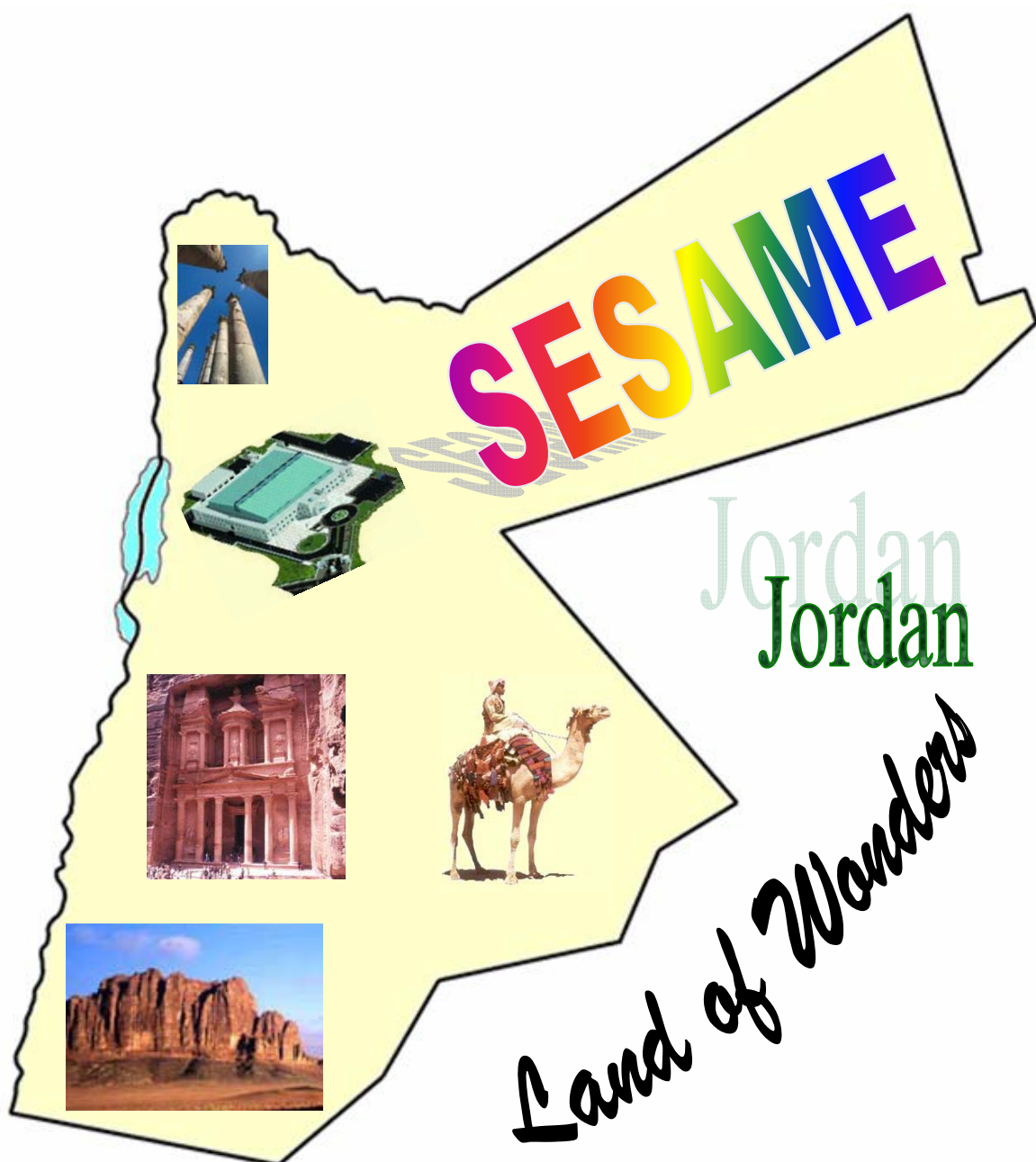




*Synchrotron-light for Experimental Science
and
Applications in the Middle East*

**6th SESAME Users' Meeting
17-19 November, 2007
Amman, Jordan**





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Sponsored by

UNESCO, IAEA, SESAME Jordanian National Committee (SJNC)
University of Jordan, Al-Zaytoonah University, Jordan Atomic Energy Commission (JAEC)
Ministry of Higher Education and Scientific Research (MOHE)
Japan Society for the Promotion of Science (JSPS), Canon Foundation-UK, and PANalytical B.V.

