Prof. Dr. Marwan Suleiman Mousa

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Nationality	:	Jordanian
Academic Dept	:	Dept. of Physics,, Faculty of Sciences, Mutah University
Languages	:	Arabic (Native), English (Excellent), German (Good), French (Good).
Orcid Number	:	0000-0002-5496-5532

Education

Degree	Year	University	Description
Ph.D.	1984	University of Aston Birmingham UK	Surface Physics and Materials Technology: "A study of field electron emission from composite micro-regimes"
M.Sc.	1979	University of Aston Birmingham UK	Physical Methods of Analysis: "Energy spectra of field emitted electrons".
B.Sc.	1976	University of Sulaymaniyah Iraq	General Physics

Academic Experience

Time Period		Details
May 9th 1996 – Present	:	Full Professor of Physics – Physics Department – Mu'tah University – Jordan.
2017 – 2018 (Academic year)	:	Professor of Physics – Physics Department – University of Jordan – Jordan.
2011 – 2012 (Academic Year)	:	Professor of Physics – Physics Department – Al-Yarmouk – Jordan
2006 – 2007 (Academic Year)	:	Professor of Physics – Physics Department – Al al-Bayt – Jordan
1999 – 2000 (Academic Year)	:	Professor of Physics – Department of Electrical and Computer Engineering – Florida International University – USA.
May 1990 – May 1996	:	Associate Professor of Physics – Physics Department – Mu'tah University – Jordan.
Sept. 1985 – May 1990	:	Assistant Professor of Physics – Department of Natural Sciences – Mu'tah University – Jordan.
Feb. 1977 – Aug. 1977	:	Lecturer of Physics – Technical School of the Royal Jordanian Airforce

Administrative Experience

Year		Details
Oct. 23rd 2019 - Present	:	Vice President – Mu'tah University.
Dec. 2017 – Dec. 2018	:	Appointed by the Ministry of Higher Education on the Board of Trustees – Jadara University.
Nov. 2009 – Nov. 2017	:	Appointed by the Ministry of Higher Education on the Board of Trustees of Al-Ahliyya Amman University.
Feb. 2002 – Oct. 2005	:	Appointed as the University President's Assistant for Scientific, External and International Affairs
Sept. 2002 – Sept. 2005	:	Appointed as the Dean of the Faculty of Nursing – Mu'tah University.
June 1996 – July 1997	:	Appointed as the University President's Advisor for International Affairs
Sept. 1994 – Sept. 1995	:	Head of the Department of Physics – Mu'tah University.

Professional Experience

Year		Details
Nov. 2019 - Present		Chairing several university committees. In charge of Research, Planning and International Relations of Mu'tah University. Member of Mutah University Council Member of Appointments and Promotions Committee of Mu'tah University.
Nov. 28th 2019	:	Appointed on the Basic Sciences committee of the Science Research Support and Innovation Fund
Nov. 3rd 2019	:	Appointed on the Mu'tah University Council.
Oct. 2019	:	Appointed on the Editorial Board of the Journal of Engineering (JE), Univ. of Bagdad. Previously has been on the Journal advisory board.
Sept. 2019	:	Appointed as the chairman of the Scientific Research Committee of the Faculty of Science and also that of the Department of Physics – Mu'tah University.
3rd April 2019	:	Appointed by the Administrative Council of the Scientific Research Support Fund (SRSF), on the committee for Basic Sciences of the Fund.
6th Dec. 2018	:	Appointed as a member of the committee for Graduate studies of the Scientific Research Support and Innovation Fund – Ministry of Higher Education & Scientific Research of Jordan (SRS&IF).
13th Oct. 2017	:	member of committee for refereeing the Price for Scientific & Technological Innovation & Creativity, SRSF.
Oct. 2016	:	Appointed by the Administrative Council of the SRSF to be on a committee to organize lists of equipment purchased by the SRSF and exist at various institutions in Jordan.
Oct. 2016	:	Appointed by the Administrative Council of the SRSF to be on a committee to develop regulations of the fellowships awarded to outstanding students at Jordanian universities.
Sept. 2016	:	Appointed by the Administrative Council of the SRSF to chair a committee to evaluate the national journals supported by the Fund.
2010 – 2015	:	Jordan, as a Science Humboldt Ambassador, I gave lectures at various Jordanian universities about the Humboldt Foundation and research in Germany mainly about postdoctoral scholarships. As a result, several scholarships and academic exchange programs for Jordanians and Germans were obtained in studying and researching.

Oct. 2015	:	member of the national committee (at Higher Council for Science and Tech.) to study establishing "National Nano Technology Center".
Dec. 2015	:	Appointed on the Academic Committee of the SRSF.
May 2015	:	Appointed on the Founding Committee of "King Abdullah II Center for Nano Technology"
12th Jul. 2014	:	Appointed, by the Higher Education Council of the Ministry of Higher Education and Scientific Research on the Administrative Council of the Scientific Research Support Fund.
Sept. 2013- Nov. 2015	:	Appointed as a member of the committee for Basic Sciences of the Scientific Research Support Fund (SRSF).
Nov. 2012	:	Appointed on the council of "Centre of Theoretical and Applied Physical Sciences" of Yarmouk University.
Sept. 2008	:	Appointed member of the Graduate Studies Council / Princess Sumaya University for Technology (PSUT).
Jan. 2007	:	Appointed by the Ministry of Higher Education and Scientific Research at the Committee assigned the task to evaluate the performance of the "Scientific Jordanian Journals" that are issued by the Ministry and Jordanian Universities.
2006 – 2007	:	Appointed on the Scientific Research Council of the Al al-Bayt University, Mafraq, Jordan.
Sept. 2002	:	Appointed as a member of the committee for appointments and promotions at Mu'tah University.
Feb. 2002 – Aug. 2005	:	Appointed as the University President's Assistant for Scientific, External and International Affairs.
July 29th – Aug. 3rd 2001	:	Appointed as a member of the Advisory Board to organize IFES' 2001 which was held in Berlin, Germany.
July 1996	:	Appointed at the Editorial Board of the "Mu'tah Journal for Research and Studies".
Oct. 1996	:	Appointed by the German Academic Exchange Service (DAAD) on pre-selection committee of the candidates for Doctorate scholarships to Germany, Then I was appointed on the same committee for the following years: 2001, 2003, 2004, 2006 till 2015.
June 1996 – July 1997	:	Appointed as the University President's Advisor for International Affairs.

