



Cairo University

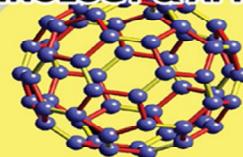
5th International Conference on MODERN TRENDS IN PHYSICS RESEARCH

Conclusion & Annotation Booklet

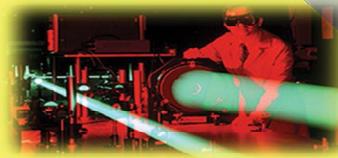
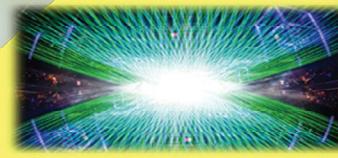
CONDENSED MATTER PHYSICS

ATOMIC & ASTROPHYSICS

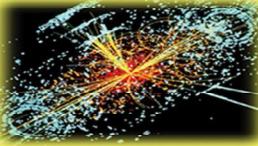
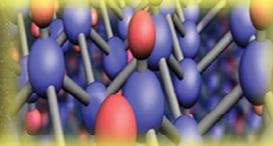
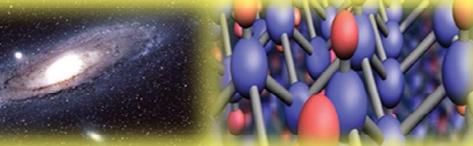
NANOTECHNOLOGY & APPLICATIONS



LASERS AND APPLICATIONS & HIGH POWER LASERS

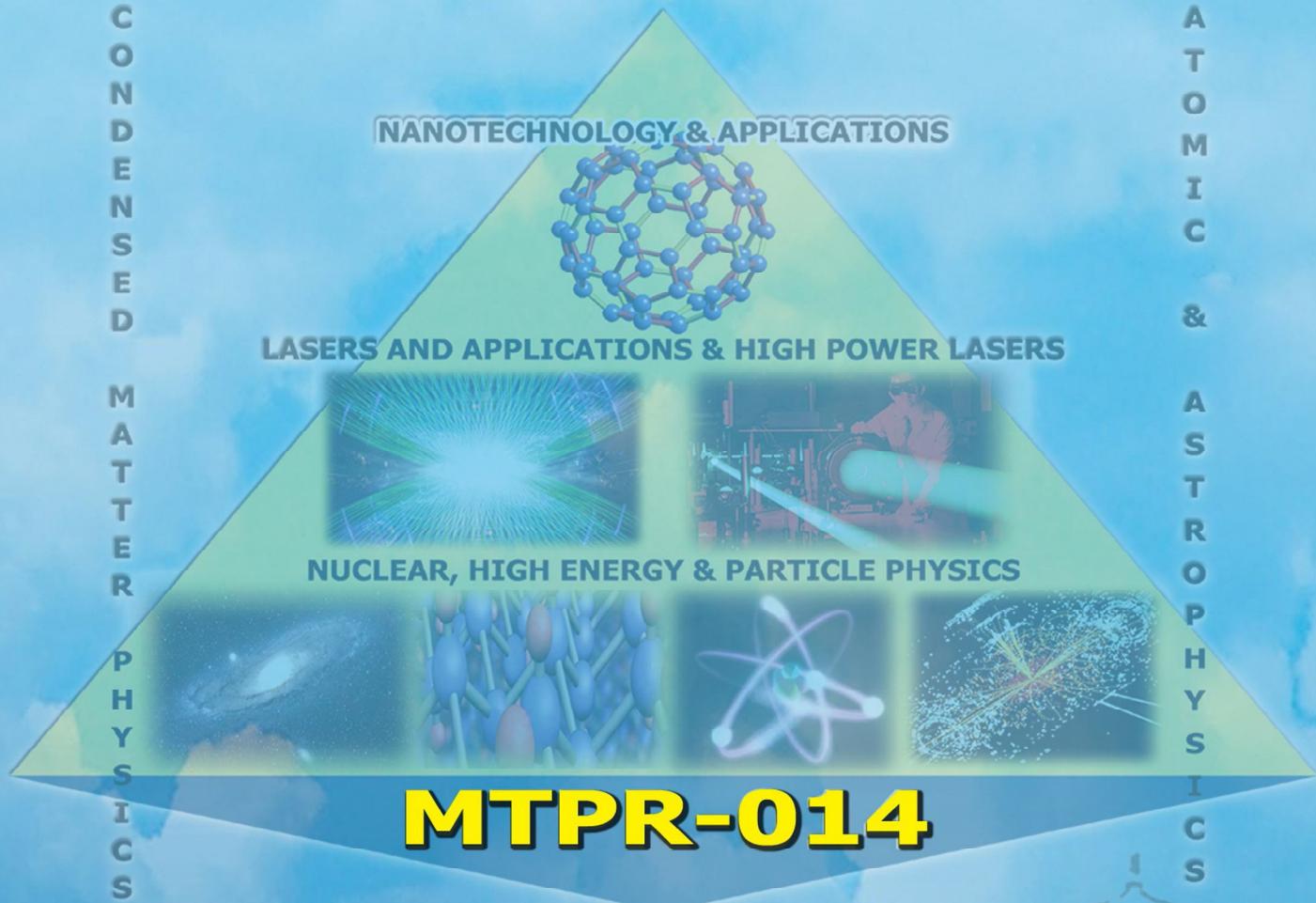


NUCLEAR, HIGH ENERGY & PARTICLE PHYSICS



MTPR-014





High **D**ensity **L**aser **I**nduced **T**hermal **E**nergy
for Water Desalination Project

Sponsors



**Group photo - Closing session 19th December 2014
(Pyramisa Hotel – Luxor)**





The 5th International Conference

on

MODERN TRENDS IN PHYSICS RESEARCH **MTPR-014**

15-19 December 2014

UNDER THE PATRONAGE OF

Prof.Dr. GABER NASSAR

PRSIEDENT OF CAIRO UNIVERSITY

Prof.Dr. GAMAL ESMAT

VICE PRSIEDENT OF HIGHER EDUCATION & RESEARCH

HONORARY CHAIRMAN

Prof.Dr. MOSTAFA ELSAYED

Georgia Institute for Science and Technology

CHAIRMAN

Prof.Dr. ELSAYED FAHIEM

DEAN of FACULTY of SCIENCE, CAIRO UNIVERSITY

VICE CHAIRS

Prof.Dr. MAGDY OMER VICE DEAN of SOCIAL & ENVIRONMENTAL AFFIARS

Prof.Dr. KHALED A.AZIZ HEAD OF PHYSICS DEPT.

STEERING CHAIRMAN

Prof.Dr. Lotfia El Nadi

PI OF The Project Pilot plant for High Density Laser Induced Thermal Energy for Water Desalination

ORGANIZED By

PHYSICS DEPT., FACULTY of SCIENCE, CAIRO UNIVERSITY

www.eun.eg/MTPR-014/home.html

بسم الله الرحمن الرحيم

CONCLUSIONS OF MTPR-014 OUTCOMES & RECOMMENDATIONS

The Closing Session No. 22 was held at 10:30 am on Friday 19 December 2014 at the conference room of Pyramisa LUXOR and was chaired by all the INTERNATIONAL PARTICIPANTS HEADED BY THE HONORARY CHAIRMAN, Prof. Mostafa A. El-Sayed Their names in alphabetic:

Alim H. Naqvi, Aligarh Muslim University	(India)
Andrea Ionov, Moscow State University	(Russia)
Braj R. Singh, Aligarh Muslim University	(India)
Lotfia M. El Nadi, Cairo University	(Egypt)
*Mostafa A. El-Sayed, Georgia Institute of Tech.	(USA)
Panagioti A. Loukakos, Inst. Elec. Str. & Laser	(Greece)
Serge I. Bozhko, Moscow State University	(Russia)
Sultana Nahar, Ohio State University, Columbus	(USA)

Some of the INTERNATIONAL PARTICIPANTS had to leave early to catch their flights & left written annotations namely:

Hosam Gareib, Taiba University	(KSA)
Kholmurade Khasanine, Moscow State Univ.	(Russia)
Mohamed O. Awadalla, Shaqra Univ.	(KSA & Sudan)

The closing session was attended by 85 Professors, Drs. and Students; members of the conference, from several universities and research centers. Accompanying persons also attended. All the names in alphabet order are attached.

The discussions involved two main sectors:-

- 1) Deals with the ACHEIVEMENTS & OUTCOMES.
- 2) Deals with RECOMMENDATIONS and ANNOTATIONS

Thus implementing short term & long term POLICY to SUPPORT all the Conference Topics and in future.

ACHEIVEMENTS& OUTCOMES

1- The President of Cairo University, Prof. Gaber Nassar attending the opening session, was a real success. In his speech he clarified the strategy of Cairo University:

- a) Support Basic and App. Physics research particularly and Science research in general.
- b) Allocation of quite reasonable budget to help innovating the laboratories
- c) Encouraged implemented projects subject to official approvals by the faculty Boards.

His speech was appreciated by all the Scientists attending the meeting and highly lifted up the morals of the young & old researchers.

2- Prof. Gamal Esmat, Vice President for post graduate studies and research and Prof. Elsayed Fahim the Dean of the Faculty of Science, expressed their confidence in the importance of this MTPR conference. They praised the organizing committee with the program chair Prof. Lotfia El Nadi for their commitment to achieve the IDEAL GOAL and reach IDEAL ways to introduce new PHYSICS research in Cairo University.

3- MTPR-014 was by all means highly successful meeting.

It was rich with the impressing efforts of young scientists.

4- Several of the orators were not able to join the Conference due to miss understanding security conditions, and short notice information slow processing of their Visas. Namely:

Ahmed Hassanein, Purdue Univ.	(USA)
Bououdina Mohamed, Bahrain University	(Bahrain)
Chang Hee Nam, APRI GIST, Inst. of Sci. and Tech.	(Korea)
Downer Mike, Texas Austin University	(USA)
Fazal-e- Aleem, University of Lahour	(Pakistan)
Gui Lui Long, Tsinghua Univ.	(China)
Hans-Joachim Kunze Rure University	(Germany)
Hem Chandra Pant, Jadavpur University, Kolkata	(India)
Martin Richardson, University of Central Florida	(USA)
Nasr Hafez, Shanghai Jiao Tong Univ.	(China)
Ping Xue, Tsinghua Univ.	(China)
Reinhold Schuch, Stockholm Univ.	(Sweden)

The program has been rearranged and the academic activities restored its richness since the attending orators offered their recent academic activities & presented their advanced research results devoted to the four topics involved in the Conference this year.

- 5- The honorary lecture presented by Prof. Mostafa El-Sayed was presented during the NILE Cruise session 3 dealt with the last achievements of his Georgia tech. Group. It comprised the response of cancer cells loaded with Nano- Au to light or laser radiation and the methods determining cell death using new spectroscopy methods. The Impressive professional way of his presentation raised several important questions which he answered in details. Hopes of Cancer patients to apply this successful method on humans are expected in the near future.
- 6- Keynote, Plenary and invited talks presented by the Invited Speakers, namely Prof. Hassan Talaat, Dr. Sultana Nahar, Prof. Alim Naqvi, Prof. Andrea Ionov, Prof. Kholmurade Khasanien Prof. Serge Bozhkov, Dr. Hosam Gharieb, Dr. Panagioti Loukakos, Dr. Mohamed Awadalla and Dr. Braj Raj Singh were extremely up to date offering several important new fields and really offering Modern Trends in Physics research. They demonstrated the new results of their recent research that helped to open the minds to important fields and advocated the young scientists to look for more International links. Details of these important presentations are available for those who would like to get a second chance to further studies.
- 7- The recent and future importance of the field of high density Physics revealed the potential numerous applications not only in physics but also in new energy resources, chemistry, biology, material science and fast ignition. The developments taking place in USA, Asia and Europe were notified. The promising application to solve the problem of electric energy and water desalination were elaborated by Professor Lotfia El Nadi.

