



**WORLD ACADEMY OF LASER APPLICATIONS**  
الأكاديمية العالمية لتطبيقات الليزر



الراقية للتدريب  
**Elegant Training**

*Organized By The Elegant Training  
The World Academy Of Laser Applications WALA  
In Connection With The American National Council On Laser Excellence NCLE,  
and The American Professional Medical Education Assn. PME  
GIVE*

# **The Laser Energy Concepts & Safety Regulations Training Course For Medical Professionals**

**Presented By**

**Gregory T. Absten and Farouk A.H. Al Watban**

*Certified by*

**The American National Council on Laser Excellence**

**NCLE,**

**& The American Professional Medical Education Assn,**

**PME.**

*Accredited by*

**The American Academy of Continuous Medical Educations**

**AACME,**

**& The Saudi Council for Health Specialist**

**SCHS.**

**VENUE**

**SHERATON HOTEL & TOWERS**

**Manama- Bahrain**

**September 2-4, 2007**

**For Registration and more Information**

**Elegant Training P.O. Box #4317 Manama- Bahrain Tel: 17514482**

**[info@eleganttraining.com](mailto:info@eleganttraining.com), [www.eleganttraining.com](http://www.eleganttraining.com),**

**[watban@kfshrc.edu.sa](mailto:watban@kfshrc.edu.sa) , [www.laser-wala.com](http://www.laser-wala.com)**

# The Distinguished Faculty



## **Gregory T. Absten ,BSc, CLRT, MBA**

Has been actively involved in the Medical Laser Field for more than 28 years, with an initial background in critical care and surgery in the Allied Health areas and the Critical Care Medicine. He is an internationally recognized lecturer and author on medical lasers, and has taught hundreds of surgical and nurses courses in every speciality over the years.

He is founder and Executive Director of the nonprofits Professional Medical Education Association ,and chairs the National Council on Laser Excellence – a laser credentialing board of the nonprofits group. He is a partner in Laser Services Alliance, a National Laser Service & Laser Sales group. A Scientific Fellow with the American Society for Laser Medicine and Surgery (ASLMS), he served as the Course Director for their “Laser Biophysics and Safety” workshops for more than eight years, is the Exhibit Chairman at their annual scientific meeting, and serves on the Board of Directors of the ASLMS.

## **Farouk A.H. Al Watban, BSc, MSc, PhD, FASLMS**

He Is Actively Involved In Laser Medical Field Since 1973, Acquired His PhD In Laser Applications From Heriot-Watt University, Edinburgh, And MSc, From University Of St.Andrews, UK. He Is The Current President And A Life Member Of World Association For Laser Therapy (WALT). Founder Of World Academy For Laser Applications (WALA), Fellow Of The ASLMS, Member Of The Editorial Board Of Photo Medicine And Laser Surgery Journal (PMLS),



Established The First Research And Publication In The Third World On Photodynamic Therapy, Low Power Laser Therapy (LPLT) Since 1985. Accomplished Researcher , Educator And Incumbent Principal Scientist Of Laser Medicine Research In King Faisal Specialist Hospital And Research Center KFSH&RC , Published A Total Of 119 International Papers/Abstracts , Book And Books Chapters Since 1976. Internationally Invited Speaker in Various Laser Medical Conferences. Experienced In Organizing Seminars And Congresses. Recipient of Several Certificates of Appreciation from International Associations.



# The Laser Energy Concepts & Safety Regulations Training Course For Medical Professionals

## The Objective of this Program:

This Training Course aims at understanding the importance, concepts, applications, use and regulations of laser in a wide variety of fields particularly medicine. Throughout the course, participants will enhance their knowledge on the use of laser, energy & tissue effect concepts, procedures and mechanical aspects of laser; how laser works and what equipment is needed. The meaning of laser and LED (light emitting diode), the application of Aesthetic Laser and Surgical and the use of laser in physical therapy as a valuable therapeutic tool, will be reinforced.

Finally this training intends to enhance practitioner's knowledge to improve their awareness on the regulations required for a proper and safe practice with laser, distinguishing between credentialing Vs Licensing and emphasizing on the training documentation required, new laser certification and the role of the ANSI ( American National Standard Institute). All, aiming at creating, enhancing and maintaining a safe and healthful environment for patients as well as for clinicians.

## Program Description and Highlights

This 3-day training course covers the different and most important concepts and aspects associated to laser use and applications within a safe and regulated practice. During the course, participants will study the following subjects:

- Electromagnetic Spectrum
- Laser Type, and Wavelengths
- Power , Energy Density, and Spot Size
- Watts, Joules, Fluence
- Laser Tissue Interaction
- Laser Dosimetry
- Therapeutic vs Surgical Laser
- Laser Hazards and Safety (Eye and skin burn)
- Laser Plume, Non beam Hazards
- O.R protection ,and Window Covering
- Patient Safety during Procedure
- Certification Review

## Who should attend:

Physicians, Dentists, Physical Therapists, Nurses, Biomedical, Allied Medicine, Sale Representatives, Health Safety Officers, and Researches.