Patents

Year		Details
Feb. 5th 2001	:	The Commissioner of patents issued a patent for the joint invention with Professor Thomas F. Kelly, entitled "Resin-coated carbon-fiber cathodes: superior electron source". Patent Application Serial: 60/220, 862.

Scientific Scores

Research Gate Score	:	36.46
Research Gate Citations	:	1119 (h index: 17)
Google Scholar h – index	:	19
Google Scholar Citations	:	1447
Scopus Published Articles	:	110 (h index: 14)

Awards and Prizes

Year		Details
June 9th 2022	:	Awarded Certificate for Scientific Distinction and International Cooperation with Poland from Nicolaus Copernicus University, Torun, Poland
Jan. 4th 2021	:	Awarded Certificate of Appreciation from Mu'tah University for contributions to distinguished scientific research & advancement in International Universities' ranking.
Nov. 2nd 2017	:	Awarded Certificate of Appreciation from the Applied Science University
June 1st – Aug. 1st 2016	:	Awarded a Post-Doctoral "Alexander von Humboldt Stiftung Research Fellowship" at Helmholtz-Berlin Center for Materials and Energy (HZB) – Berlin – Germany.
June 1st – Aug. 1st 2013	:	Awarded a Post-Doctoral "Alexander von Humboldt Stiftung Research Fellowship" at Helmholtz-Berlin Center for Materials and Energy (HZB) – Berlin – Germany.
June 1st – Aug. 1st 2012	:	Awarded a Post-Doctoral "Alexander von Humboldt Stiftung Research Fellowship" at Helmholtz-Berlin Center for Materials and Energy (HZB) – Berlin – Germany.
Apr. 10th 2011	:	Awarded the Medal of the "2nd Int. Conf. for Materials in Jordan", held in Amman.
Oct. 26th 2010	:	Awarded the Medal of the Jordanian Astronomical Society at its 23rd Anniversary Ceremony.
June 1st – Aug. 31st 2010	:	Exceptional "Alexander von Humboldt Stiftung Research Award/Fellowship with accompanying research graduate student" at HZB.
June 20th 2009	:	Mu'tah University Medal awarded by the University and presented by HRH Princess Muna Al Hussein in recognition for the constructive efforts to serve and develop the Nursing Faculty in addition to continuous service to the university.
June 1st – Aug. 1st 2009	:	Deutsche Forschungsgemeinschaft (DFG) Post-Doctoral Research Fellowship – HZB – Berlin – Germany.
June 1st – Aug. 1st 2008	:	Awarded a Post-Doctoral "Alexander von Humboldt Stiftung Research Fellowship" Helmholtz-Berlin Center for Materials and Energy (HZB) – Berlin – Germany.
June – Aug 2001	:	Scientific Research Contract for three months at Imago Scientific Instruments – Madison – Wisconsin – USA.
June 2000 – June 2001	:	Scientific Post-Doctoral Research Award – Oak Ridge National Lab. (ORNL) – San Francisco – USA.
1999 – 2000	:	"Fulbright Post-Doctoral Research Fellowship" – Electrical and Computer Engineering Department – Florida International University – USA.
Dec. 27th 1999	:	Mu'tah University Medal awarded and presented by the University president.
Dec. 15th 1998	:	Members of staff of Mu'tah Univ. Medal awarded in recognition for distinguished efforts to serve Mu'tah University on the national and international levels
Oct. 8th 1998	:	King Hussein Medal, awarded in recognition of the distinguished scientific efforts in preparation and organization of the 45th International Field Emission Symposium (IFES) held in Jordan 12 - 18th Sept 1998.
Sept. 17th 1998	:	HRH Crown Prince Hassan Medal, awarded to distinguished scientists attending the 45th International Field Emission Symposium (IFES), held in Jordan Sept. 12th – 18th 1998.
June 1st – Aug. 1st 1997	:	Deutscher Akademischer Austauschdienst (DAAD) Post-Doctoral Research Fellowship – Bonn University – Germany.
June 1st – Sept. 30th 1994	:	Resumption of the "Alexander von Humboldt Stiftung Fellowship" Post-doctoral research at (FHI-MPG) – Germany.
June 1992 – Sept. 1993	:	"Alexander von Humboldt Stiftung Fellowship" post-doctoral research at the Fritz-Haber-Institute der Max-Planck-Gesellschaft – West Berlin – Germany.
1991 – 1992	:	"Fulbright Post-Doctoral Research Fellowship" at Stanford Research Institute (SRI), San Francisco – USA. Awarded the SRI certificates for "Scientific Research Distinction" to me and to Mu'tah

		University.
July 24th – Sept. 24th 1988	:	Max-Planck fellowship for Post-doctoral research at the Fritz-Haber-Institute der Max-Planck-Gesellschaft (FHI-MPG) – West Berlin – Germany.
1984	:	Honoury life membership of the Aston University Guild of Students, conferred in recognition for the organization of Aston students International Cultural Weeks.
1984	:	"Aston Graduates Association Prize "for"exceptional contribution to the social and cultural life of the University".