Prof. Lotfia El Nadi introduced the project forwarded to Cairo University and preliminary accepted for consultation by Prof. Chang Hee Name of GIST in Korea. The importance of this project for HD Laser induced thermal energy production for water desalination was also suggested by some of the International Invited Speakers to be extended for electric energy production. This remark will be considered.

- 8- MTPR-014 attracted quite a numbers of Egyptian Students to study in the field of Nanotechnology, Lasers and their applications, Astrophysics, Nuclear, high energy & Particle Physics. It was clear this year that young students from Universities and Research Institutes enthusiastically joined the Conference. Their discussions during the sessions or in between, gave the conference a lively atmosphere. They presented their results confidently and successfully**
- 9- The orally presented research activities presented by the Egyptian Scientists were carefully demonstrated dealing with Innovated research points that needed more time for discussion. It gave the flavor of success for all of the presentations. Special professional ways used by some of the Egyptian Professors reveiled talent to their presentation in an educative way which was appealing to young students.**
- 10- All in all more than 95 presentations took place. Dr. Mohamed Hassan lecturer at the Physics Dept. faculty of Science, Cairo University was nominated by all the participants for the BEST PRESENTATION.**
- 11- 22 posters were subjected to discussions and inspected by at least 6 invited speakers in order to spot out the best poster during 2 hours of the Poster session. The result favored Mohamed Ezzat, researcher at Zewail City doing MSc. Research at Cairo University.**
- 12- Cultural Activities took place after or in between the sessions and found great success with Prof. Ali Abdel-Motalib, Professor of Geology, supervising them.**
- 13- One should also mention the extremely helpful role of technical group and the administration group. They devoted their efforts to make the great outcome of the whole Conference activities and services as perfect as possible.**

RECOMMENDATIONS & ANNOTATIONS

- 1- Prof. Sultana Nahar encouraged young scientists to benefit from the MOA agreement already signed with Ohio State Univ. and Cairo University and start communication especially for the field of Astrophysics and Atomic Spectroscopy. She will be in Cairo next March through the MOA to lecture a condensed course in Atomic Physics.**
- 2- Prof. Mostafa El-Sayed is always ready to Co-supervise good students and train them in his Laboratories.**
- 3- Dr. Pagnaioti Loukakos suggested that the process of training the technical staff could be studied and could be implemented in Greece as short term programs. He will discuss first with authorized staff at FORTH.**
- 4- Professors Alim and Ionov offered to help training of Physists as well as technicians in the field of nano-technology at Aligarh University and at ISSP in Moscow state University according to the agreement of Cairo University and ISSP. More details could be found with Prof. Mohamed Saadeldin the legion officer of the agreement.**
- 5- Professor Alim Urged the signing of the MOA between Aligarh and Cairo University which was agreeable to all.**
- 6- It is Necessary to Specify a certain scientific strategy for several years as a long term program for research and projects and in doing so there should be a way to arrange the following:-**
 - Organize winter and/or Summer Schools, through approaching Professors in the field of the assigned points.**
 - Invite short term + long term visitors from advanced Laboratories.**
 - Seek Collaboration with European, American and Asian scientists and technical experts.**
 - Appoint 6-10 young research students to join the fields of study and to be put under specific small projects as clear from the Posters & abstract Booklet.**
- 7- Continue to contact the Orators who were prevented from joining MTPR-014 due to unavoidable conditions. Arrange Short visits headed by the Dean to get to arrange precise protocols to benefit from the available facilities at the similar labs.**

- 8- Join existing network links for the presented Topics. Provide ways for members of MTPR-014 and others to join.**
- 9- Organizing the conference in Luxor away from Cairo developed an atmosphere of devotion to attend all the Sessions punctually. It also helped to develop a feeling of intimacy between the young scientists & the International invited speakers as well as the Egyptian Professors.**
- 10- Tendency to promptly push the Project "High Density Laser Induced Thermal Energy" HDLITE applied to WATER DESALINATION and to further consider its application to ELECTRIC ENERGY PRODUCTION is emphasized. Professor Chang Hee Nam from KAIST offered his support to the project.**
- 11- Nominate an Egyptian - International Board to run Projects according to international rules of similar centers.**
- 12- Publish the Proceedings of this Conference by either AIP or WSP, being most distinguished worldwide, according to who will offer lower prices. The editors for these proceedings will be Mostafa El-Sayed and Lotfia El Nadi.**

THANKS TO ALL, BEST WISHES FOR FUTURE CONFERENCE

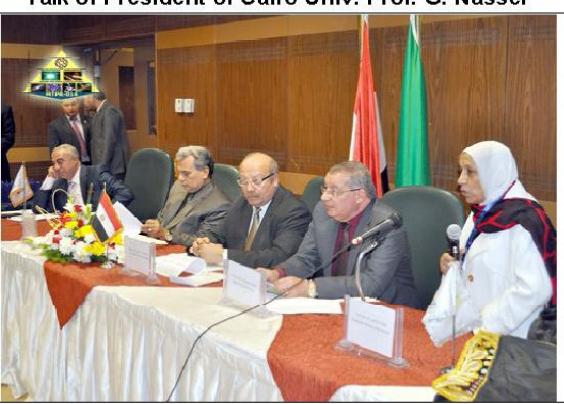
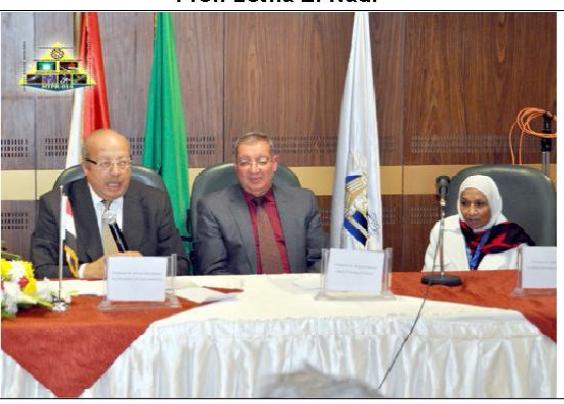
Program Chair of MTPR-014

