

Summary of Events

Time	Saturday 19 January	Sunday 20 January	Time	Monday 21 January	Tuesday 22 January	Wednesday 23 January	Thursday 24 January	Friday 25 January	Saturday 26 January	Sunday 27 January	Monday 28 January
9:00 - 9:45		Opening	09:00 - 9:45	Session 4 Chair M. EL.Sayed S. Svanberg	Session 7 Chair W .Hill M. Richardson	Session 10 Chair M.A.Harith M. ElSayed	Giza Pyramids and Sakkara Tours	Free day	Session 13 Chair A.Wague P. Delfyett	Session 16 Chair E-Amara S.Mtingwa	Session 18 Chair S..Mtingwa U.Becker
9:45 - 10:15		Break	9:45- 10:30	H. Shokair	K. Tanner	M.Slaughter			H.Von Bergmann	P. Delfyett	J. Majumdar
10:15 - 11:00		Session 1 Chair M. .Mansour S. Svanberg	10:30- 11:15	T. Robinson	K. Toussaint	M.Slaughter			E. Lalanne	W. Virgo	A.Msezane
11:00 - 11:45		M.Richardson	11:15- 11:45	Break					Break		
11:45 - 12:30		S. Bililign	11:45- 12:30	Session 5 Chair H. Shokair M. El Sayed	Session 8 Chair M. Richardson K. Toussaint	Session 11 Chair M. Slaughter L. Johnson			Session 14 Chair H.Von Bergmann A.Wague	Panel Discussion Chairs A. Beye U. Becker P. Delfyett	Session 19 Chair U. Becker A. Msezane
12:30 - 13:15		Session 2 Chair S. Svaberg S. Bililign	12:30- 13:15	A.Beye	W. Hill	L. Johnson			A. Karsten	A. Wague H.Von Bergmann S..Mtingwa	E. Amara
13:15 - 14:00		F. Kühnemann	13:15- 14:00	H. Saleh	W. Hill	C. Barnett			R. Amin	M. Harith	B .Charfi
14:00 - 14:45		V. Sivakumar	14:00- 15:30	Lunch					Lunch		
14:45 - 16:30		Lunch	15:30- 15:50	Session 6 Chair A. Beye C. George	Session 9 Chair K. Toussaint S. McGee	Session 12 Chair L. Johnson C. Tabor			Session 15 Chair P.Delfyett J. Cherif	Session 17 Chair A. Msezane M. McLaren	Closing Session & Lunch
16:30 - 16:50	Registration & Welcome cocktail reception	Session 3 Chair S. Bililign A. Cochran	15:50 - 16:10	N.Boardley	H.Saleh	A. Apori			O.T BA	S. Batti	
16:50 - 17:10		O. Oyewole	16:10- 16:30	H. Aliou	K.Tanner	A. Seddik	M..Hassan	S. George			
17:10 - 17:30		V. Sivakumar	16:30- 16:50	I. Cisse	J. Mirkovic	B. deHarak	.DeMagalhaes	G. Rahali			
17:30 - 18:50		R. Bernath	16:50- 17:10	B. Ngom	R.Rawlings	J. pope	M.Driscoll	K.Yahiaoui			
18:50 - 19:10		E. McJimpsey	19:00	Dinner			Banquet	Dinner			
19:10		Dinner									