Funded Research Projects

Donor	Project Title
Deanship of Scientific Research Mu'tah University	Field electron emission from MW CNTs as a potential electron source.
Science Research Support Fund (SRSF)	Polymeric nanocomposites doped with magnetically aligned nanoparticles for monovalent and multivalent ion rejection and electromagnetic wave polarizer.
Deanship of Scientific Research Mu'tah University	Characterization of an electron source from SW CNT mounted on W bases.

Membership of Scientific Institutions

Country	Details
UK	Fellow (elected) of the Institute of Physics
Switzerland	Member of the European Physical Society
International	Member of the International Field Emission Society.
Jordan	Member of the Association of Jordanian Physicists and since 2008 till now, President elect of the Jordanian Physics Society
USA	Senior member of the IEEE (The Institute of Electrical and Electronics Engineers)
Korea	"International Field Emission Society – Fellow" title (elected) of the IFES – 2016, on June 16th, 2016 at Gyeongjo, South Korea and being awarded: "For recognition as an eminent and outstanding scientist in the field of field emission, field ionization, and related phenomena".
(Conference Series)	"IFES Fellow" title (elected) of the International Field Emission Society
Germany	Member of the Max-Planck Alumni Association (MPAA).
Greece	Unanimously Elected Fellow of EMAAS (European Mediterranean Academy of Arts and Sciences)

Courses Taught

Level	Courses
Ph.D.	Surface Physics, Plasma Physics, Elective: Non Destructive Technique NDT)
M.Sc.	Statistical Mechanics, Non-Destructive Technique (NDT) & its applications, High Voltage Breakdown Phenomenon, Methodologies of scientific research, Electrodynamics
B.Sc.	General Physics 1 (Mechanics and Heat), General Physics 2 (Electricity and Magnetism), General Physics for Agriculture, Electronics, Properties of Matter, Vacuum Technology, Electron Microscopy, Electronics for Computers, Electronic Instrumentation, Final year Graduation Project, Solid State Physics, Digital Electronics & Digital Electronics Lab. Vibrations and Waves, Introduction to Light and waves, Thin Film Technology, Quantum Mechanics, Thermodynamics, Statistical Mechanics, Atomic Physics, Modern Physics, Electromagnetic Theory I, Electromagnetic Theory II, Surface Physics, Physics of Meteorology, Environmental Physics, Modern Communication Systems, Physics for Architects, Physics for Life Sciences, Advanced Physics lab. Optics Lab. Applied Physics Lab. Electronic Instrumentation Lab. Vacuum Technology Lab. Electronics Lab. General Physics Lab. (2), General Physics Lab. (1)

Donation of equipment

Title
1993/4 the Alexander von Humboldt Stiftung "AvH" donated a LEED AUGER instrument, to measure composition of materials, upon the success of the research project carried out at the Fritz-Haber-Institut der Max-Planck-Gesellschaft in Berlin.
1995 the Alexander von Humboldt Stiftung "AvH" donated an upgrade to the LEED AUGER instrument, installed at the "Materials Technology Lab." of the Dept. of Physics, Mu'tah Univ.
1992-5 The FHI-MPG donated several other electronic and ultra high vacuum (UHV) equipment and pumps to complement a surface analysis research facility at Mu'tah Univ. The president of the Univ. officially received them.
1994/5 a Philips Transmission Electron Microscope TEM 300 was donated, installed and operated in Mu'tah University as a result of the collaboration existing with Philips and the Fritz-Haber-Institut.
Similar Philips donated Tansmission Electron Microscope was obtained for the - Hashemite University (Zarqa), 1996.
Similar Philips donated Tansmission Electron Microscope was obtained for the the University of Jordan (Amman) 1997. Royal Jordanian Airlines kindly shipped the microscope without any charges.
1996/7 Donations, worth hundreds of thousands of D.M. of Periodicals and Books were obtained, for the library of Mu'tah University, from the German DFG and the Ministry of International Communication.
Sept. 2008 the AvH donated a Portable computer for fast data acquisition.
August 2016 Technical university of Berlin and HZB donated valuable materials for research.
Nov 30th 2016, Prof. Dr. John Banhart, Helmholtz Center Berlin for Energy and Materials, confirmed to me that "The Center obtained all approvals to export the highly advanced piece of equipment the Field Ion Microscope FIM as a donation and arrangements has been made for relocation of the Microscope." This instrument does only exist in advanced countries and would worth about a million Euro; thus providing our researchers with master piece of equipment. It enables studying single atoms, films grouth and single-atom surface diffusion from metals … etc.
Oct. 2018, Institute of Standards Int. of the Czech Academy of Sciences, Brno, Czech donated a "Sample Etching Machine" delivered by Dr Alexandr Knapek whom solid collabaration is taking place with several exchanges of visiting researchers and students. Collaboration Agreement between ISI with Mutah University has been signed.