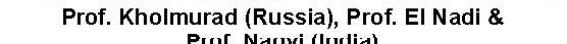
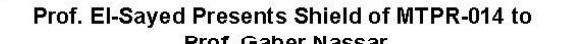
Lotfia El Nadi



**Professor of Nuclear & Laser Physics
Physics Dept., Faculty of Science
Vice Director IC-SAS, NILES
Cairo University, Giza, EGYT**

OPENING CEREMONY of MTPR-014
(NEW CENTRAL LIBRARY – CAIRO UNIV.) December 15th 2014

 <p>Professor Dr. Mahmoud Sadek President of Academy of Scientific Research and Technology</p>	
<p>Talk of President of Cairo Univ. Prof. G. Nasser</p>	<p>Talk of President of Cairo Univ. Prof. G. Nasser</p>
 <p>President of Cairo Univ. Prof. Gaber Nasser with Vice President Prof. Gamal Esmat</p>	 <p>Steering Chairman of MTPR-014 Prof. Lotfia El Nadi</p>
 <p>Steering Chairman of MTPR-014 Prof. Lotfia El Nadi</p>	 <p>Vice President of Cairo Univ. Prof. Gamal Esmat</p>
 <p>Attendance of MTPR-014 Conference</p>	 <p>Dean of Faculty of Science Prof. El-Sayed Fahiem</p>

	
<p>National dress was gifted by Prof. Kholmurad to Prof. L. El Nadi</p>	<p>Prof. Nassar, Prof. El Nadi & Prof. Fahiem honoring the invited professors.</p>
	
<p>Prof. El-Sayed Presents Shield of MTPR-014 to Prof. Alim Naqvi</p>	<p>Prof. L. El Nadi Presents Medal of MTPR-014 to Prof. G.Nassar</p>
	
<p>Prof. Kholmurad (Russia), Prof. El Nadi & Prof. Naqvi (India)</p>	
<p>All Attendance of MTPR-014, Group photo December 15 th 2014</p>	<p>Dr. Braj, Prof. Naqvi & Prof. El Nadi</p>

(In Marine Club, EL FALANDARA BOAT) December 16th 2014

 Attendance of MTPR-014	 HONOREY PRESENTATION Given by Prof. Mostafa El-Sayed (session 2)
 Prof. Mostafa El-Sayed discussions with Prof. Sultana Nahar (session 2)	 Prof. L. El-Nadi Presents Shield of MTPR-014 to Prof. Mostafa El-Sayed
 Prof. Sultana discussions with Prof. L. El Nadi (session 3)	 Prof. L. El-Nadi Presents Shield of MTPR-014 to Prof. Sultana Nahar
 Prof. L. El-Nadi Presents Shield of MTPR-014 to Prof. Hassan Talaat	 Prof. L. El-Nadi & Prof. Mostafa El-Sayed with professors & researchers

IN PYRAMISA HOTEL (CONFERENCE HALL) LUXOR

December 17th-18th 2014



Prof. Kholmurad (Moscow State University - Russia)



Prof. A.M. Ionov (Inst. of Solid State Phy. - Russia)



Mr. Ahmed Sabry (Cairo University - Egypt)



Dr. P. A. Loukakos (Inst. of Elec. & Laser – Greece)



Prof. Alim H. Naqvi (Aligarh Muslim Univ. – India)



Mr. Yaser Abd El-Khalek (NRC-Egypt)



Mrs. El-Shaymaa Omara (NILES - Egypt)



Dr. M.A.F.Basha (Cairo University – Egypt)

	
Dr. M. Moragan (Al-Azhar University – Egypt)	Prof. Lotfia El Nadi (Cairo University – Egypt)
	
Mr. M. AbdelKader (Al-Azhar University – Egypt)	Dr. Abeer Esmat (Modern academy – Egypt)
	
Mr. Hamed Kandel (NILES – Egypt)	Mr. M.A.Rezk (Al-Nahda University – Egypt)
	
Dr. M. Shaker (Cairo University – Egypt)	Mr. M. Shawky (Cairo University – Egypt)



Prof. M.El Nagdy (Helwan University – Egypt)



Prof. Amr Zaher (National Heart Institute – Egypt)



Prof. Tarek Mohamed (Budapest – Hungary)



Prof. S.I. Bozhko (Inst. of Solid State Phy. – Russia)



Prof. Hesham Mansour (Cairo University – Egypt)



Dr. Amal Refaei (Cairo University – Egypt)

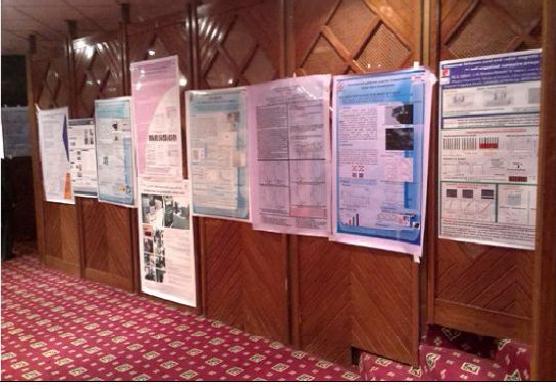
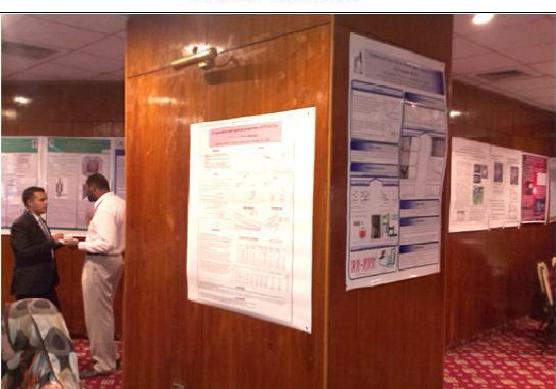