Scientific Program Committee:	Local Organizing Committee:
Abdul-Halim Wriekat, Univ. of Jordan, Jordan Zehra Sayers, Sabanci Univ., Turkey Zahid Hussain, ALS, LBNL, USA Hafeez Hoorani, Quaid-i-Azam Univ., Pakistan Javad Rahighi, AEOI, Tehran, Iran Sami Mahmood, Yarmouk Univ., Jordan Rami Ali, Univ. of Jordan, Jordan	Abdul-Halim Wriekat, Univ. of Jordan Sami Mahmood, Yarmouk Univ. Rami Ali, Univ. of Jordan Maher Jewihan, SJNC Secretary Sonia Al-Faques, SESAME, c/o UNESCO Amman Office

Saturday, November 17, 2007

8:00 - 9:30 **REGISTRATION**

9:30 - 10:30 **OPENING SESSION**

	CHAIR: Sami Mahmood	
	Dean of Academic Research and Graduate Studies, Yarmouk University, Jordan	
9:30 - 9:50	Herwig Schopper SESAME Council President	Opening Remarks
9:50- 10:10	H. E. Khaled Toukan Director of SESAME and Minister of Education and Minister of Higher Education and Scientific Research	The Importance of the SESAME Project for Jordan and the Middle East
10:10 – 10:30	Abdul-Halim Wriekat Chair of SESAME Jordanian National Committees	Mission and Activities of the SESAME Jordanian National Committees

10:30 - 11:00 **COFFEE BREAK**

11:00 - 13:00 **SESSION I: Atomic, Molecular, & Chemical Physics**

CHAIR: Nasr Saleh, President, Al-Zaytoonah University, Jordan		
11:00 - 11:30	Alfred Mueller Giessen University, Germany	Photoionization of Ions: Precision Spectroscopy and Absolute Cross Sections
11:30 - 12:00	Rami Ali University of Jordan, Jordan	COLTRIMS: A Reaction Microscope for Studying the Interaction of Synchrotron Radiation with Atoms, Molecules, and Clusters
12:00 - 12:30	Musahid Ahmed Advanced Light Source, LBNL, USA	Aerosol Chemistry, Nanoparticle Physics, and Imaging Mass Spectrometry with Synchrotron Radiation
12:30 - 13:00	Aslam Baig Quaid-i-Azam University, Pakistan	Photoionization Studies of Atoms using Lasers and Synchrotron Radiation: Future Prospects for SESAME.

13:00 - 14:30 **LUNCH (Sponsored by PANalytical B.V.)****14:30 - 16:00** **SESSION II: SESAME Machine, Beamlines, & Scientific Program**

CHAIR: Javad Rahighi, AEOI, Iran, SESAME Training Committee Chair		
14:30 - 15:00	Amor Nadji SOLEIL, France, SESAME Technical Director	Progress Report on the Construction of SESAME
15:00 - 15:30	Zahid Hussain Advanced Light Source, LBNL, USA, SESAME Beamlines Committee Chair	Plan and Strategy for Development of SESAME Beamlines
15:30 - 15:45	Hafeez Hoorani SESAME Scientific Director	Scientific Program of SESAME
15:45 - 16:00	Zehra Sayers Sabanci University, Turkey, SESAME Scientific Committee Chair	Scientific Strategies for SESAME

16:00 - 16:30 **COFFEE BREAK****16:30 - 18:30** **SESSION III: Structural Biology, Drug Design, & Medical Applications**

CHAIR: Wajih Owais, President, Jordan Univ. of Science & Technology, Jordan		
16:30 - 17:00	Hassan Belrhali EMBL, Grenoble, France	Synchrotron SAD Phasing in Macromolecular Crystallography
17:00 - 17:30	Inna Solomonov Weizmann Institute of Science, Israel	Self Assembly of Amyloid Beta Peptide: Application to Alzheimer Drug Design
17:30 - 18:00	Mohammad Yousef Cairo University, Egypt and SRBC, KEK, Japan	Structural Insights into Neural Stem Cell Differentiation
18:00 - 18:30	Samer Al-Gharabli German-Jordanian Univ, Jordan	Investigation of Macromolecular Structures Using X-Ray Synchrotron Radiation: SARS M ^{Pro} as a Case Study

20:00 **DINNER (Hosted by His Excellency Dr. Khaled Toukan, MOHE)**

Sunday, November 18, 2007

8:30 - 11:45 **SESAME SITE TOUR**

11:45 - 12:15 **COFFEE BREAK**

12:15 - 13:00 **PLENARY SESSION**

CHAIR: Zehra Sayers, Sabanci University, Turkey		
12:15 - 13:00	Zahid Hussain Advanced Light Source, LBNL, USA	Scientific Opportunities with Soft X-Rays: From Science to Technology

13:00 - 14:30 **LUNCH**

14:30 - 16:45 **SESSION IV: SR Sources, Insertion Devices & Phase I Beamlines**

CHAIR: Zahid Hussain, Advanced Light Source, LBNL, USA		
14:30 – 14:45	Herman Winick Stanford Linear Accelerator Center, Stanford Univ, USA	The Early Days of Synchrotron Radiation (1945-1980)
14:45 - 15:15	Sami Tantawi Stanford Linear Accelerator Center, Stanford Univ, USA	Development of Insertion Devices Based on RF Undulators
15:15 - 15:30	Badar Suleman PAEC, Islamabad, Pakistan	The Soft X-Ray and VUV Beamline
15:30 - 15:45	Mahmoud Al-Hussein University of Jordan, Jordan	The SAXS/WAXS Beamline
15:45 - 16:00	Mohammad Yousef Cairo University, Egypt and SRBC, KEK, Japan	The MAD Protein Crystallography Beamline
16:00 - 16:15	Awni Hallak Hashemite University, Jordan	The XAFS/XRF Beamline
16:15 - 16:30	Engin Ozdas Hacettepe University, Turkey	The Powder Diffraction Beamline
16:30 - 16:45	Rami Ali University of Jordan, Jordan	The Zero Beamline