Nov. 2018 an UHV Turbo Molecular pump has been obtained from Lawazem Scientific and Medical Co. in addition to a Digital Camera and coloured main printer with supply of inks. Four large screens were also obtained.
2019 Dr Alexandr Knapek from ISI visited Jordan and donated a "Dipping and Etching highly accurate Instrument" to the Surface Physics and Advanced Materials Technology Lab. of Mu'tah University. The Univ. appreciated the visit, cooperation (MOU has just been signed between both parties) and presented Dr Knapek with the Univ. shield.

International Activities and Conferences

Year	Country	Title
9th – 11th June 2022	Madaba (Jordan) German Jordanian Univ.	The Int. Conf / Humboldt Kolleg; "How to Change the World via Science" (Chairman)
24 – 28 March 2022	Tishk University Erbil, Iraq	6th IECASS Internationa Conference (Key Note Speaker) Invitation for visiting Tishk University and Soran University
1 – 2 November 2021	Helmholtz Berlin Zentrum for Energy	Scientific visit and cooperation with Mutah University (MOU)
3-5 November 2021	Brno, Czech Republic	Scientific visit and cooperation with Int. Standards Institute of the Czech Academy of Sciences with Mutah University (MOU)
15th – 17th Apr. 2020	Marrakesh (Morocco)	Virtual Conf: 5th Int. conf on Dielectric Materials and Applications.
21st – 23rd Oct. 2019	Hammamet (Tunis)	the Humboldt Kolleg "4th Int conf. Research to application and Markets".
14th – 19th Oct. 2019	Adana (Turkey) Cukurova Univ.	the Int. Conf. on Condensed Matter and Materials Science (ICCMMS-19).
12th – 15th Sept. 2019	Szczecin (Poland)	the 11th Congress of Societas Humboldtiana Polonorum – Science in the age of Globalization.
1st – 4th Sept. 2019	Harnack House, Berlin (Germany)	"Max-Planck Symposium for Alumni and Early Career Researchers" conference
2nd – 4th May 2019	Amman (Jordan)	4th Int. Conf. on Dielectrc Materials and Applications. ISyDMA 4
11th – 14th Apr. 2019	Loveno di Menaggio, Villa Vigoni (Italy)	the Int Conf. Kosmos in 21 Century.
15th – 26th Aug. 2018	Brno (The Czech Republic)	scientific visit upon the invitation of the Institute of Scientific Instruments (ISI) of the Czech Academy of Sciences (ASCR). Joint scientific collaboration started.
10th – 15th June, 2018	Maryland (USA)	the 56th International Field Emission Symposium (IFES), Atom Probe Tomography and Microscopy (APT&M)
14th – 17th May, 2018	Chisinau (Moldova)	the NATO advanced research workshop SPS.EAP.ARW.G5347 "Functional nanostructures and sensors for CBRN defence and environmental safety and security –FNS-CBRN Defence-2018"
1st – 3rd May, 2018	Amman (Jordan)	The 12th Arab Conf. for Astronomy and Space Science & The 7th Islamic Astronomical Conf.

20th – 23rd Apr. 2018	Ohrid (Macedonia)	The Humboldt Kolleg 2018 titled "At the door of European Union: The role of the science for sustainabvle development of the Balkan region"
10th – 12th Apr. 2018	Irbid (Jordan) JUST Univ.	Int Conf. on current nanotechnology and its applications (ICCNA 2018)
4th – 6th Apr. 2018	Marrakech (Morocco)	the Int. Conf. Humboldt Kolleg "Beacons of hope in the quest for the next Einstein in MENA"
24th – 26th Oct. 2017	Cairo (Egypt)	the "Science and management for sustainable development" held at the National research Centre (NRC) that was jointly organized by Japanese SPS and the AvH Alumni.
10th – 18th Aug. 2017	Dortmund (Germany)	scientific visit to the Leibniz-Institut fur Analytische Wissenschaften – ISAS – e. V.
1st – 10th Aug. 2017	Berlin (Germany)	scientific visit to the Helmholtz Zentrum Berlin.
27th – 29th Apr. 2017	Mafraq (Jordan) Al al Bayt Univ.	The Int. Conf / Humboldt Kolleg; "Jordan Life Sciences Conference for Sustainable development"
Mar. 29th – Apr. 1st, 2016	Irbid (Jordan) JUST Univ.	The first Scientific Jordanian Tunisian Forum
16th – 18th Sept. 2016	Sfax, (Tunis)	the 3rd Int Conf. "Research in applications & Markets RAM 2016"
12th – 17th June, 2016	Gyeongju (Korea)	the 55th IFES, APT&M "From Science to Industry"
21st – 23rd June 2015	Cracow, Poland	Int. Conf. "Progress in Biomedicine and Neuromedicine"
10th – 13th May 2015	Torun, Poland	the Humboldt Kolleg Int. Conf. on "Ethics in Science & Life, Standards and Dielemas".
August 31st - 5th Sept. 2014	Stuttgart (Germany)	the 54th IFES, together with two of my graduate students from Mu'tah university, chairing the session: "High Field Nano Sciences"
3rd – 5th Apr. 2014	Amman (Jordan)	The Int. Conf./ Humboldt Kolleg; "Building Int. Networks for enhancement of Research in Jordan"
15th Nov 2013	London (UK)	invited to the Institute of Physics (IOP) to attend the 2013 Awards Dinner of the Institute at the Lancaster Terrace, London W2 2T to celebrate "achievements of the Physics community which recognize oustanding research".
4th – 7th July 2013	Poznan (Poland)	the 9th Congress of the "25 Years Societas Humboldtiana Polonorum"
28th – 30th June 2013	Safax (Tunis)	the Humboldt Kolleg "Research to Applications & Markets II"
30th May – 1st June 2013	Venice (Italy) Venice Int. Univ.	the AvH Kolleg Italian Association meeting and discussed the AvH Mediteranian Network Projects specially the clean energy one.
12th – 13th Nov. 2012	Amman (Jordan)	the German Rectors' Conf. (DIES-Seminar): "Enhancing internationalization and managing partnerships between higher education institutions in Germany and Jordan"
Dec. 28th – Oct. 1st, 2012	Cairo (Egypt) German University	the Humboldt Kolleg conference
31st Aug – 9th Sept. 2012	Germany	scientific visits to the Dept. of Physics at Chemnitz University from 31st Aug – 4th Sept. and to Berlin from 5th Sept. – 9th Sept. 2012 to enhance scientific collaboration.
21st – 25th May 2012	Alabama (USA)	the 53rd IFES, chairing the session: "High Field Sciences and Sources 1"

09th – 11th Mar. 2012	Marrakech (Morocco)	the Humboldt Kolleg / Int. Conf. "New Prospects for Science and Education in the MENA region"
27th – 29th Jun 2011	Berlin (Germany)	the Annual General Meeting of the AvH in Berlin and had the honor to meet with the German President Christian Wulff on June the 28th
23rd – 25th June 2011	Monastir (Tunis)	the Humboldt Kolleg "Research to Applications & Markets"
25th – 27th May 2011	Rome (Italy)	Int Conference organized by Universita di Firenze and Assoc. Italiana AVH. A memorandum of understanding "AvH Med Net initiative MOU" to form a netwok between the Mediterranian Humboldt Clubs (of Italy, Greece, Spain, Masadonea, Maghreb and Jordan) was also signed by Prof. Schwartz the president of Humboldt Foundation.
9th – 11th April 2011	Amman (Jordan)	The Int. Conf. on Materials in Jordan – Humboldt Kolleg; under the title "Recent Developments & Future Resources
12th – 14th Dec. 2010	Oran (Algeria)	(Humboldt Kolleg) 2nd North African Conference on computational Physics and Chemistry
24th – 26th Sept. 2010	Ismaylia (Egypt)	(Humboldt Kolleg) "Green Chemistry for clean environment"
4th – 8th July 2010	Sydney (Australia)	the 52nd IFES
21st – 23rd June 2010	Rabat (Morocco)	(Humboldt Kolleg) University Research-Industry: Partnering Opprtunities Conference
26th – 27th May 2010	Wroclaw (Poland)	the High Field Nano Science (HFNS) workshop
10th – 12th Apr. 2010	Amman (Jordan)	The Workshop on Materials in Jordan" – Humboldt Kolleg
15th – 19th Nov. 2009	Amman (Jordan)	the Int. Conference on Frontiers of Chemical sciences IV: Research and Education in the Middle East. A Bridge to Peace and Int development" (Malta-IV).
9th – 14th Nov. 2010	Amman (Jordan)	the Middle East Doctoral Student Workshop "Communicating the Chemical Sciences"
17th – 23rd Aug. 2009	Berlin (Germany)	the "Thermec Int. Conference" with 1200 participants. Chaired a session "Composite Metallic Materials".
10th – 11th May 2009	Amman (Jordan)	the "German Middle East Int. Conference"
4th – 6th Mar. 2009	Amman (Jordan)	"The 1st Int. Conf. on Materials in Jordan" – Humboldt Kolleg
19th – 23th Jan. 2009	Berlin (Germany) the German Foreign Ministry	AvH Alumni Network Conference and Bonds of trust 2009 – Germany Alumni in Tomorrow's World
12th Apr. 2008	Amman (Jordan)	the JCHF and Goethe-Institute in Amman the "1st Workshop on Materials in Jordan".
11th – 15th July 2008	Rouen (France)	the 51st IFES
25th – 29th Oct. 2007	Penang (Malaysia)	the AVH-Kolleg on "Aquatic Sciences cum Enhancement of the Agro-Industry"
18th – 21st June 2007	Goteborg (Sweden)	*the Workshop on "Current Issues in Atom Probe Tomography" and Int. Steering Committee Meeting of IFES in Chalmers University of Technology*
17th – 20th July 2006	Guilin (China)	the 50th IFES
21st – 25th Sept. 2006	Penang (Malaysia)	the AVH-Kellog on "Biotechnology and scientific advances for socio-economic benefits"
19th – 21st Feb. 2006	Mombay (India)	the 3rd Western Regional Humboldt Colloqium
12th – 16th July 2004	Graz (Austria)	the 49th IFES

7th – 11th July 2002	Lyon (France)	the 48th IFES
8th – 12th May 2002	Bonn (Germany)	the conference for the presidents of the Humboldt Clubs around the world.
12th – 16th Nov. 2001	Alicante (Spain)	the 3rd European Field Emission Workshop
29th July – 3rd Aug. 2001	Berlin (Germany)	the 47th IFES
June – 20th Aug. 2001	Madison (USA)	participating in a scientific research program on the deployment of electron sources in technology with the University of Madison in Wisconsin and the University of Tennessee, Knoxville.
4th – 7th Feb. 2001	Madison (USA)	participating in a scientific workshop at the University of Madison in Wisconsin.
23rd – 28th July 2000	Pittsburgh (USA)	the 46th IFES
Feb. – May. 2001		fellowship doing research on developing electropolishing and ion milling techniques to fabricate Atom Probe Field Ion Microscopy (APFIM) specimens of bulk molybdenum-based alloys.
June 2000 – Feb. 2001	Tennessee (USA) Oak Ridge National Laboratory	fellowship doing research at the Microscopy & Microanalytical Sciences / Metals and Ceramics Division working on a novel approach to gaseous field ion sources for focused ion beam applications.
12th – 15th Apr. 2000	Washington, D.C. (USA)	the Fulbright Visiting Scholar Conference "Modern democracy in a Changing World".
12th – 17th March 2000	Florida (USA) Orlando, Univ. of Central Florida	the 3rd joint meeting of the Microscopy Society of America and the American Vacuum Society
1st – 3rd Nov. 1999	Miami (USA)	the TECH EAST 1999 – 2009 Conference
12th – 18th Sept. 1998	Irbid (Jordan)	chaired the 45th IFES
23rd July 1997	Erlangen (Germany)	gave an invited talk at Erlangen University.
6th – 11th July 1997	Tsukuba (Japan)	the 44th IFES
18th – 26th Apr. 1997	Germany	visiting various scientific institutions in Berlin, Leipzik, Hannover and Bonn upon the invitation of the Friedrich-Ebert-Stiftung.
16th – 23rd Feb. 1997	Bonn (Germany)	the international meeting for the presidents of the Alexander von Humboldt clubs around the world.
14th – 19th July 1996	Moscow (Russia)	the 43rd IFES
7th – 12th July 1996	St. Petersburg (Russia)	the 9th Int. Vacuum Microelectronics Conference (9th IVMC)
10th – 14th June 1996	Polanica Zdroj (Poland)	the 18th "International Seminar on Surface Physics" (ISSP)
7th July – 11th Aug. 1995	Madison (U.S.A.)	the 42nd IFES
24th July – 11th Aug. 1995	Germany	Scientific visits to investigate the possibility for joint collaboration and to establish academic exchange program, upon the invitation of: Bonn Univ. Alexander-Von-Humboldt Stiftung, Erlangen Univ. VSI, Free Univ. of Berlin, Fritz-Haber Institute and BESSY.
11th –16th June 1995	Koln (Germany)	Scientific visit to educational establishment
11th – 15th July 1994	Rouen (France)	the 41st IFES

6th – 11th June 1994	Kudowa (Poland)	the 17th ISSP
30th Aug. – 4th Sept. 1993	Warwick (U.K.)	the 13th European Conference on Surface Science
2nd – 6th Aug. 1993	Nagoya (Japan)	the 40th IFES
5th – 10th Oct. 1992	Kudowa (Poland)	the 16th ISSP
10th – 14th Aug. 1992	Halifax (Canada)	the 39th IFES
5th – 9th Aug. 1991	Viena (Austria)	the 38th IFES
29th July – 3rd Aug. 1990	Albaquerque (USA)	the 37th IFES
16th – 30th Jan. 1990	(USSR)	to give lectures and investigate the possibility for joint investigations, upon the invitation of: Academy of Sciences of the U.S.S.R. in Moscow and Leningrad, Academy of the Ukranian SSR in Kiev, Electro-Technical Institute of Communications in Leningrad, and Bashkir State University in Ufa.
30th July – 4th Aug. 1989	Oxford (UK)	the 36th IFES
17th – 23rd July 1988	Oak Ridge (USA)	the 35th IFES
9th – 14th May 1988	Piechowice (Poland)	the 12th ISSP
11th – 14th Apr. 1988	Manchester (UK)	the First "European Vacuum Conference"
14th –18th Sept. 1987	Crowly (UK)	attended a vacuum technology course at "Edwards High Vacuum PLC".
12th – 19th July 1987	Osaka (Japan)	the 34th IFES
17th June – 8th July 1987	Trieste (Italy)	a study visit to the "International Center for Theoretical Physics"
6th – 11th July 1986	West Berlin (Germany)	the 33rd (I.F.E.S.)

National Activities and Conferences

Year	Title
26 – 27 May 2021	Third National Conference for Food and Drug Industry (Food and Drug Security) Chairman of Scientific Committee Mu'tah University jointly with Jordan Food and Drug Administration
7 – 8th May 2021	The Conference for the Renaissance of Education in Jordan during Hundred Years Mutah University (Chairman of the Scientific Committee)
14th Mar. 2018 – present	Aoun Cultural association, founding member and member of the Administrative Committee for 5 years.
Sept. 2017 – present	The JU: participated in organizing various activities about scholarships to Germany, Physics Day of the Science Faculty and other seminars.
10th Oct. 2019	Amman, the Univ. of Jordan, the 16th Jordanian Chemistry Conf.
2nd June 2019	Amman, Letter of gratitude from the Minister of Higher Education and Scientific Research for running seminar about applications for funding from the Science Research Support and Innovation Fund (SRSF).
4th Apr. 2019	Amman, Haya Cultural Center, organized jointly with the JCHF and Al-Balqa' Applied University and FNF a day Conference titled ″New horizons in technical and vocational training in Jordan″.