Dr. Braj Raj (Aligarh Muslim University-India)



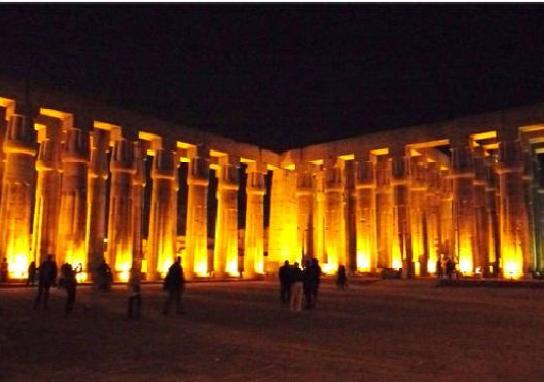
Dr. Manal Makram (Cairo University – Egypt)

	
Mr. Tarek El Basheer (Inst. for Standards – Egypt)	Dr. M.H.M.Soliman (Cairo University – Egypt)
	
Mr. Mohamed Salah (Suez Canal University – Egypt)	Mr. Hussien Fareed (Cairo University – Egypt)
	
Dr. Mohamed Osman(Shaqra University – KSA)	Mrs. Dana Sief (Cairo University – Egypt)
	
Attendance of MTPR-014	Dr. Hossam Gharieb (Taibah University – KSA)

	
Poster Session	Poster Session
	
Poster Session	Poster Session
	
Poster Session	Attendance of MTPR-014 with Prof. Mostafa El-Sayed
	
Prof. El Nadi presents the shield of Conference	Final Session of Conference

CULTURE ACTIVITES

	
Members of MTPR-014 at glass boat (Hurghada)	Members of MTPR-014 (Hurghada)
	
Members at (Valley of the kings - Luxor)	Members at glass boat (Hurghada)
	
Funny evening with Prof. Mostafa El-Sayed	Culture moments (Valley of the kings - Luxor)
	
Administration Committee during sessions (Mostafa, Rania, Hanan and Fawzia)	The Karnak Sound and Light Show highlights the dramatic history of ancient Thebes

	
<p>Administration Committee during El-Falandara Boat cruises in River Nile</p>	<p>Culture moments (Valley of the kings - Luxor)</p>
	
<p>Culture moments (Valley of the kings - Luxor)</p>	<p>Culture moments (Valley of the kings - Luxor)</p>
	
<p>Prof. Sultana with Mostafa and Hussein (Hurghada)</p>	<p>Young researchers during El-Falandara Boat cruises in River Nile</p>
	
<p>The Karnak Sound and Light Show</p>	<p>Group photo of all attendances at opening session (New Library – Cairo University) 15 Dec. 2014</p>

Modern Trends in Physics Research, MTPR-014 (All Speakers)

SN	Name	Affiliation	Title of Presentation
1.	Mostafa Amr El-Sayed	Laser Dynamics Laboratory, Georgia Institute of Technology, Department of Chemistry, Atlanta, Georgia, USA.	Plasmonic Gold Nanoparticles meet laser light in the Cancer cell: following cell cycle, cell death, drug delivery dynamics and drug efficacy.
2.	Sultana N. Nahar	The Ohio State University, Columbus, USA	STUDY OF OUR STAR THE SUN
3.	M. Hassan A. Talaat	Phys., Dept., Faculty of Science, Ain Shams Univ.	Surface Enhanced Raman Spectroscopy
4.	Badawy M. Badawy	Reactor Physics Department, Atomic Energy Authority, Egypt	System Size and Energy Dependence in $^4\text{He-Nucleus}$ Interactions
5.	Nasser N. Morgan	Physics Department. Faculty of Science Al-Azhar University	Atmospheric Pressure Cold Plasma Jet for Biomedical applications
6.	Hussien M. Farid	Astronomy, Space Science & Meteorology Dept., Faculty of Science , Cairo University	CME-SSC Listing Model
7.	Abeer Esmat Aly	Basic Science Department, Modern Academy for Computer Science and Management Technology, Cairo, Egypt.	The electronic band structure of $\text{Nd}_2\text{Fe}_{14}\text{B}$ from first- principles calculations
8.	Andrei M. Ionov	Inst. of Solid State Physics RAS, Chernogolovka, Russia	Spin and Charge Density Maps of $\text{Nd}_2\text{Fe}_{14}\text{B}$
9.	LOTFIA M. EL NADI	Physics Dept., Faculty of Science Int. Center of Scientific & App. Studies of HDSP Lasers, National Institute of Laser Enhanced Sciences (NILES), CAIRO UNIVERSITY	Vicinal surfaces Si(hhm): templates for nanostructures fabrication New Energy Resources, Start from the Latest Achievements of Western Research
10.	Mostafa A. Shawkey	Materials Science lab (1), Faculty of Science, Cairo University, Egypt	High Density Laser Induced Thermal Energy for Water Desalination
11.	Mohamed Shaker Salem	Physics Department, Faculty of Science, Cairo University, Giza, Egypt	Piezoresistive behavior of Multi Walled carbon nanotubes and Multiferroic nanoparticles / cement mortar composites
12.	Mohamed A. Khereldeen	Physics Dept. , Faculty of Science , Al-Azhar Univ.	Crossover between axial and radial magnetic anisotropy in self-organized nanowire arrays
13.	Panagiotis Loukakos	Foundation for Research & Technology – Hellas (FORTH), Institute of Electronic Structure & Laser (IESL), Greece	Full wave solution and simulations of laser pulse amplification Ultrafast processes on semiconductor surfaces irradiated by temporally shaped fs laser pulses: Tuning & controlling surface micro/nano-structures.

