995.

I was involved in advising Mattias Gustavsson, a Ph. D. student from the Department of Thermo and Fluid Dynamics as a fulfillment of co-operation to publish joint work on thermal transport properties of solids at Chalmers University of Technology, Sweden (1995-2000)

I was also, partially involved in guiding Jenny Larfeldt, a Ph. D. student from the Department of Energy conversion at Chalmers University of Technology as a fulfillment of co-operation to publish joint work on thermal transport properties of wood during conversion to coal(1998).

I was external examiner of a MSc student (Miss Mariaum Mustafa Al Marzoqi), MSc in material Science and Engineering " Dynamics of Pancake vortices in A finite stack of superconducting copper oxide layers" at UAEU, Al-ain , UAE on 26 Dec. 2001.

I have supervised several undergraduate projects during my work in Libya, at the Physics Department, Garyounis University including computerizing the archives of the university administration at Medical Arab University in Benghazi(1983-1989).

I have supervised a joint work between our group and Department of Geotechnical Engineering at Chalmers University of Technology. The work was aimed at investigating the thermal properties of rock samples obtained from geothermal caverns used to store liquefied petroleum and natural gas products.

(b)PROJECTS AND RESEARCH GRANTS

- PI of a project which is under reviewing and it's related to effect of radiofrequency waves on metallic nano-particles targeted Cancer Cells." Effect of Radiofrequency Waves on Metallic Nano-Particles Targeted Cancer Cells" 70,000 AED
- Group Coordinator "Nano Technology Research Group (NTRG)" Submitted Under review 100,000 AED.
- Co I in a project related to Remotely controlled thermal performance of walls in smart building using Phase Change composite Materials and PV solar panels. AS co-investigator with Prof. Rachid Bennacer , Prof . Habib Sammouda Prof. Thabit Barakat Researchers from King Saoud University , Submitted, 1.2 M Saudi Riyal, waiting for the approval
- I was the principle investigator (PI) in several research projects that won grants either in Sweden or in Sharjah. In spite of the fact that we do not have graduate students in applied physics program, yet ,the latest successfully completed (2007) project was to investigation the thermal properties of building materials in UAE. The project was granted more than ninety nine thousand Dirhams (99,650 AED) through the college of research and Graduate studies at UOS.
- I was an active member of two former research groups at UOS , namely: Radiation Science and Technology Research Group at UOS (5 members) the Acoustics Research Group at UOS (5 members). We have got several grants to support the activities of the groups during the period 2006-2009. We won, as members of RSTR group, the best research group award, nominated during the 5th annual scientific research form at UOS (23-24 April 2009)
- In the Last two year, as PI, I have applied for a project entitled "*Thermography in Infra-Red Image Processing and Data Analysis*" The grant amounts to One Million UAE Dirhams (**1000 000 Dhs**) from the National Research Foundation(NFR) in UAE. The project passed the evaluation of first and second stages. Unfortunately, we did not get to the third final stage; however, to seek financial sport for such relatively large budget from different sources, two modified sub-project drafts of the proposal is now in process to be submitted. One to King Saud University in Saudi Arabia and the other one to the College of Research & Higher Studies at UOS.

International Scientific Co-operation

During my research work I have been keen to develop partnerships with several researchers and research institutions (see the publication list) around the globe to exchange ideas, share experimental results with different labs and publish joint articles. A list of some of the reference names given below as follows:

1. Prof Börjesson, a Research Team Leader at Physics Department, Chalmers University of Technology, Gothenburg, Sweden.
2. Prof. Giovanni Maria Carlomagno, The Scientific Research Team Leader at Department of Aerospace Engineering in Università Degli Studi Di Napoli Federico II, Napoli, Italy.
3. Prof. Lunden, Chalmers University of Technology, Gothenburg, Sweden.
4. Prof Lindblom, Gieo-technical, Department, Chalmers University of Technology, Gothenburg, Sweden.
5. Prof.(Mrs) Asghari Maqsood, Professor of Physics, department of physics, Quaid-i-Azam University, Islamabad, Pakistan.
6. Dr. Vlastimil Boháč, Research Associate from Institute of Physics, Slovak Academy of Science, Bratislava, Slovak Republic.
7. Dr. Svetozár Malinarič, Department of Physics, Constantine the Philosopher, University, Trieda Andreja Hlinku 1, SK-949 74 Nitra, Slovakia.

8. Dr. (Mrs) Bui-Thi-Nhi, Research Associate from Institute of Physics, Academy of Science, Hanoi, Vietnam
9. Dr Mattias Gustavsson, Department of Thermo and Fluid Dynamics, Chalmers University of Technology, Gothenburg, Sweden. Now is the Vice President R&D of Hot Disk AB, Sweden

Honors and Awards:

- ❑ The research excellent performance incentive award at UOS during the academic years 2010-2011.
- ❑ Among the faculty to held excellent performance award within the College of Sciences during the academic years 2007-2008 and 2008-2009.
- ❑ A member of the best research group award, nominated during the 5th annual scientific research form at UOS(2009)
- ❑ Bank of Sharjah award for the best article to serve the community during the academic year 2007-2008 (Shared with a colleague from the our department Dr. Hussein El Mehdi).
- ❑ A badge form and appreciation certificate award to be selected among the best three research papers in the field of basic and applied sciences during the 4th annual scientific research form at UOS(23-24 April 2008)
- ❑ A candidate among the best three research paper on Applied sciences during the 5th annual scientific research form at UOS(May, 2009)
- ❑ Several grants and Scholarship from the ministry of education of the Libyan government during B Sc., M. Sc. and Ph. D. Studies.
- ❑ Full Scholarship from Ministry of Education in Libya to get B.Sc. Degree from University of California, USA.
- ❑ Full Scholarship from University of Garyounis in Libya to do the research work for the M.Sc. thesis at Chalmers University of Technology Gothenburg, Sweden
- ❑ Included in the biographical record in Who's Who in the Word since year 2000.
- ❑ A number of awards from several Swedish educational support institutions during my post graduate study in Sweden.
- ❑ Nominated as "Docent" at the Physics Department, Chalmers University of Technology and Gothenburg University, Gothenburg, Sweden, 1998
- ❑ Number of appreciation letters and certificates during the participation in several local, national and international activities such as workshops, symposiums and conferences inside and outside UAE.
- ❑ Number of letters of seniority in administrative and academic committee at both the college as well as the university level within UOS.
- ❑ I have been invited to hold TV interviews as a chairman of the 2nd physics festival committee

Research & Adminstrtive Intensive Trinings

- Certificate in Leadership in Higher Education, Workshop (3days)Feb/2016.
- Certificate in By laws and administrative systems for Deans, Chairmen and Vice deans in UoS, "By laws and administrative systems for the leadership's experts including Deans, vice-Deans and Departments' chairmen in UOS " Workshop 23-25/11/2015.
- Certificate in Knowledge on Satellite uses, the 5th Global Space and Satellite Forum (GSSF May 2015)
- A certificate of intensive course on "Nano-materials and Nanotechnology" by RAK-CAM Advanced Studies Institute, October 17-19, 2009 Ras Al Khaimah, UAE
- A certificate of intensive on-line course on "The Extech i5 Infrared Radiation Camera" by
- Infrared Training Center, May 13, 2009 , North Billerica, Massachusetts , USA
- A certificate of intensive course on" X-ray Fluorescence Techniques in Heritage and Archaeology", under the supervision of International Atomic Energy Agency(IAEA), 17-18, March 2010, Sharjah, UAE.
- A certificate on Patents and Intellectual Property Protection Workshop, Emirates Foundation at
- UOS December 15th 2010.
- A certificate on Multiphysics High Performance Computing Workshop, Intel Corporation(UK) LTD., IBM Bldg. No. 5, Dubai Internet City January 20th 2011.
- Leadership certificate, 3 days workshope on leadership, Dubai 2014
- Certificate on Systems & By-laws within the leadership's experts including Deans, vice-Deans and Department;s chirmen within the university Colleges, Sharjah, Nov. 2015.

Conferences and Symposiums

In addition to several talks presented at different occasions such seminar's series and local workshops, I have participated in the following events:

1. Summer School on Mechanical Properties and Behavior of Solid - Plastic Instabilities, Trieste, Italy, 12-29 August, 1985.
2. The 1st Conference on Physics, organized by the National Committee of Pure and Applied Physics, Tripoli, Libya 3-6 July 1989.
3. The 12th European Conference on Thermophysical Properties Vienna, Austria, 24-28 September, 1990.
4. The 4th Chalmers Postgraduate conference on material science, Gothenburg, Sweden, May 21-22, 1991.
5. Symposium on Research and Development in Building Physics during the last 25 years, Department of building Physics, Lund University, Lund, Sweden, September 12-13, 1991
6. Nobel Jubilee Symposium on Low Dimensional Properties of solids, Gothenburg, Sweden, December 5-6, 1991
7. The 5th Chalmers Postgraduate Conference on material science, Frederikshavn, Denmark, May 27-28, 1992.
8. The 13th European Conference on Thermophysical Properties Campo Grande, Edificio C1, Lisbon, Portugal, 30/8 - 03/9/1993.
9. The International Terje Østvold Symposium, Røros –Norway, Nov. 2-3, 1998.
10. The 14th Bratislava conference "Property Tailoring of Thermoplastics – Based Blends and Composites" Bratislava, Slovak Republic, 1-5 Oct. 2000
11. The 2nd Conference for Physics and Sciences, Abu Dhabi 11-12 Feb. 2002
12. Thermal insulation systems used in building construction-Dubai 18-19 June 2002
13. The effects of using thermal insulation materials & systems on selection of air conditioning equipment Dubai 15th Oct. 2002
14. The 10th IEEE International Conference on Electronics, Circuits and Systems (ICECS 2003), Sharjah, Dec.15-18, 2003.
15. First UAE International Conference on Biological and Medical Physics (ICBMP) United Arab Emirates University Al-Ain March 27-30, 2005
16. First Scientific Research Form at UOS, Sharjah, UAE, 14-15 May 2005
17. The 17th European Conference on Thermophysical Properties. Bratislava, Slovak Republic Sep.5- 8 2005
18. The 2nd Scientific Research Form at UOS, Sharjah, UAE, May 2006
19. The 4th IASME / WSEAS Int. Conf. on Heat Transfer, Thermal Engineering And Environment Crete Island, Greece, August 21-23, 2006
20. The XIV INTERNATIONAL CONFERENCE ON NOISE CONTROL, Noise control 07, Polish Academy of Sciences, Warszawa, Elblg., June 3-6, 2007, Poland
21. The 8th Asian Thermophysical Properties Conference ATPC 21-24 August, 2007, Japan
22. WSEAS Intern. Conferences, Acapulco, Mexico, January 25-27, 2008
23. The 7th International Symposium On Heat Transfer' October 26-29, 2008, BEIJING, CHINA
24. The Fourth International Conference on Thermal Engineering: Theory and Applications, January 12-14, 2009, Abu Dhabi, UAE
25. The 2nd UAEU Physics Symposium, 23rd April, 2009, UAEU, Department of Physics, Al- ain, UAE
26. The 21st International Symposium on transport phenomena, Nov. 2-5, 2010, Kioushing, Taiwan
- 27- The ICTE 2012, International Conference on Thermal Engineering, April 25-26, 2012, Paris France.
29. The ICCMREA2014, The international Conference on Composite Materials and Renewable Energy Applications, Jan. 20-11, 2014, Sousse, Tunisia
31. The 7th Inter. Conf. on Envi. & Geo.Sci., June 2014 Salerno, Italy.
32. WSMEAP' 2015 World Symposium on Mechatronics Engineering & Applied Physics was held from 11-13 June, Sousse, Tunisia.
33. Global Congress & Expo on Materials Science & Nanoscience October 24-26, (2016) Dubai, UAE
34. The 8th International Conference on Material Science and Engineering IMS/8 Feb. 2-4, AUS, Sharjah (2016), UAE.

Publications

It should be noted that since joining UOS my teaching load has been relatively heavy (12 credited hours per week divided between one to three different courses) and I do not have graduate students due to the lack of graduate physics program at UOS. Yet, I do my best to

remain active in my research area as well as in the related fields including physics education. I have published more than 45 articles in more than 20 different international journals and 13 international conferences. I am either solo or first author in 80% of these publications. Moreover, my papers have been cited by many researchers from various prestigious universities all over the world. For example, you can look at the citation list(excluding self the citations) from Scopus associated with Elsevier B. V., on <http://www.scopus.com/home.url> The number of citations of 17 of my articles published in Scopus exceeds 161 citations and over 4010 downloads for my book chapter that has been published on line at <http://www.intechopen.com/statistics/14317>

I have listed my publications according to my research interest areas and among the following four different categories:-

- (a) Engineering Physics
- (b) Material Physics
- (c) Physics of Measurements
- (d) Physics Education.

Publications

- (a) **Engineering Physics:** The practical application of physics in engineering fields
 1. **Bashir M. Suleiman**, Musbah Mohamed, Salah Hamad , Sami Elmehdy
Assessment of forest and Juniperus Phoenicea Decline in Al Jabal Al Akhdar Using NDVI-Remote Sensing and GIS Data (2006-2013), *International Journal of Remote Sensing Applications, in press (2016)*
 2. **Bashir M Suleiman**,
Validations of a Model to Estimate Thermal Conductivities of Ceramics, *Advances in Materials (2016); 5(5): 44-50.*
 3. **Bashir M. Suleiman**,
Theoretical Estimation of Thermal Conductivity in Composite Materials, *Proceedings of the 8th International Conference on Material Science and Engineering IMS/8 Feb. 2-4, AUS, Sharjah (2016), UAE. 123-126*
 4. **Bashir M. Suleiman**
Thermal conductivity of ceramics and validates of the theoretical models, Presentation under the session Composite Materials at Materials Science-2016 *Proceedings of Global Congress & Expo on Materials Science & Nanoscience October 24-26, (2016) Dubai, UAE*
 5. **Bashir M. Suleiman**
Invited Keynote Speaker “THERMAL Conduction in Composite Building Materials”, Proceedings of the ICCMREA’ (2014) is an International Conference on Composite Materials & Renewable Energy Applications, from 22-24 January, WSMEAP’ 2015 World Symposium on Mechatronics Engineering & Applied Physics *11 - 13 June (2015) / Venue: El Mouradi Palace Sousse, Tunisia.*
 6. **Bashir M. Suleiman**, Sami Elmehdy, Musbah Mohamed, Salah Hamad
Infrared Spectral Measurements in Remote Sensing and Gis to Asses Factors Controlling Flora Diseases, *Proceedings of the 7th Inter. Conf. on Envi. & Geo.Sci., (2014) Salerno, Italy, 385-392*
 7. Elmehdi, H. M, Pistorius, S. and **Suleiman, B. M.**
Difficulties faced by college in introductory physics: A Case Study. *Physics Education, Jan - Mar 2013 (article no. 7), 2013.*

8. **Bashir M. Suleiman,**
Thermal Load Calculations of Multilayered Walls, *Journal of World Academy of Science Engineering and Technology, Issues 64, April 2012, Pages 703-707*
 9. **Bashir M. Suleiman,**
Estimation of U-value of Traditional North African Houses, *Journal of Applied Thermal Engineering, Volume 31, Issues 11-12, August 2011, Pages 1923-1928*
 10. ****Bashir M. Suleiman**
“Aural reception and possible thermal effects on speech intelligibility inside UOS Classrooms, *UOS Pure & Applied Sciences' Journal 6, 1 (2009).*
****This article was a candidate among the best three research paper on applied sciences during the 5th annual scientific research form at UOS.**
 11. **Bashir M. Suleiman,**
Sound and Noise Levels Inside UOS Lecture Halls
Polish Academy of Sciences, Warszawa, Poland Archives of Acoustics, Chronicle (2007), Vol. 32, no. 2, P436
 12. **Bashir M. Suleiman ,**
Thermal Performance of North African buildings, 8th Asian Thermophysical Properties Conference ATPC, August 21-24, 2007, Japan.
 13. **Bashir M. Suleiman,**
Sound and Noise Levels Inside UOS Lecture Halls, 14th International Conference on noise control '07, 3-6 June 2007, Elblag, Poland.
- (b) **Physics of Materials** : Investigations of the material microstructure effects on the kinetic transport properties with emphasis on thermal transport due to phonon – phonon/electron scattering in solids.
14. **Bashir M. Suleiman,**
Effective Thermal Conduction in Composite Materials, Applied Physics A, Material Sciences & Processing 223–228, 99: (2010).
 15. **Bashir M. Suleiman,**
The effective thermal transport in composite materials, a book chapter on Advances in Composite Materials: Ecodesign and Analysis: Chapter 28, Pages 625-642, since Jan 2011 is online at www.intechweb.org ISBN: 978-953-307-150-3, <http://www.intechopen.com/statistics/14317>
 16. **Bashir M. Suleiman,**
Moisture effect on thermal conductivity of some major elements of a typical Libyan house envelope, Journal of Physics D: Applied Physics. 39 (2006) 547-551.
 17. **Bashir M. Suleiman and Arnold Lundén ,**
Thermal conductivity and diffusivity of sodium orthophosphate
Journal of Physics: Condensed Matter 15, (22 October) 6911-6918 (2003).
 18. **Bashir M. Suleiman, Arnold Lundén, and Ernest Karawacki ,**
Heat transfer and ion migration in the system Li_2SO_4 - LiNaSO_4 , *Solid State Ionics, 136-137, 325 (2000).*
 19. **B. M. Suleiman, J. Larfeldt, Bo Leckner, and M. Gustavsson,**
Thermal Conductivity and Diffusivity of wood, *Wood Science and Technology 33, 465(1999).*

20. **B. M. Suleiman**, S. E. Gustafsson, E. Karawacki, R. Glamheden and U. Lindblom, The effective thermal conductivity of a multi-phase system *The International Journal of Thermal Analysis*, Vol. 51, 349(1998).
21. **B. M. Suleiman** and L. Börjesson,
The effects of cobalt substitution on the thermal diffusivity of YBa₂Cu₃O_{7- δ} superconductor,
Journal of Superconductivity, 10, 663 (1997).
22. **B. M. Suleiman**, S. E. Gustafsson, and A. Lundén
Uniaxial Pressure Dependence of the Debye Temperature in Metals
The International Journal of Thermophysics, Vol. 18, 1527, (1997).
23. **B. M. Suleiman**, M. Gustavsson, E. Karawacki and A. Lundén
The thermal Properties of Lithium Sulphate, *Journal of Physics D: Applied Physics*, 30, 2553 (1997).
24. **B. M. Suleiman**, **L. Börjesson** and **P. Berastegui**,
The effect of cobalt doping on thermal conductivity of YBa Cu O superconductor *Phys. Rev. B* 53 (9) 5901 (1996).
25. **B. M. Suleiman**, E. Karawacki and S. E. Gustafsson,
Thermal conductivity and diffusivity of KH₂PO₄ and NH₄H₂PO₄ polycrystalline samples near their phase transitions, *Journal of Materials Research.*, Vol. 9, 1895, (1994).
26. **B. M. Suleiman**, I. Ul-haq, E. Karawacki, A. Maqsood and S.E. Gustafsson, Thermal conductivity and electrical resistivity of the Y- and Er- substituted 1:2:3 superconducting compounds in the vicinity of the transition temperature, *Phys. Rev. B* 48 (6) 4095 (1993).
- (c) **Developing Measuring Techniques(Technology)**: Developing and improving several transient techniques to measure thermal properties of solids.
27. **Bashir M. Suleiman**,
Measurements of Thermal Conduction in Partially Saturated Specimens Using the Transient Hot-Disk Technique, *Journal of Testing and Evaluation*, 529-534, Vol. 39, No. 4.(2011)
28. **Bashir M. Suleiman**,
Alternative fitting procedures to enhance the performance of resistive sensors for thermal transient measurements *Journal of Sensors and Actuators A* Vol. 163, issue 2, Pages 441-448(2010)
29. **Bashir M. Suleiman** & Svetozár Malinarič
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40. **Bashir M. Suleiman**, " Development of the transient hot strip technique for measuring
the uniaxial pressure dependence of the electrical resistivity and its temperature
coefficient in metals", *Technical Report, no. GIPR-243*, Department of Physics,
Chalmers University of Technology, Gothenburg, Sweden (1983).
41. **Bashir M. Suleiman** " The transient plane source technique for measurement of thermal
properties of polycrystalline ceramics including high- T_c superconductors" ,
Dissertation, ISBN 91-7032-905-2, Physics Department, Chalmers University of
Technology, Gothenburg, Sweden (1993).
- (d) **Physics Education:** Educational research in the role of applied physics within
medical sciences, health sciences and engineering disciplines.
42. ***Bashir M. Suleiman**, Hussein M. El-mehdi
The Role of Guided Critical Thinking and Course Management Systems in
Developing University Physics Education in UAE (in Arabic), *Journal of The
Association of Arab Universities* , a specialized issue on modern university
education, (ISSN 1680-6549), Vol 5, 447-463(2009).***This article won the Bank of
Sharjah award for the best article to serve the community.**
43. **Bashir M. Suleiman**,
The Role of Basic Physics in Medical Sciences.*International Journal of
Scientific Research (IJSR)* 16 (2006), 449-505

Conferences Publications

44. **Bashir M. Suleiman** "THERMAL TRANSPORT IN MULTIPHASE
MATERIALS", Proceedings of the 21st International symposium on transport
phenomena , Nov. 2-5, 2010, Kaohsiung, Taiwan

45. **Bashir M. Suleiman** “Theoretical models in thermal conduction”, Proceedings of the Fourth International Conference on Thermal Engineering: Theory and Applications, January 12-14, 2009, Abu Dhabi, UAE
46. **Bashir M. Suleiman & SVETOZÁR MALINARIČ**, Difference Analysis Model in the Extended Dynamic Plane Source (EDPS) Technique, WSEAS Intern. Conferences, Acapulco, Mexico, January 25-27, 2008.
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- بشير محمد سليمان و عمر محمد عدوان
عالم الفيزياء عبد الرحمن الخازني؛ أهم اختراعاته خلال القرن الثاني عشرة الميلادي المؤتمر الدولي
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جامعة الشارقة، الإمارات العربية المتحدة 25-27 مارس 2008
48. **Bashir M. Suleiman and Vlastimil Boháč** ” Thermal Conductivity Of Heterogeneous Media” proceedings of the 7th International Symposium On Heat Transfer’ 08 October 26-29, 2008, BEIJING, CHINA
49. **Bashir M. Suleiman**, Thermal Conductivity of Saturated Samples Using the Hot-Disk Technique, Proceedings of the 4th IASME/ WSEAS International Conference on Thermal Engineering & Environment, 21-23 Aug. 2006
50. **Bashir M. Suleiman**, Thermal Conductivity and Moisture effect of Some Major Element of a Typical Middle Eastern Envelope. Proceedings of the 17th ECTP 5-8 Sep. 2005
51. **Bashir M. Suleiman**, The Role of Basic Physics in Medical Sciences. Proceedings of the 1st ICBMP 27-30 March. 2005
52. **Bashir Suleiman**, Physics Education: Critical Thinking and Visual Aids, Proceedings of the 2nd Conference for Physics and Sciences, Abu Dhabi, 11-12 Feb. (2002).
53. **Arnold Lundén, Bashir M. Suleiman, and Ernest Karawacki** Heat transfer in the system Li_2SO_4 - LiNaSO_4 in the range 300-900K The International Terje Østvold Symposium, Røros –Norway, Eds. H. A. Øye and O. Wærnes, Inst. Inorg. Chem. Norwegian Inst. Technology, Trondheim, Norway. , pp 65-75, (1998).

Workshops , Presentations & Seminars

I have participated and organized several workshops locally and on international levels and I have given over 50 seminars in both research and educational disciplines. Some of the latest workshops are listed below:-

- *Global Congress on Materials Science & Nanoscience October 24-26, (2016) Dubai, UAE*
- *The PGRS new Program” University of Sharjah Oct. 7th (2015).*
- *The 8th IMS International Conference on Material Science and Engineering, The American university of Sharjah. Nov. (2015).*
- *Keynote Speaker at the World Symposium on Mechatronics Engineering & Applied Physics, Tunis, Jan (2015).*
- *Conference on Composite Materials & Renewable Energy Applications ICCMREA’ 22-24 January, in the beach city of Sousse, Tunisia. (2014)*
- *The 1st UAE Workshop on Environmental & Occupational Noise at the University*

of Sharjah, 6 Dec. 2007, UAE

- *Workshop on The optimized Scientific Disktop, "How to go beyond office and e-mal" at the University of Sharjah, January 31st, 2008, UAE*
- *Workshop on Iben Alhaythem Optics, By Prof. Charles Falco, at the University of Sharjah, March. 2008, UAE*
- *Workshop on Thermo-acoustic tools at the University of Sharjah, 28 May, 2008, UAE*
- *Workshop on Thermography at the University of Sharjah, 3 June. 2008, UAE*
- *Workshop (ICCROM), Conservation and managements of Heritage in the Arab Word, UOS 19-20 Nov. 2009, UAE*
- *Workshop on X-ray Fluorescence Analysis at the University of Sharjah, January 19th, 2009, UAE*
- *Workshop on Cone Beam Computed Tomography at the University of Sharjah, January 22nd, 2009, UAE*
- *Physics one-day Symposium on Physics-related topics at UAEU in AlAin City, April 23rd, 2009, UAE*
- *The Stanford-Sharjah VLF Workshop through the (AWESOME) Network . It is a Workshop on Very Low Frequency Waves at UOS 22-24 Feb. 2010,UAE*
- *Workshop on X-ray Fluorescence Techniques in Heritage and Archaeology, under the supervision of International Atomic Energy Agency(IAEA), 17-18, March 2010, UAE.*
- *A keynote lecture at the international conference on Composite Materials & Renewable Energy Applications, January, 2014 in Sousse, Tunisia.*

Scientific Merits and Membership in Professional Societies

- The SULF- Sveriges Universitets-Läraryörbund, Sweden.
- The Libyan Faculty Members Society , Libya
- The (WSEAS) World Scientific and Engineering Academy Society
- I have been invited to be as session chair in several local & international conferences.
- An active member of the Radiation Science and Technology Research Group at UOS(5 members) This group won the Award for the best research group in UOS 5th Sceintdic Form.
- An active member of the Acoustics Research Group at UOS (5 members)
- A keynote speaker at the international conference on Composite Materials & Renewable Energy Applications, January, 2014 in Sousse, Tunisia.

Reviewing

I am currently a reviewer for several journals of (IOP) Institute of Physics (www.iop.org) publications

and others along with international conferences. In addition, I have been selected as a promotion evaluator to the ranks of professorship for some universities at the Gulf region. For more detailed information see the following:-

1. Reviewer to research projects for the deanship of academic research at King Saud University, Saudia Arabia.
2. Evaluator of promotions files to the rank of professorship at Umm AL-QURA University Makkah (Mecca) The Kingdom of Saudi Arab, AlBasra University , Iraq, Al-Quds University, Palstine, and Moutha University, Jordon.
3. An external examiner of MSc. Theses, Physics Department at the United Arab Emirates University in Al-ain, UAE.
4. Reviewer and a member of editorial boards to several national and international conferences, for example, the International Conference on Composite Materials & Renewable Energy Applications, January, 2014 in Sousse, Tunisia. And the 21st International symposium on transport phenomena, Nov. 2-5, 2010, Kaohsiung, Taiwan.
5. The Journals are:
 - i) Journal of Applied Physics D
 - ii) Journal of Condensed Matter
 - iii) Journal of Semiconductor Science and Technology
 - iv) Journal of Measurements Science and technology
 - v) University of Sharjah Journal of Pure & Applied Sciences (UOS Publishing).
 - vi) International Journal of Scientific Research (UAEU Publishing)
 - vii) Journal of Building & Environment (Elsevier Ltd. Publishing)