Oral Presentations EBAL

Session 1	Chair: M.S. Mansour	
S-1-1	Optical and laser techniques for environmental mentoring	S. Svanberg <i>Sweden</i>
S-1-2	Laser sensing technologies for the environment	M. Richardson <i>USA</i>
S-1-3	Spectroscopic Techniques for Studies of Non-Radiative Collisional Energy Transfer and Atmospheric Trace Gas Detection Part I	S. Bililign <i>USA</i>
Session 2	Chair: S. Svanberg	
S-2-1	Spectroscopic Techniques for Studies of Non-Radiative Collisional Energy Transfer and Atmospheric Trace Gas Detection Part II	S. Bililign <i>USA</i>
S-2-2	Laser photoacoustic monitoring of trace gas emissions by green plants Instrumentation and biological application	F. Kühnemann <i>Egypt</i>
S-2-3	Light detection and ranging(LIDAR) state of the art	V. Sivakumar <i>South Africa</i>
Session 3	Chair: S. Bililign	
S-3-1	Negative Ion Proton-Transfer Reaction Mass Spectrometry for the Measurement of Acids in the Atmosphere	A. Cochran <i>USA</i>
S-3-2	Environmental and biological applications of Laser-induced breakdown spectroscopy	O. Oyewole <i>Nigeria</i>
S-3-3	LIDAR for atmosphere research over Africa	V. Sivakumar <i>South Africa</i>
S-3-4	Femtosecond Laser Self-Channelling in the Atmosphere	R. Bernath <i>USA</i>
	Characterizing Single Particle Ionization Using Bio-Aerosol Mass Spectrometry	E. McJimpsey <i>USA</i>
Session 4	Chair: M. El-Sayed	
S-4-1	Laser techniques of medical diagnostic and treatment	S. Svanberg <i>Sweden</i>
S-4-2	Biological effects of lasers	H. Shokair <i>Egypt</i>
S-4-3	Designing pre-RNA World Models Using Quantum Chemical Computations and Spectroscopy Experiments	T. Robinson <i>USA</i>
Session 5	Chair: H. Shokair	
S-5-1	A short account on nanoscience and nanotechnology: the hype and the facts	M. El-Sayed <i>USA</i>
S-5-2	Nanomaterials and Nanocomposites for fundamental study of localization and application in photonics and plasmonic	A. Beye <i>Senegal</i>
S-5-3	Molecular Imaging and Laser Targeted Therapy for Malignancies using Gold Nanoparticles	H. M. Saleh <i>Egypt</i>
Session 6	Chair: A. Beye	

S-6-1	Effect of Heat on the Morphology and Optical Properties of Porphyrin Nanostructures	R.C. George <i>Nigeria</i>
S-6-2	Synthesis and Characterization of Modified Magnetic Nanoparticles for Encapsulation by Human Prostate Carcinoma Cells	N. Boardley <i>USA</i>
S-6-3	Application of Laser ablation method in nano-science and nano- technology	H. Aliou <i>Cameroon</i>
S-6-4	Single Molecule Study of Protein-DNA Interactions inside Nanocontainers	I. Cisse <i>USA</i>
S-6-5	Effect of Laser Energy on the Structural and Optical properties of Nanostructured ZnO:W growth by PLD	B. D. Ngom <i>Senegal</i>
Session 7	Chair: W .T. Hill	
S-7-1	The impact of lasers on advanced biological imaging	M. Richardson <i>USA</i>
S-7-2	Imaging the Small and the Large: From the Cell to the Brain	K. Tanner <i>USA</i>
S-7-3	Enhanced Spatial Resolution in Optical Microscopy: Moving Beyond the Diffraction Limit Part I	K. Toussaint <i>USA</i>
Session 8	Chair: M. Richardson	
S-8-1	Enhanced Spatial Resolution in Optical Microscopy: Moving Beyond the Diffraction Limit Part II	K. Toussaint <i>USA</i>
S-8-2	Coulomb Explosion Imaging: Towards the Control of Intramolecular Dynamics Part I	W .T. Hill <i>USA</i>
S-8-3	Part II	W .T. Hill <i>USA</i>
Session 9	Chair: K. Toussaint	
S-9-1	Spectroscopic Assessment of Precancer and Cancer in the Oral Cavity Part I: Anatomy	S. McGee <i>USA</i>
S-9-2	Excision biopsy of tongue lesions by diode laser	H. M. Saleh <i>Egypt</i>
S-9-3	Dynamics of Cell Migration in 3D using a Multimodality Imaging Platform of Multi-photon Excitation, Second Harmonic Generation and Optical Coherence Tomography	K. Tanner <i>USA</i>
S-9-4	Quantitative Spectroscopy and Imaging for Detection of Epithelial Neoplasia	J. Mirkovic <i>USA</i>
S-9-5	Characterizing Protein-RNA Interactions in the RNA Interference Pathway by Laser-Induced Fluorescence Imaging	R. A. Rawlings <i>USA</i>
Session 10	Chair: M. A. Harith	
S-10-1	Metallic Gold is More Precious on the Nanometer Size Scale; Some properties & Applications of Gold Nanoparticles of Different Shapes in Nanophotonics, Nanomotors, Nanomedicine and Nanobiology	M. El-Sayed <i>USA</i>
S-10-2	Understanding the Interaction of Ultra High Intensity Laser Pulses with Extremely Small Physical Systems of Importance in Biological and Environmental Research from a Purely Quantum Point of View Part I: Theory and Phenomenology	M. Slaughter <i>USA</i>

S-10-3	Part II: Phenomenology and Applications	M. Slaughter <i>USA</i>
Session 11	Chair: M. Slaughter	
S-11-1	Laser Induced Breakdown Spectroscopy (LIBS) Part I	L. Johnson <i>USA</i>
S-11-2	Laser Induced Breakdown Spectroscopy (LIBS) Part II	L. Johnson <i>USA</i>
S-11-3	Effects of Wavelength on LIBS on Glass and Metal Oxides in Pellets	C. Barnett <i>USA</i>
Session 12	Chair: L. Johnson	
S-12-1	Creating Highly Monodisperse Colloidal Nanoparticle Solutions by Combining Electron Beam Lithography and Femtosecond Laser Photothermal Techniques	C. Tabor <i>USA</i>
S-12-2	On-Chip Fabrication of a Polymer Membrane and Separation Gel for Electrophoretic Immunoassays	A. Apori <i>USA</i>
S-12-3	Polaron effects on the Magneto-Absorption Coefficient of Donor in CdSe Quantum Dot	A. Didi Seddik <i>Morocco</i>
S-12-4	Electron impact autoionization in the presence of a laser Field	B. de Harak <i>USA</i>
S-12-5	Intelligent Science Tutors	J. Pope <i>USA</i>
Session 13	Chair: A. Wague	
S-13-1	Stabilized Optical Frequency Combs from Mode- Locked Semiconductors: Physics and Applications Part I	P. Delfyett <i>USA</i>
S-13-2	Design of Mini CO ₂ TEA lasers and applications	H. Von Bergmann <i>South Africa</i>
S-13-3	100X Enhancement of the Nonlinear Refractive Index of Sulfur-Doped CS ₂ over Pure CS ₂	E. Lalanne <i>USA</i>
Session 14	Chair: H. Von Bergmann	
S-14-1	Application of laser spectroscopy in medicine and environmental monitoring at our Laser Laboratories	A. Wague <i>Senegal</i>
S-14-2	Biophotonics at the NLC ,CSIR in South Africa	A. Karsten <i>South Africa</i>
S-14-3	Antimicrobial effect of laser	R. M. Amin <i>Egypt</i>
Session 15	Chair: P. Delfyett	
S-15-1	Detection of cadmium stress in tomato plants using Laser-Induced Fluorescence Imaging	J. Cherif <i>Tunis</i>
S-15-2	Analysis of Chlorophyll Fluorescence Spectra in some Tropical Plants	O.T BA <i>Senegal</i>
S-15-3	Follow up of phytoremediation of contaminated soils via LIBS	M. Hassan <i>Egypt</i>
S-15-4	Combined in-vivo Biological and Mathematical Model of Cancer Growth and Response to Photodynamic therapy	N. DeMagalhaes <i>USA</i>
S-15-5	The Cellular Migration of Dictyostelium on Topographically Modified Surfaces	M. Driscoll <i>USA</i>
Session 16	Chair: E. Amara	
S-16-1	Future Light Sources and Their Applications to Biological and Environmental Systems	S. Mtingwa <i>USA</i>
S-16-2	Stabilized Optical Frequency Combs from Mode-	P. Delfyett

	Locked Semiconductors: Physics and Applications Part II	USA
S-16-3	Spectra and Dynamics of Molecules in Long-Lived, Highly Reactive Triplet States	W. Virgo USA
Session 17	Chair: A. Msezane	
S-17-1	Optical Tweezing and Micromanipulation	M. McLaren South Africa
S-17-2	Architecture proposition and performances evaluation of a fiber Bragg Gratings based buffer	S. Batti Tunisia
S-17-3	Spectroscopy and Dynamics of Laser Plasmas for EUV Sources	S. George USA
S-17-4	The second Born approximation in electron-atom collision in a laser field	G. Rahali Morocco
S-17-5	Explosive boiling in Titanium target irradiated by third harmonic Nd :YAG laser	K. Yahiaoui Algeria
Session 18	Chair: S. Mtingwa	
S-18-1	Tunneling induced entanglement of electrons in molecular double slit experiments	U. Becker Germany
S-18-2	Laser Surface Engineering of Ti-6Al-4V for Bioimplant Application	J. D. Majumdar India
S-18-3	Low-Energy Electron Scattering Resonances: Physics of Weakly Bound Systems Part I	A. Msezane USA
Session 19	Chair: U. Becker	
S-19-1	Low-Energy Electron Scattering Resonances: Physics of Weakly Bound Systems Part II	A. Msezane USA
S-19-2	Laser joining process for the environmental requirements modeling approach	E. Amara Algeria
S-19-3	Calculation of composition and radiative level population in laser induced plasma on water target	B. Charfi Tunisia