14.	A. S. Abdel-Rahman	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Effect of blending ratio and carbon concentration on the stress-strain characteristics for NR/SBR rubber
15.	M.Mikhramr	Physics department, Faculty of Science ,Sohag University, Sohag	Projectile Fragmentation of $^{6,7}\text{Li}$ nuclei in Photoemulsion at Dubna energy
16.	Ahmed Abd Elazim Gomaa	Basic Science Department, Nahda University, Faculty of Engineering, Beni Suef, Egypt.	Influence of B-site cation size variation on the physical properties of a canted AFM $\text{La}_{0.7}\text{Sr}_{0.3}\text{Fe}_{1-x}\text{Ni}_x\text{O}_3$ multiferroic system,,
17.	Yasser Abd EL-Khaleq	Materials Science lab (1), Faculty of Science, Cairo University, Egypt	Tuning of energy gap with Al content in $\text{SmFe}_{1-x}\text{Al}_x\text{O}_3$ multiferroic
18.	Naglaa Rashed	Physics department, Faculty of Science, Fayoum University, Egypt	Results on the scaling of multiplicity distributions of fast target fragments in high energy nucleus-nucleus collisions
19.	Mohamed Osman Awadalla	Shaqra University, Saudi Arabia	Usage of plasma X-ray emission technique to Diagnose Plasma Temperature
20.	Saiyed Alim Hussain Naqvi	Centre of Excellence in Materials Science (Nanomaterials), Aligarh Muslim University, INDIA	Innovative Applications of Nanotechnology in Preservation of Vegetables & Fruits, Agriculture and Biofuels
21.	Kholmurad Khasanov	Gas and Wave Dynamics Dept., Faculty of Mechanics and Math., Lomonosov Moscow State University, Russia	DIRECTED RADIATION OF ELECTROGRAVITATIONAL HIGH-ENERGY PHOTON
22.	Hesham mansour	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Single particle spectrum of pure neutron matter
23.	Tarek M.El-Basheer	Department of Acoustics ,National Institute for standards (NIS),Giza, Egypt	Preparation and thermal properties of Gelatin/TGS composite films.
24.	M. S. El-Nagdy	Phys. Department, Faculty of Science, Helwan University, Egypt.	Missing Energy within Helium Fragments Emitted in AA Collisions at High Energies
25.	Tarek Mohamed	Physics & Astronomy College, Texas A & M University , USA. & ELI-HU Non-Profit Ltd. H-6720 Szeged, Hungary	Absorption Laser Spectroscopy with Frequency Comb Lasers for Breath Analysis
26.	S.I.Bozhko	Institute of Solid State Physics, Russian Academy of Sciences, Chernogolovka, Russia	Electronic Growth in Metallic Nanoislands
27.	Fazal-e-Aleem	Department of Physics, The University of Lahore, Pakistan	TOTEM Measurements and Geometrical Picture How Particle Accelerators Are Helping Us Treat Cancer?

SN	Name	Affiliation	Title of Presentation
28.	Braj Raj Singh	Centre of Excellence in Materials Science (Nanomaterials) Aligarh Muslim University, India	Synthesis and Characterization of Engineered Nanostructured Materials and its application in Photocatalysis
29.	Amr Zaher	Hurt Surgery Sector, National Heart Institute, Ministry of Health, Cairo, Egypt	Transmyocardial Revascularization for treating end stage coronary artery diseases
30.	Manal Makram Botros	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	The Energy Dependence on the Density Depression Parameter To study the effect of the depression parameter θ of the protons and neutrons density distributions on The total energy of nuclei
31.	Ali Abdouh	Zewail City for Science & Technology, Egypt	DENSE MAGNETIZED PLASMA AND THEIR APPLICATIONS
32.	Elshaimaa M. M. Emara	National Institute of Laser Enhanced Sciences (NILES), Cairo University, Giza, EGYPT	Detection of heavy metals in hair samples using LIBS technique
33.	Abdallah Abdelsalam	Faculty of Science, Cairo University, Department of Physics, Egypt	SYSTEM SIZE AND ENERGY DEPENDENCE IN ^{4}He -NUCLEUS INTERACTIONS
34.	Amal I. Refaei	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Fine structure atomic data for Ar XVI
35.	M. H. M. Soleiman	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	A Symmetry of Hadron – Antihadron Ratios in Au – Au Relativistic Heavy Ion Collisions at $\sqrt{(S_{NN})}=200 \text{ GeV}$.
36.	Hosam Gharib Abdelhady	Department of Pharmaceutics and Pharmaceutical Technology, College of Pharmacy, Taibah Univ., Almadinah Almunawarah, Saudi Arabia.	Nano-Eyes: 4D Atomic Force Microscopy (4DAFM) of the Effect of Suicidal Gene Nanoparticles on Live Cancer Cells.
37.	A.A. H. El-Bassuony.	Physics Department, Faculty of Science, Cairo University, Giza, Egypt	Enhancement of the Physical Properties of Ni-Zn-Cr Nanoferrite
38.	Mai. M. El-Masry	Basic science Dept., Higher Engineering Institute, Thebes Academy, Cairo, Egypt.	Optimum Condition for Applied Ceria Nanoparticles as UV absorbance
39.	Mohammad A. F. Basha	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	The effect of dopant concentration on the thermal and opto-dielectric properties of GdCl_3 -doped polyvinylpyrrolidone nanocomposite system
40.	Dana Saif Akil	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Preparation and optical properties of PVA/TiO ₂