# The Laser Energy Concepts & Safety Regulation Training Course for Medical Professionals

## Program

Time	2-Sept-07	3-Sept-07	4-Sept-07
07:00-08:00	Pre- Registration		
08:00-09:00	Registration & Coffee	Coffee	Coffee
<b>Laser The Light That Heals Farouk Al Watban</b>		<b>Laser &amp; Energy Concepts I Gregory Absten</b>	<b>Laser &amp; Safety Regulation &amp; Revised ANSI Standards Gregory Absten</b>
09:00 09:45	Basic Definition, Tissue Interaction, Surgical Laser Benefits, Therapeutic Laser, Dosimetry	Basic Laser, Energy & Tissue Effect Concepts, (Including Video Clips of Procedures and Mechanical Aspects of Lasers & Delivery Systems). Electromagnetic Spectrum, Laser Wavelengths	Discussion of New Laser Certification, Process & Qualifications for Operators & Facilities, Credentialing Vs Licensing, Training Documentation, Safety Audits, OSHA, JCAHO Inspection Preparation, ASLMS, AORN & Various State Agency
09:45 10:00	Question & Answers	Question & Answers	Question & Answers
10:00 10:30	Coffee	Coffee	Coffee
<b>Laser Safety Hazard Farouk Al Watban</b>		<b>Laser &amp; Energy Concepts II Gregory Absten</b>	<b>Certification Review Gregory Absten</b>
10:30 11:45	Ocular, Skin, Non Beam Hazard Associate Hazard, Fire and Explosion	How Lasers Work, Laser Characteristics, power Density, Spot Size, Energy Density, Watts Joules, Fluence.	Review of Key content Areas for NCLE Laser Certification Exams to Include Laser Safety Officer/Medical/and Laser operators in the Areas of Surgical Aesthetic and Hair Removal.
11:45 12:00	Question & Answers	Question & Answers	Question & Answers

# The Laser Energy Concepts & Safety Regulation Training Course for Medical Professionals

Time	2-Sept-07	3-Sept-07	4-Sept-07
	<b>Laser Safety Control Measure Farouk Al Watban</b>	<b>Laser &amp; Energy Concepts III Gregory Absten</b>	<b>Laser Certifications Review Gregory Absten</b>
12:00 12:45	Engineering, Personal Protection, Administrator, Control Eye, Education & Standard, and other measures.	Photo-thermal Acoustic/ Disassociations/Chemical Tissue Effect, Reflection, Absorption, Scattering, Transmissions, Heat Confinements, Aesthetic Laser Principles & Equipment.	Laser Safety Officer/Medical Laser Repair Technician Laser operator/ Aesthetic Laser Operator/Hair Removal Laser operator/Surgical Laser Operator/Therapeutic
12:45 13:00	<b>Question &amp; Answers</b>	<b>Question &amp; Answers</b>	<b>Questions &amp; Answers</b>
13:00 14:00	<b>LUNCH</b>	<b>LUNCH</b>	<b>LUNCH</b>
	<b>Laser Classification Farouk Al Watban</b>	<b>Laser Hazards &amp; Safety I Gregory Absten</b>	End of the Program
14:00 14:45	Exposure Limits, Quality Control, Safety Conclusion	Policies & Procedures, LSO Duties, Laser Safety Program, Laser Hazards Including Eye & Skin Burns, Laser Plume, Non beam Hazards.	
14:45 15:00	<b>Question &amp; Answers</b>	<b>Question &amp; Answers</b>	
15:00 15:30	<b>COFFEE</b>	<b>COFFEE</b>	
	<b>Difference between Surgical Laser &amp; Therapeutic Laser Farouk Al Watban</b>	<b>Laser Hazards &amp; Safety II Gregory Absten</b>	
15:30 16:45	What is Surgical Laser? Therapeutic Laser? Dosimetry Difference, Heat Limitation , Safety Difference, Equipments	Nominal hazard Zones, Laser Treatment Controlled Areas MPE's, Eyewear Requirements, Window Covering, patient Safety During Procedures, Controlled Room Access	
16:45 17:00	<b>Question &amp; Answers</b>	<b>Question &amp; Answers</b>	

# Laser Accidents For Improper Handling

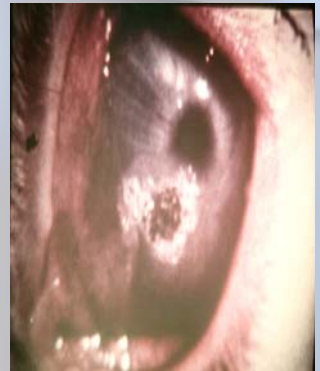
Merely understanding the principal of laser does not explain how this wonderful occurrence is harnessed in so many fields.

As the use of lasers in medicine and surgery increases, the need for effective coordination and operation of laser programs is emphasized. This training course provides standard guidance for safe use of lasers and laser systems for diagnostic and therapeutic uses in health care facilities.

The purpose of this training course is to ensure the safe use of lasers by identifying hazards, providing recommendations for proper use, medical surveillance, **And to understand And protect you and others from possible harm.**

**"The analysis reveals that laser accidents major categories are unanticipated eye exposure, no eye protection, equipment malfunction improper handling. Lacking non-beam hazards protection.. etc depending on laser type between 12 to 30% accident, per occupation of persons between 9 to 21 % from doctor, nurse. technicians scientist and patients – Statistic data from Rockwell laser industries."**

This training program establish to secure compliance with all applicable environmental health and safety standards to create, maintain and enhance a safe and healthful environment for all individuals associated with the institution.



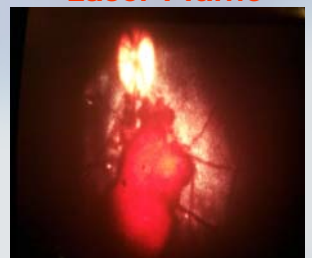
Eye Damage



Hand Injury



Laser Plume



Retina Damage

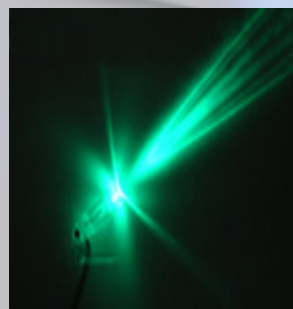




# LASER: The Light That Heals

The term **LASER** is an acronym that stands for **L**ight **A**mplification by **S**timate **E**mission **R**adiation. Laser is not a device, it is phenomenon that has been applied for specific uses in a wide variety of fields particularly medicine.

Laser used in surgery for Ablation, Cutting, Vaporizing, Coagulating, and Tissue Welding in all disciplines. E.g. in Neurosurgery, lasers are used to vaporize specific, highly vascular tumors, or tumors, in specific locations, Also in Dentistry, Urology, Endoscopies, GI, Ophthalmology, Gynecology, ENT, Cardio Vascular Surgery. .etc



A part of these fields, lasers are used in the hospitals in the fields of physical therapy for pain control and wound healing. This field is called bio-Stimulation. or Laser Therapy, and Photodynamic Therapy. The effective use of lasers also required adherence to safety procedures. Users need to be continuously educated in safety practices. The correct protective eyewear should be worn. There should be adequate ventilation and respiratory protections against airborne contamination. Precaution should be taken against fire from the presence of flammable materials as well as electrical hazards...etc



There are several distinct advantages in using lasers in clinical applications: dry surgical field, reduce blood loss, reduce P.O Edema, limited fibrosis and Stenosis, no interference with monitoring equipment, reduction in Metastasis, Precision, reduced P.O Pain, reductions of Anesthesia and greater ability to carry out patient procedures, Sterilization of the site and reduction of contact..etc. All these advantages also results, in reduced hospitalization and decreased medical costs for the patient.

As the use of lasers in medicine and surgery increases, the need for effective coordination and operation of laser programs is emphasized; Gregory T.Absten and Farouk AH Al Watban provide through out this training course, guidance for safe use of lasers and laser Systems for diagnostic and therapeutic uses in health care facilities.

**WE SOLVE YOUR BUSINESS PROBLEMS**

- ▶ DYNAMIC BUSINESS DEVELOPMENT
- ▶ PRECISE AND IMPARTIAL APPROACH



**LASER ENERGY CONCEPTS AND SAFETY  
REGULATIONS TRAINING COURSE  
September 2-4, 2007  
(Sheraton Hotel & Towers- Manama, Bahrain)**

**Registration Form**

**Please complete in BLOCK letters. Complete a separate form for each applicant**

Title (Dr, Mr, Mrs, Miss).....  
 First Name:..... Middle Name:.....  
 Family Name:.....  
 Position:..... Department:.....  
 Organization Company:.....  
 P.O.Box No..... Address:.....  
 Postal Code..... City..... Country.....  
 Telephone Office..... Telephone Home.....  
 Fax..... Mobile No.....

Please find below the fee to be paid for each applicant.

Training Course	Fees
The Laser Energy Concepts & Safety Regulations Training Course	\$ 2450 Per Participant

The Above price includes certifications, handouts, all materials, refreshments and daily complementary breakfast and lunch.

All applications should be submitted no later than Aug 4, 2007

**Method of Payment**

Payment by one of the following must be included with the Registration Form:

- Please send an invoice to the organization mentioned below (attach authorization).
  - I enclose a cheque/banker's draft payable to ELEGANT TRAINING
  - Bank Transfer - A/C No.100000196296 Bank of Bahrain and Kuwait BBK, Bahrain
- Please debit my    AMEX        Master Card        Visa        Diners Club
- Card Number:..... Expiration Date.....  
 Card Holder's Name & Address (if different from above): .....

Signature: ..... Date: .....

Cancellation: Written Cancellation Must Be Received By Elegant Training Two Weeks To The Course Starting Date Prior For A Full Refund. Those Received After This Date Will Be Refunded The Full Registration, Less A US\$ 300 Per Person For Administration Fee.  
 No Refunds Are Made For Cancellations On/Or After Aug 10th, 2007.

Please send/ fax this completed Registration Form along with appropriate fees to:

Elegant Training  
 P.O.Box 3124, Manama Bahrain,  
 Phone: +(973) 17514482 Fax: (973)17514481  
 Email: [info@eleganttraining.com](mailto:info@eleganttraining.com)