

# Annual Scientific Conference

3-7 October, 2018 - Italy



Scientific Conference



Hands-on Sessions



Clinical Cases



Sightseeing



Dear Guests,  
Welcome !!!



Mr. Eric Ben Mayor  
Light Instruments CEO



Level Up your Dental Expertise!

## Welcome Words



**Scientific Committee Chairman - Prof. Adam Stabholz**

Dear friends and colleagues, It is my great pleasure to welcome you to the Light Instruments' "Annual Scientific Conference in Laser Dentistry in Italy". Along my academic career I have been an advocate and partner to the advancement of the use of lasers in dental medicine. I am delighted to take part in this event and to contribute to the outstanding educational program spreading the knowledge of laser technology implementation in dental medicine. All of us at the laser dentistry academic world and Laser dentistry worldwide organizations believe in the importance of continuing education and are very pleased to collaborate with Light instruments - a leading laser company in dental medicine, who is hosting its Second Annual Scientific Conference in Fiuggi, Italy.

I would like to extend my gratitude to Mr. Eric Ben Mayor and Light Instruments for offering me to serve as the chairman of the scientific committee of this unique conference, to all my colleagues who gathered to join forces in producing an exceptional scientific program and to all the conference participants who came to learn and extend their knowledge in using lasers in dentistry.

I look forward to a continued fruitful and longstanding collaboration between Light Instruments and the dental community. I wish all of us an enjoyable, exciting and productive journey.



Prof. Adam Stabholz



**Scientific Coordinator - Prof. Roly Kornblit**

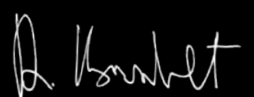
As the scientific coordinator of the Light Instruments Annual Conference in Fiuggi and Light Instruments scientific adviser, it is a great pleasure to welcome you in Italy, the country where I have been living and working for more than 30 years.

In the last decade high technology, which laser is a part of, has revolutionized the world of medicine and dentistry, too, offering new treatments and improving the existing ones for the benefit of patients and dentists all over the world.

Paying particular attention to continuous education, Light Instruments is offering the opportunity to clinicians and researchers throughout the world to come to Italy and update and share their knowledge in laser dentistry in an enjoyable and informal atmosphere.

We have tried to conceive and develop a scientific program including an overview on the latest advancements in laser technology in all dentistry fields, as well as new clinical applications and tailored treatments using the company's lasers. I hope you find the program interesting and have the chance to learn new applications to use once back home. I would like to thank all of you for taking part in this important event and all my colleagues who are participating as speakers, offering presentations and practical sessions of high scientific level.

A special thank goes to Light Instrument CEO Mr. Eric Ben Mayor and Chairman Mr. George YU, for organizing this scientific meeting and for their constant support in a variety of academic courses in laser and scientific events all over the world.



Prof. Roly Kornblit





**LIGHT INSTRUMENTS**  
RISE ABOVE TECHNOLOGY

# Annual Scientific Conference

Grand Hotel Palazzo della Fonte, Fiuggi, Italy



October 5<sup>th</sup>, 2018 - Scientific Session

09:00 - 09:15

## Opening Ceremony Welcome Words:

CEO: Mr. Eric Ben Mayor

Chairman: Mr. George Yu

Scientific Committee: Prof. Adam Stabholz

09:15 - 10:00

## Introduction to 9.6 $\mu$ m CO2 Laser

Prof. Norbert Gutknecht

10:00 - 10:45

## Treatment of peri-implantitis using lasers: an up-to-date

Prof. Jamil Awad Shibli

10:45 - 11:00

## Coffee break

11:00 - 11:30

## Histological evaluation of soft and hard tissue irradiated by LiteTouch™ Er:YAG laser

Dr. Takashi Takiguchi

11:30 - 12:15

## Soft tissue management by Er:YAG Laser

Prof. Jiangwu Yao

12:15 - 13:00

## Indications and possibilities of lasers use for the treatment of periimplantitis and bone regeneration

Prof. Marzena Dominiak

13:00 - 13:30

## A novel concept in laser irradiation for the treatment of Periodontitis and Peri-implantitis

Prof. Ayala Stabholz

13:30 - 14:00

## Dentaray 9.6 $\mu$ m CO2 dental laser – Technical data and early clinical experience

Prof. Georgi Tomov

14:00 - 15:00

## LUNCH

15:00 - 15:45

## Speakers' Corner

15:45 - 18:30

## Workshops & Hands-On:



**Edodontic Therapy &  
New Endo Tip presentation**

Room 1

**Prof. A. Stabholz  
Dr. S. Sahar Helft**



**Pediatric Dentistry & Laser  
Applications on Soft and Hard Tissues**

Room 2

**Prof. Roly Kornblit**



**Aesthetic Dentistry & Applications  
on Teeth, Crowns & Veneers**

Room 3

**Prof. Aldo Brugnera  
Dr. Fatima Zanin**

Grand Hotel Palazzo della Fonte, Fiuggi, Italy



**Level Up your Dental Expertise!**

## What makes the 9.6µm Laser Wavelength so special?

Prof. Norbert Gutknecht



Mechanical trauma, extreme high temperature and bleedings occur in many surgical procedures when cutting, removing or modelling soft tissue, bone, dentin or enamel.