25th – 28th Mar. 2019	Amman, the U.N./Jordan Workshop: Global partnership in space exploration and innovation. Co-chairing the session "Terrestrial Analogues"
26th Nov. 2018	Amman, UNDP & Prince Faisal Research Center for Dead Sea Environment and Energy " مشروع التقليل والحد من الملوثات العضوية الثابتة"
25th Oct. 2018	Amman, organized the joint Conf. between the JCHF and the FNF titled "Building successful partnerships between academia and industry – scientific research and labor market needs"
9th – 12th Oct. 2018	Amman, the 9th Petra school of Physics.
16th – 18th July 2018	Amman, The Int. Conf on fractional differentiation and its applications (ICFDA), held at the Univ. of Jordan.
11th – 12th May 2018	Amman, DAAD –AvH-Alumni Seminar in Amman titled "Meeting the challenges in the region – what can Int / regional academic co-operation contribute"
29th – 30th Nov. 2017	Amman, the 6th Int. Conf. (ZTIPC 2017: New Horizons in Pharmaceutical Research) held at al Zaytoonah Univ.
12th – 14th Sept. 2017	Amman, the First Int. Conf. Geospatial Information Management "Mapping the Future".
10th – 13th July 2017	Irbid, the Int. Conf. on advanced Materials (ICAM 2017).
5th – 6th Apr. 2017	Mafraq, the Conf. "Chemistry and Biosciences".
4th Apr. 2017	Al-Karak, the Science Day of Science Faculty.
6th – 8th Dec. 2016	Amman, member of the preparatory committee of the 2nd Conference for "Arab Survey and Geonames Experts".
24th Nov. 2016	A conference was organized on about "Integrated Solid Waste Management in Jordan" held at landmark Hotel under the patronage of HE Minister of Water.
26th – 28th Apr. 2016	Irbid, the Spring Workshop "Nanotechnology in heavy metals removal and water treatment & Scientific Nanotechnology Day".
13th Apr. 2016	A conference was organized on which presented the success story of higher education and industry in the field of Pharmacy and how to bridge the gap between them. HRH Princess Sumaya bint el Hassan patronized the Conf. giving a talk. Deans of Pharmacy faculties at several Arab Univ. Sec. General of the Arab Association of Pharmacy Faculties, Min. of Industry and several others from academia and industry actively participated. This Conf. to be followed by other conferences to work on bridging the gap.
24th Nov. 2015	Amman, organized a joint educational and cultural event: A seminar was on about "The effect of Syrian refugees on the Higher Educational system (Universities) in Jordan".
21st – 23rd Oct. 2015	Amman, the Int. Pharmaceutical Conf. 2015 on "Frontiers in the pharmaceutical Sciences and Pharmacy Practice: A global perspective" within collaboration project between Al-Zaytoonah Univ of Jordan and Univ. of Toledo under the title "Frontiers in the Pharmaceutical Sciences and Pharmacy Practice: A global perspective".
18th – 22nd Oct. 2015	Madaba, participated at the Winter Workshop 2015 on "Heavy Metal removal and water treatment" within collaboration project between GJU and Leibnitz Institute for analytical science – ISAS – e.V.
6th Oct. 2015	Amman, organized a joint educational and cultural event: "Reality and ambition of scientific research in the Jordanian academic institutions".
9thSept. 2015	Amman, organized a joint educational and cultural event: "Reform in education system in Jordan; Workshop"
13th Aug. 2015	Amman, the meeting of Jordanian Scientists & Technologists Abroad – JoSTA Network.

5th – 8th May, 2015	Petra, the 15th Int. congress of the Int. Society for Ethnopharmacology.
27th – 29th Apr. 2015	Irbid, the Int. Conf. on advanced Materials (ICAM 2015) at JUST. My graduate students presented two papers at the Conf. that were refereed and published at the British Journal of the Institute of Physics, U.K.
16th Apr. 2015	Amman, organized a joint educational and cultural event: "Young Syrian Refugees in Jordan's higher education systems: Challenges and policies"
8th Apr. 2015	Mafraq, the 14th Jordanian Chemistry Conf. at Al al-Bayt University.
30th Nov 2014	Amman, organized a joint educational and cultural event: "Educational reforms in Jordan – What is still needed?"
12th Oct. 2014	Amman, organized a joint educational and cultural event: "Performance measures and accountability of Jordan's higher education system"
1st Dec. 2013	Amman, organized a joint educational and cultural event: "Supporting intellectual freedom-strategies for scientific and educational progress in Jordan"
24th March, 2013	Amman, organized a joint educational and cultural event: "The role of intellectual freedom in cultural, technological and economic development Jordanian and German perspectives"
8th Nov. 2012	Amman, giving a lecture for elementary students of Al Fareed Model Schools in Amman, titled "Industrial materials and its role in development".
14th Oct. 2012	Amman, the 1st Arab Robotics Conference.
26th Apr. 2012	Amman, Conf. at PSUT under the title "Jordanian Professors Today: Humboldtians Tomorrow", Society of Friends of Humboldt. Presentations and discussions about Humboldt cooperation's between Germany and Jordanian Humboldtians: valuable experience.
13th Dec. 2011	Irbid, Participating at the Faculty of Archaeology and Anthropology of Yarmouk Univ in workshop about Archaeology of North Jordan plateau during the bronze and iron ages.
4th – 8th Dec. 2011	Amman, the 2nd Conf. for Amman City: "Sustainability and Participation" organized by Amman Municipality and Center for New Jordan Studies
17th Nov. 2011	Amman, gave a presentation about "Scholarships in Europe and especially in Germany" organized in cooperation between the "Jordanian Astronomical Society" and the "Jordanian Physics Society" at its third anniversary. Discussion also included opportunities at the USA and the world.
12th – 14th Nov. 2011	Amman, attended the 9th SESAME Users Meeting.
17th Nov. 2011	Amman, attending the "Understanding the Arab Spring - Recommendations for Peaceful Transitions to Democracy" organized by The Int Crisis Group (ICG) and the Friedrich Naumann Foundation for Liberty (FNF).
12th – 14th Nov. 2011	Amman, SESAME Users 9th Meeting.
28th Apr. 2011	Amman, SESAME Users Meeting.
27th Apr. 2011	Amman, Jordan, gave a talk "Jordanian professor development through Int. cooperation" at the Pharmaceutical Education and requirements of work market.
5th May 2011	Al-Karak, participating at the 4th Scientific Week of the faculty of Science, Mu'tah University.
9th Dec. 2010	Amman, Final Conference on European-Jordanian scientific collaboration together with small projects exhibition. Inaugurated by HRH Princess Hassan Bin Talal.
25th Sept 2010	Amman, "Returning Experts Program" in cooperation with vJADU seminar about joint masters programs between Germany and Jordan:

	Water Resources management & "Renewable Energy for MENA region"
15th – 17th June, 2010	Amman (Jordan) National Conference for the development of study plans, teaching and learning, and scientific research
10th – 12th May, 2010	Al-Karak, chairman of the scientific committee of the 3rd Scientific Week of the faculty of Science, Mu'tah University.
7th – 9th May, 2010	Amman, Jordan, Excellence in Education, Current practices, Challenges and Future Trends.
6th May, 2010	Amman, 6th National workshop of the Jordanian National Committee, SESAME.
27th Mar. 2010	organized a meeting in Amman that resulted in forming "The Network for Cooperation between German and Jordanian-German-Oriented Institutions and Associations in Jordan". A letter of support and collaboration with the Jordanian Club of Humboldt fellows was sent by HRH Princess Sumaya bint El Hassan and read at the meeting.
16th Jan. 2010	Amman, Jordan, organized a reception patronized by HRH Princess Sumaya bint el Hassan to express gratitude to the Humboldt Jordanian University Presidents and vice presidents for distinguished service, in addition to a distinguished group of German and Jordanian personalities who served the cause of science, technology and friendship between Jordan and Germany.
19th – 21st Nov. 2009	Petra, Eighth SESAME Users Meeting.
9th – 15th Nov. 2009	Amman, helped in organizing and participated at the "Middle East Doctoral Student Workshop on "Communicating the Chemical sciences".
7th Nov. 2009	Amman, the 4th Conf. on Scientific Research in Jordan, organized by "Jordan Society for Scientific Research".
26th – 28th Oct. 2009	the 2nd Int. Symposium on Nuclear Energy (ISNE-09) and chairman of session IV.
1999	Amman, member of the Council for Higher studies of Princess Sumaya University for Technology.
4th – 8th May, 2008	director of the 1st scientific week for the Science Faculty of Mu'tah University.
12th Apr. 2008	director of the Surface Science workshop organized by the JCVHF.
9th – 15th Apr. 2008	organized the scientific visit by Dr. Nelia Wanderka from Hein-Meitner-Institut Berlin to Mu'tah Univ and scientific institutions in Jordan.
17th – 19th Nov. 2007	Sixth SESAME Users Meeting.
28th Oct. – 1st Nov. 2007	the Jordanian 13th Scientific Week organized by the Higher Council for Science and Technology held under the title "Scientific and Technological Parks: Building Knowledge Economy".
3rd Sept. 2006	Mafraq, 21st March 2007 organized the German-Jordanian Workshop titled: Cooperation between Germany and Jordan – Scholarships and Scientific Research in Germany.
27th – 28th Sept. 2006	the Jordanian 12th Scientific Week organized by the Higher Council for Science and Technology.
18th – 20th Sept. 2005	the Jordanian 11th Scientific Week organized by the Higher Council for Science and Technology.
21st – 23rd Sept. 2003	the Jordanian 10th Scientific Week organized by the Higher Council for Science and Technology.
23rd – 25th Sept. 2001	the Jordanian 9th Scientific Week organized by the Higher Council for Science and Technology.

13th Oct. 2001	elected as an executive committee member for the national team of the Synchrotron project in Jordan (SESAME)
12th – 18th Sept. 1998	the 45th International Field Emission Symposium, held at JUST
10th Sept. 1998	Irbid, organized the International Introductory School about Field Electron, Field Ion Emission, Atom probe and Vacuum Microelectronics that was held at Jordan University of Science and Technology (JUST).
1st – 3rd Nov. 1997	Director of the First Conference on Materials Science CMS1, Mu'tah University
18th – 21st Apr. 1994	Amman, the 3rd Int. Conference for condensed matter.
1990 - 1991	supervised the process of maintaining some vacuum equipment of the Vaxenes center that belong to the Ministry of Agriculture and provided a vacuum technology intensive course to the operators of the equipment
June 1991	Irbid, one-week computer course on some computer applications in physics at the "Center for theoretical Physics, Yarmouk University"
20th – 24th Mar. 1989	Amman, the 2nd Int. Conference for condensed matter
28th – 31st Oct. 1987	Amman, Univ. of Jordan & Royal Sci. Soc. the 1st Int. Conference for condensed matter
1987	Initiating the federation agreement between the Int. Centre for theoretical physics (I.C.T.P.; Trieste, Italy) and the Physics Dept. of Mu'tah University.
24th August – 2nd Sept. 1986	Amman, Int. Seminar on appropriate technology in the fields of solar and wind energy applications
24th – 26th Mar. 1986	Amman, Int. conference about remote sensing.
1st – 9th Sept. 1985	Amman, the 3rd Petra school of Physics.

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Number	Publication
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128	Nizar A. Abu-Najm, Moneeb T. M. Shatnawi, Mohammad M. Allaham and Marwan S. Mousa "Field Electron Emission Characteristics of Tungsten-Polyethylene Composite Materials as a

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Supervision of Graduate Students

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