41.	Mohamed Monier Saadeldin	Physics Department ,Faculty of Science, Cairo University, Egypt	EFFECT OF TEMPERATURE AND ADDITIVES ON THE ELECTRICAL PROPERTIES OF ZnO VARISTOR
42.	Hamed M. Kandel	National Institute of Laser Enhanced Sciences, Cairo University, Giza, Egypt	TRANSIENT TEMPERATURE DISTRIBUTION IN AUTOMATED PULSED PUMPING PASSIVELY Q-SWITCHED Yb:YAG SOLID-STATE LASER
43.	Mongur Hossain	Department of Physics, Jagannath University, Bangladesh	Dispersion of single-walled carbon nanotubes (SWCNTs) by using dimethylformamide (DMF) solution
44.	D. A. E. Darwish	Physics Department, Faculty of Science, Suez Canal University, Ismailia, Egypt	A New Theory on THE CREATION OF THE UNIVERSE
45.	Farouk Elakshar	Vice director of Center of plasma technology, Azhar University, Nasr City, Cairo, Egypt	New Trends For waste water by Electro-spraying Corona Discharge
46.	A. A. Garamoon	Physics department, Faculty of Science Al Azhar University, Cairo, Egypt	Methane Reforming Through spark discharge
47.	Salah Obbaya	Zewail City of Science & Tech., 6th October City, Egypt.	Liquid Crystal Photonic crystal Devices
48.	Amal I. Refale	Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Fine structure atomic data for Ar XVI (P)
49.	Ramy Mawad	Space Weather Monitoring Center, Physics Department, Helwan University, Helwan, Egypt	The Correlation between Sea Level Oscillations and Earth's Orbital Perturbation (P)
50.	Shahinaz Yousef	Dept. of Astronomy, Space and Meteorology Sciences, Faculty of Sciences, Cairo University, Cairo, Egypt	Solar Forcing on Cyclones - Case Study: Gonu 2007 (P)
51.	Yasser. H. O. Algafari	Presidency of Meteorology & Environment Protection, Jeddah, Kingdom of Saudi Arabia	On the Solar Stimuli That Initiate Makkah Al Mukarramah, Al-Madinah Al-Munawarah And Jeddah Flash Floods (P)
52.	Shahinaz Yousef	Dept. of Astronomy, Space and Meteorology Sciences, Faculty of Sciences, Cairo University, Cairo, Egypt	The Control of the sun of North Atlantic Oscillation And Expectation of Rainfall Abundance Over Egypt (P)
53.	Shahinaz Yousef	Dept. of Astronomy, Space and Meteorology Sciences, Faculty of Sciences, Cairo University, Cairo, Egypt	A Revolutionary Theory on The Origin of the Moon (P)
54.	Sherif A. Fareed	Materials Science Lab. (1), Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Structural and magnetic properties of samarium bismuth strontium iron garnet $Sm_{2.8-x}Bi_xSr_{0.2}Fe_5O_{12}$ ($0.00 \leq x \leq 0.15$) (P)

55.	L.M.Salah	Physics Department, Faculty of Science, Zagazig University, Zagazig, Egypt.	Influence of (Glycine /Nitrate) Ratio on The Physical Properties of $\text{Gd}_3\text{Fe}_5\text{O}_{12}$
56.	A. Allam	Materials Science Lab. (1), Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Fabrication and characterization of silica @ silver core-shell nanoparticles using modified method
57.	A.M. Aboulfotouh	Laser Physics Lab., Physics Dept., Faculty of Science, Cairo Univ. Giza. Egypt	Nonlinear Process in Plasma Induced by High Density Laser Interaction with Solid
58.	M. M. El-Desoky	Materials Science Lab. (1), Physics Department, Faculty of Science, Cairo University, Giza, Egypt.	Structural and physical properties of nanostructured barium doped BiFeO_3
59.	Mohamed Basyoni	Solar and Space Research Department, National Research Institute of Astronomy and Geophysics (NRIAG), Helwan, Cairo, Egypt	Synthesis and characterization of Tin oxide thin film, effect of annealing on multilayer film for sensing applications
60.	Mohamed Affifi	Ultrasonic Laboratory, National Institute for Standards, Giza, Egypt	The influence of pH value on sol-gel preparation of PZT polycrystalline powders
61.	Ragab R. Amin	Basic and Applied Science Department, Faculty of Engineering, Nahda University, NUB, New Beni-Sweff, EGYPT.	Nano-Molar concentration of Cu(II), Zn(II) and Co(II) in Wastewater by a Novel Carbon paste ion-selective electrode
62.	Abeer Esmat Aly	Basic Science Dept., Modern Academy for Comp. Science and Management Tech., Cairo, Egypt.	Aluminum tris-quinolate complex thin film producing novel blue laser
63.	Yasser.S.Nada	Physics Department, Faculty of Science, Menoufia University, Shebin El-Kom, Egypt	The first-principles electronic structure calculations of chromia (Cr_2O_3)
64.	Mahmoud Abdel-Aty	Zewail City of Science and Technology, 6 th October, Giza, Egypt	Study of the optical aspects of suitable new glass for Radiation Shielding Applications
65.	Mounir F. Habib	National Institute of Laser Enhanced Sciences, NILES, Cairo University, Giza, EGYPT	Entanglement and Geometric Phase of Nonmechanical Resonators
66.	Salem F. Hegazy,	National Institute of Laser Enhanced Sciences, NILES, Cairo University, Giza, EGYPT	Liquid Phase Pulsed Laser Ablated TiO_2 Nanoparticles Applied to Self-Cleaning Surfaces
67.	Mohamed Ezzat	Center of Nanoelectronics and Devices, Zewail City of Science & Tech., 6 th October City, Egypt.	How to Optimally Collect Hyperentangled photons.
			High Density Laser Induced Thermal Energy for Water Desalination (Study the Design of LiFE Chamber and its Relevance)

68.	Ayman M. Darwish	Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt	Synthesis of Nano CdS by pulsed laser ablation in liquid environment (PLAL)
69.	Mohamed Ramadan	Inspection Research Lab., Ministry of Interior Affairs, Cairo, Egypt.	High Density Laser Induced Thermal Energy for Water Desalination (<i>Simulation of Fusion Evaporation of Compound Nuclei Created</i>)
70.	A. M. EL Sherbini	Faculty of Science, Cairo University, Department of Physics, Laboratory of Lasers and New Materials (LLNM), Giza, Egypt	Laser Induced Plasma Spectroscopy of Nano vs. Bulk Materials
71.	A. A. Menazea	Spectroscopy Department, Physics Division, National Research Centre, Giza, Egypt	Spectroscopic and thermal properties of PVK/AgNPs nanocomposites prepared by laser ablation
72.	Mohamed A. Hafez	National Institute of Laser Enhanced Sciences (NILES), Cairo University, Giza, EGYPT	Preparation of silver nanoparticles to improve the physical properties for textile material

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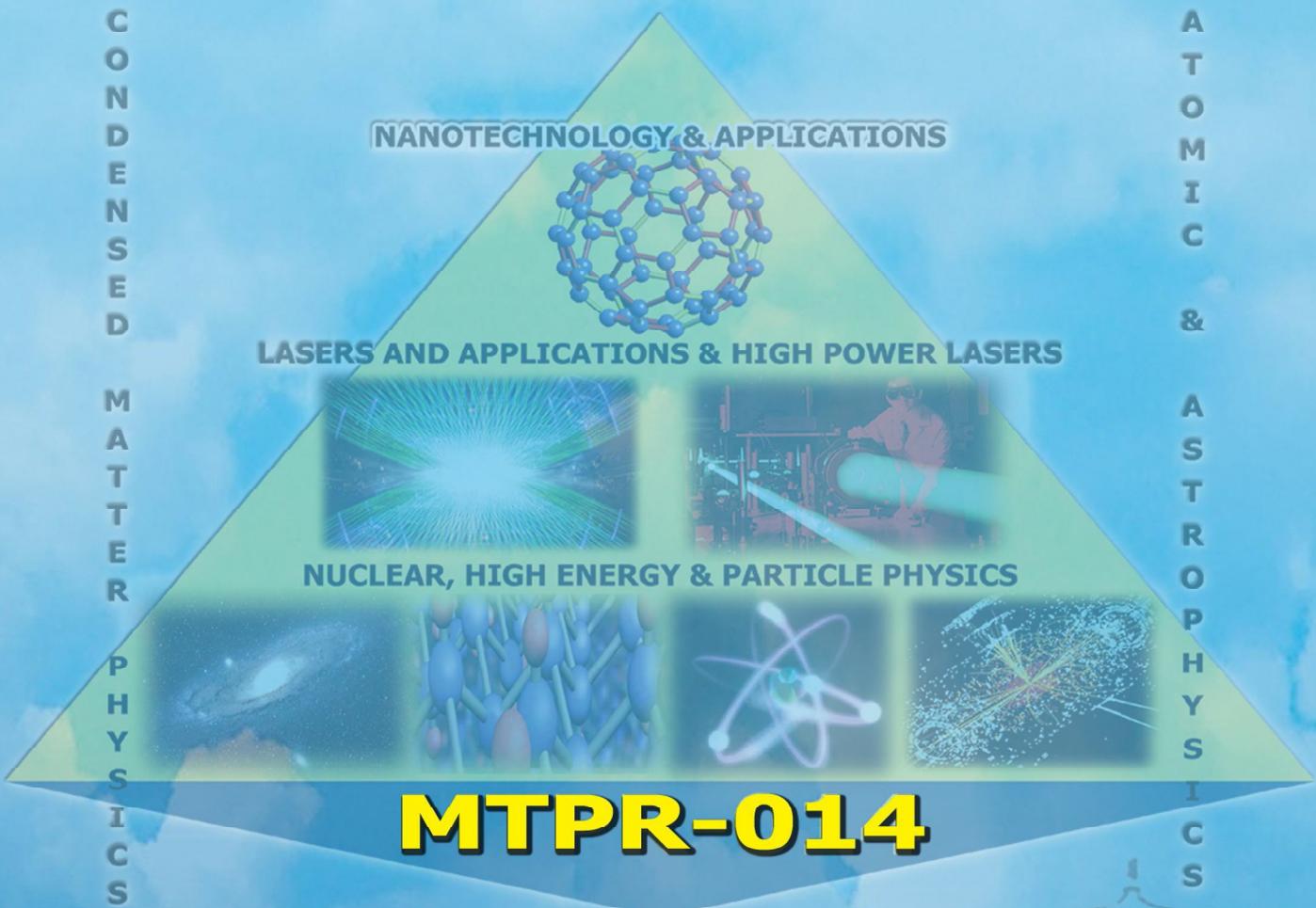
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أسماء السادة الحاضرين بالجلسة الافتتاحية
للمؤتمر الخامس لاتجاهات الحديثة في بحوث الفيزياء MTPR-014
الاثنين ١٥ ديسمبر ٢٠١٤
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**Group photo - Closing session 19th December 2014
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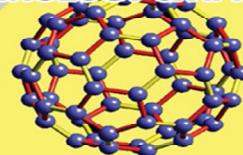
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كتاب التوصيات

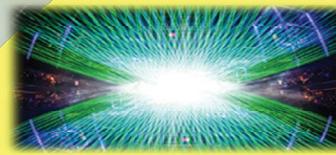
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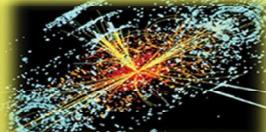
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