16:45 - 17:15 **COFFEE BREAK**

17:15 - 18:15 **SESSION V: Archaeology & Cultural Heritage**

CHAIR: Omar Rimawi, President, Al-Balqa' Applied University, Jordan		
17:15 – 17:45	Martin Mueller University of Kiel, Germany	Investigation of Archaeological Textile Fibres Using Synchrotron Radiation
17:45 – 18:15	Kyoko Yamahana Tokai University, Japan	Fingerprinting the Ancient Egyptian Vitreous Objects: Using SR-XRF for Archaeological Interpretation

18:15 - 20:00 **POSTER SESSION**

20:30 **DINNER (Hosted by Jordan Atomic Energy Commission)**

Monday, November 19, 2007

9:00 - 11:00

SESSION VI: Materials Science & Nanotechnology I

CHAIR: Herman Winick, Stanford Linear Accelerator Center, USA		
9:00 - 9:30	Amir Rozatian University of Isfahan, Iran	Grazing Incidence X-Ray Scattering from Thin Films and Nanostructures
9:30 - 10:00	Emil Zolotoyabko Technion, Israel	Strain Analysis with High Depth Resolution in Polycrystalline Materials by Means of Energy-Variable X-ray Diffraction
10:00 - 10:30	Yahia Swilem Zagazig University, Sharkia, Egypt.	Application of Synchrotron Light to Elucidate the Formation of Nanostructure
10:30 - 11:00	Moshe Paz-Pasternak Tel Aviv University, Israel	The Pressure-Induced Inverse to Normal Spinel Transition in Magnetite

11:00 - 11:30

COFFEE BREAK

11:30 - 13:30

VII: Materials Science & Nanotechnology II

CHAIR: Marwan Kamal, President, Philadelphia University, Jordan		
11:30 - 12:00	Ghassan Saffarini An-Najah National University, Palestinian Authority	EXAFS Study of the Local Order in Chalcogenide Glasses
12:00 - 12:30	Ercan Alp Advanced Photon Source, Argonne National Lab, USA	Emerging Areas in Applications of Synchrotron Radiation in Materials Science
12:30 - 12:45	Shaden Jaradat University of Manchester, UK	Recent Advancements in Probing Novel Liquid Crystal Systems Using Various Synchrotron Techniques
12:45 - 13:00	Muhammad Iqbal Quaid-i-Azam University, Pakistan.	Semiconductor Research at Quaid-i-Azam University and Relevant Use of the SESAME Facility
13:00 - 13:15	Khosrow Hassani University of Tehran, Iran.	X-ray Microdiffraction: Useful Techniques for Synchrotron Facilities
13:15 - 13:30	Cahit Karanfil Mugla University, Turkey	Bent Crystal Laue Analyzer for Fluorescence XAFS

13:30 - 15:00

LUNCH

15:00 – 17:15

SESSION VIII: Proposals, Physical, Biological & Medical Sciences

		CHAIR: Dia-Eddin Arafah , Vice President for Development, Planning and Quality Assurance, University of Jordan, Jordan
15:00 – 15:15	Shoaib Ahmad PINSTECH, Pakistan	Proposals and Plans of an SRS for Pakistani Science
15:15 – 15:30	Ghassan Alna'washi Hashemite University, Jordan	Photoionization of Cl-Like Ca ³⁺
15:30 – 15:45	Feras Afaneh Hashemite University, Jordan	Photofragmentation Processes in Rare Gas Clusters Investigated with COLTRIMS Imaging Technique
15:45 – 16:00	Said Taha Cairo University, Egypt	Elucidating the 3-D Structure of Novel Anticancer Proteins
16:00 – 16:15	Hossein Naderi-Manesh Tarbiat Modares University, Iran	Isolation and Characterization of Peptides from Local Sources with Medical and Industrial Applications: Structural Determination by X-Ray (Synchrotron Light) and NMR
16:15 – 16:30	Gizem Dinler Sabanci University, Turkey	Are Plant Type-1 Metallothioneins Possible Candidates for Intrinsically Unstructured Proteins?
16:30 – 16:45	Gaffar Attaelmanan University of Sharjah, UAE	Applications of Microbeam XRF in Biomedical Sciences
16:45 – 17:00	Mamoon Abdelmegid Consultant to Egyptian Atomic Energy Authority, Egypt	Use of Synchrotron Infra Red Radiations for Assessing Biomolecular Damage in Cultured Human Malignant Melanoma Cells After Different Photodynamic Treatments
17:00 – 17:15	Said Assaf Arab Scientific Institute for Research and Transfer of Technology Palestinian Authority	A Proposal to Establish an Auxiliary Sister to SESAME in Palestine Called MELSIR – The Middle East Life Sciences Institute for Research

17:15 - 17:45

CONCLUDING SESSION

Zehra Sayers, Zahid Hussain, Amor Nadji, and Abdul-Halim Wriekat