- viii) International Journal of thermophysics (Springer Publishing, New York, USA)
- ix) Madridge Journal of Nanotechnology & Nanoscience, Editorial board member (www.madridge.org)
- x) International Journal of Heat and Mass Transfer (Elsevier B.V., Amsterdam, The Netherlands)

Administrative and Academic Committees

A- University services committees

In addition to several ad hoc committees at the University /College/ Department levels, I have been appointed in many formal committees. The following are selected lists of the important committees on these levels

1- University Committees:

- Head of the initial accreditation committee and Coordinator of the program “Petroleum Geosciences and Remote Sensing” Initial Accreditation file preparation (2015-Present)
- Department Representative in the College Council (2011-present).
- Member of Deans’ Recruiting Committee (2014)
- Acting Head of the Department Jan-August 2013
- Grievance committee for faculty (Sep. 2010- Sep 2011).
- Member of the Accreditation Curriculum committee (2006-2007)
- Member of the Teaching and Research Laboratories advisory and evaluation team committee at W12 (2000-2003).

2- College Committees

- The Department representative at the college council Sep. 2013- Present)
- A member of the promotion committee (Sep. 2013-present)
- Acting Department Chairmen(Jan. 2013-August 2013)
- Department Chairmen(Sep. 2002-Sep. 2005).
- Member of The college Accreditation Curriculum committee (2006-2007)
- The college Schedule and examination committee (2007-2009)
- Member of the strategic planning committee (2007-2009)
- Member of the MSc proposed program in Applied Physics (2008)
- Head of Grading and evolution assessment committee for High Schools Physics Olympiad (2008-2009).
- Head of Grading and evolution assessment committee for High Schools Physics Olympiad (2007-2008).

3- Departmental Committees:

- A member of the promotion committee (Sep. 2013-present)
- Head of Seminars & Conferences Committee (2006-2007). It was the most active one in UOS during this academic year (2006-2007).
- Member of Program Accreditation Committee(2000-2007)
- Member of Investigating Committee on IT Lab manual copy rights(2009)
- Member of the Committee to study and endorse the annual report evaluating scheme for faculty.
- Member of several Committees to organize and conduct several workshops at UOS
- Head of the organizing committee of the 1st and 2nd Physics Festivals (2007 & 2009)

B- Community services committees

I have been engaged in several committees related to community services. For example, as a chairman/ member of organizing committees and/or giving talks in the following activities inside and outside the UOS:-

- A Member of the Organizing Committee and The chairman of the Students Projects' competition committee in the Third Sharjah Sciences Festival (Feb 5-6, 2014).
- A Member of the Organizing Committee and The chairman of the Students Projects' competition committee the 2nd Sharjah Sciences Festival (April, 2010).
- Head of Grading and evaluation assessment committee for High Schools Physics Olympiad (2008-2009).
- Head of Grading and evaluation assessment committee for High Schools Physics Olympiad (2007-2008).
- Head of the organizing committee of the 1st Physics Festivals (2007)
There were more than 2000 high school students in addition to their school teachers.
- Head of the organizing committee of the 2nd Physics Festivals (2009). The number of students doubled (4000) beside their teachers and families as well.
- I have been involved in several visits to different high schools either delivering talks related to the importance of physics and its role in our daily-life, or judging students work during several schools' scientific activities (2006-2010). For example, some of these activities were conducted at the school of Creative Sciences, Wesgreen International school and Naof high school.
- Being a member of organizing committees of several workshops that are directly related to community needs (2000-2009) such as materials degradation, sound pollution (noise), infrared heating, etc ..
- Participated in two Sharjah TV interviews regarding improving education quality through out of class activity such as festivals and workshops.