Since many years there are discussions about the use of different lasers in these areas, gaining different results. In 1964 the carbon dioxide (CO<sub>2</sub>) laser was introduced by Patel.

It was approved by the FDA in 1984 and afterwards mainly used as an incision tool in different medical fields and in dentistry.

Since different CO<sub>2</sub> laser wavelengths exist, most of them have different tissue absorptions. The 9.3 µm and 9.6 µm are highly absorbed in hydroxyapatite followed by water with a lower absorption, while the 10.6µm is highly absorbed in water and has a lower absorption in hydroxyapatite.

Never before in the history of CO<sub>2</sub> lasers in dentistry has a CO<sub>2</sub> laser, with a wavelength of 9.6 µm, been built exclusively for dentistry. This new wavelength in the field of dentistry will maintain known CO<sub>2</sub> treatments, but will also open new indications and revolutionize treatments on hard tissue as well as on soft tissue.

First investigations on the different tissue surfaces have shown that this is no longer a hypothesis.

### Prof. Norbert Gutknecht - Scientific committee

Director of the Department of Operative Dentistry Periodontology, Pediatric Dentistry RWTH Aachen University.

Director of the Aachen Dental Laser Center (AALZ).

Scientific Director of the Postgraduate Master Program: "Lasers in Dentistry".

Honorary Professor at The University of Hong Kong.

Visiting Professor at MIU, Mirs International University Cairo, Egypt.

Board Member of the German Dental Association (DGZMK).

President of the German Society for Laser Dentistry (DGL).

CEO WFLD Headquater, the World Federation for Laser Dentistry.

Scientific researcher at the RWTH Aachen University Hospital since 1990.

Editor-in-Chief of "Laser in Dental Science" Springer Heidelberg, Germany.

Assoc. Editor of "Laser in Medical Science" Springer London UK.

Editor-in-Chief of "Laser International Magazine" Oemus Media Leipzig, Germany.

Editorial Board member of "Photomedicine and LASER Surgery" Mary Ann Libert, Inc Publishers USA.s

## Treatment of peri-implantitis using lasers: an up-to-date

Prof. Jamil Awad Shibli



Peri-implantitis is an infectious disease that cause bone loss and if not treated could lead to the loss of the implant-supported restoration. The etiology of peri-implantitis is associated with a complex bacterial biofilm and systemic and local risk factors might increase the severity of the peri-implant tissues destruction.

Intriguingly, there is no specific and predictable treatment for peri-implantitis, although several surgical and non-surgical therapeutic strategies have been proposed to manage this complex-multifactorial disease. These strategies to treat peri-implantitis can be divided in anti-infective and regenerative techniques, however, the removal of the contaminants and hard deposits at implant surface alter the implant surface topography as well as the oxide layer avoiding peri-implant bone regeneration and consequently the new bone reformation.

Sterilization and cleaning/decontamination of dental implant surfaces by means of high and low-intensity laser therapy using Er:YAG (LiteTouch™, Israel) has been employed lately. Laser irradiation removes not only the inflammatory soft tissue present around the peri-implant pocket but also detoxify the implant surface without damage or even alter the titanium surface neither dental implant morphology allowing a better stabilization of the blood clot with or without adding some bone graft materials during the guided bone regeneration (GBR). In addition, photobiomodulation produced as secondary effect following Er:YAG laser (LiteTouch™, Israel) therapy positively modulates wound healing. This effect is caused by promotion of cell proliferation and differentiation, as well as anti-inflammatory effects playing a pivotal impact on peri-implant tissues.

The present conference will focus on the treatment of peri-implantitis using Er: YAG laser (LiteTouch™, Israel) as well as the effect on the bacterial etiology. In addition, treatment of soft and hard periodontal tissues will also be discussed during the presentation.

### Prof. Jamil Awad Shibli

Vice Dean for Dental Research and Graduate Education

Director and Head of Oral Implantology Program

Professor, Department of Periodontology and Oral Implantology

Dental Research Division, University of Guarulhos (UnG)

His research is focused, but not limited, on Oral Implantology and Periodontology Mainly Peri-implant diseases, Guided Bone Regeneration, Growth factors, implant surface topographies, laser and Randomized Clinical Trials (RCT).

He is reviewer of International Journal of Oral and Maxillofacial Implants, Clinical Oral Implants Research, Journal of Clinical Periodontology, Journal of Periodontology, Clinical Implant Dentistry and Related Research, Journal of Periodontal Research, PlosOne, Journal of Biomedical Material Research, part B: applied Biomaterials, BioMed Res International, