



# Conference program

## Al-Karamah Auditorium



Time	Session	Tuesday 10/4/2018
10:00-11:00		<b>Registration</b>
11:00-12:00	Opening Ceremony	* National Anthem
		* Quran recitation with translation in English
		Opening ceremony
		* Dean Institute of Nanotechnology
		* Conference Chair
		* University President
	<b>Session 1: Nanotechnology and its environmental effects</b>	
	Chair: Dr. Omar Manasreh	
	Co-Chair: Dr Mohamed Al-Fandi	
12:00-12:45	Prof. S. Ismat Shah	Multifaceted Environmental Nanotechnology
12:45-13:15	Dr. Richard Forbes	Field Emitters and the Machines of Nanotechnology
13:20-14:00	<b>Lunch</b>	
	<b>Session 2: Nanomaterials-production, synthesis and processing</b>	
	Chair: Prof. Dr. Laila Abuhassa	
	Co-Chair: Dr. Kyril M. Solntsev	
14:00-14:45	Prof. Dr. Omar Manasreh	Nanomaterials for IR devices
14:45-15:05	Prof. Dr. Ismail Mekkaoui Alaoui	Photoluminescence and Nanomaterials for Finger Mark Visualization and Imaging
15:05-15:25	Dr. Raed Hashaikeh	Advanced Nanofiberous Materials: Selected Applications
	<b>Session 3: Nanoengineering</b>	
	Chair: Prof. Dr. S. Ismat Shah	
	Co-Chair: Dr. Alexandre MAYER	
15:25-15:45	Dr. Kyril M. Solntsev	Photochemical/spectroscopic studies in turbid and scattering media
15:45-16:15	Prof. Abeer Al-Bawab	Nanomaterials and Colloid Chemistry
16:15-16:30	Prof. M. Alper Şahiner	CdTe/CdS Photovoltaic Thin Films with Metal Nanoparticles
	Trip to Umm Qais and Dinner	



# Conference program

## Al-Karamah Auditorium



Time	Session	Wednesday 11/4/2018
	<b>Session 1: Nanomedicine &amp; Nanobiotechnology</b> Chair: Prof. Dr. Joydeep Dutta Co-Chair: Dr Nusaiba Al-Nemrawi	
9:00-9:20	<b>Dr. Moemen S Hanafy</b> Hairy root cultures of Catharanthus roseus: a promising approach for the production of antitumor alkaloids.	
9:20-9:40	<b>Dr. Bashir M. Jarrar</b> Silver Nanoparticles in Vivo Toxicity in Accordance With Size, Shape and Concentration	
9:40-10:00	<b>Dr. Khawla Qamhieh</b> NanoChip DNA Hybridization Efficiency	
10:00-10:20	<b>Dr. Ahmad Telfah</b> High resolution <sup>19</sup> F and <sup>1</sup> H NMR to investigate tethering silver nanoparticles (AgNPs) with Ofloxacin antibiotics for higher antimicrobial activity	
10:20-10:40	<b>Dr. Mohammad Alnaief</b> Hybrid nanoporous biomaterial based on polysaccharide as a potential carrier for pharmaceutical application	
10:40-11:00	<b>Fifth Dimension Engineering and Medical Ssystems</b> Latest developments in the 80-200kV Thermo Scientific TEM portfolio for Advanced High Resolution 2D & 3D S/TEM imaging and analysis	
11:00-11:30	<b>Coffee Break &amp; Poster session</b>	
	<b>Session 2: Nanotechnology and its environmental effects</b> Chair: Dr. Khaled M. Saoud Co-Chair: Dr. Muna A	
11:30-12:15	<b>Prof. Joydeep Dutta</b> Sustainable water treatment solutions with nanotechnology	
12:15-12:35	<b>Dr. Ayat Bozeyya</b> The Effect of Functionalization of Carbon Nanotubes on the properties of HDPE/CNT nanocomposites	
12:35-12:55	<b>Dr. Azeez Abdullah Barzinjy</b> Ionic liquids: Sustainable Media for Nanoparticles	
12:55-14:00	<b>Lunch</b>	
	<b>Session 3: Nanomaterials- production, synthesis and processing</b> Chair: Dr. Ahmad Telfah Co-Chair: Dr. Yahia Makableh	
14:00-14:20	<b>Dr. Mohamed Henini</b> Development of Advanced Semiconductor Materials and Devices For Next Generation Photovoltaics: Opportunities And Challenges	
14:20-14:50	<b>Dr. M. Saidani</b> Tuning the physical properties of spinel oxides: the importance of local spectroscopy.	
14:50-15:10	<b>Dr. M.E.Hajlaoui</b> Performances of effective medium model in interpreting optical properties of PVK:ZnSe nanocomposites	
Trip to Jerash with Dinner		



# Conference program

## Al-Karamah Auditorium



Time	Session	Thursday 12/4/2018
8:00-9:00		<b>Registration</b>
	<b>Session 1: Nanotechnology &amp; Energy</b> Chair: Dr. Richard G. Forbes Co-Chair: Dr. Nid'A H. Alshraiedeh	
9:00-9:20	<b>Dr. Ibrahim Kayali</b> Formulation of nano and micro emulsion for alternative fuel	
9:20-9:40	<b>Prof. Dr. Sameer Makki</b> Effect of Aluminum on The Structural, Optical, Electrical and Photovoltaic Properties of ZnSe/n-Si Heterojunction Solar Cell	
9:40-10:00	<b>Dr. Hala J. El-Khozondar</b> Review of different Solar Cell Si based structure using composite nanoparticles	
10:00-10:20	<b>Dr. Dler A. Jameel</b> Investigation of the Effects of Substrate Orientation on the Solar Efficiency and the Electrical Properties of Conducting Polymer (SPAN) grown on GaAs	
10:20-10:40	<b>Dr. Aida Benchaabane</b> Hybrid solar cells: synthesis and applications	
10:40-11:00	<b>Bruker /Hijaz</b> Advanced Raman Microscopy for material science	
11:00-11:30	<b>Coffee Break &amp; Poster session</b>	
	<b>Session 2: Nanoengineering</b> Chair: Prof. Dr. Sameer Makki Co-Chair: Dr. Aida Benchaabane	
11:30-11:50	<b>Dr. Richard G. Forbes</b> The link between voltage loss, reduction in field enhancement factor, and saturation effects in Fowler-Nordheim plots	
11:50-12:10	<b>Dr. Ahmed A. Al-Tabbakh</b> Correlating Specific Surface Area with Electrochemical Capacity of Li-Ion Batteries: An Innovative Approach	
12:10-12:30	<b>Dr. Bothina Hamad</b> Theoretical investigations of the adsorption, dissociation and oxidation of small molecules on low-dimensional transition-metal catalysts	
12:30-12:50	<b>Dr. Khaled M. Saoud</b> 3D printing of Mechanically Strong and Ultra-Light Mesoporous Silica Aerogel Using Low-Power and Cheap Lasers	
12:50-14:00	<b>Lunch</b>	
	<b>Session 3: Nanomedicine &amp; Nanobiotechnology</b> Chair: Prof. Dr. M. Alper Şahiner Co-Chair: Prof. Dr. Ismail M. Alaoui	
14:00-14:20	<b>M.J. Hagmann and Marwan .S. Mousa</b> Analysis of generating a microwave frequency comb in laser-assisted scanning tunneling microscopy with a semiconductor sample	
14:20-14:50	<b>Dr. Alexandre MAYER</b> A genetic algorithm for addressing computationally expensive optimization problems in optical engineering	

14:50-15:10	<b>Dr. Sereen M.B. Bataineh, <u>Miss. Bara'ah A. Abu Dalo</u></b> The antibacterial activities of certain medicinal plant extracts on growth and urease activity of <i>Helicobacter pylori</i>
15:10-15:30	<b>Dr. Sofian M. Kanan</b> Synthesis and Surface Analysis of Nano-sized Tungsten Based Metal Oxides as Selective Sensors Toward Nerve Agent Simulants
15:10-15:30	<b>Dr. Aya Khalaf</b> Preparation, Characterization, Structural And Photocatalytic Properties Of Nano-Sized $Ga_2Zr_2-Xw_2O_7$ System (X=0, 0.05, 0.1, 0.15)
15:30-16:30	<b>Closing remarks and group photo</b>
	Dinner at School Campus with group dancing by JUST students & Poster Award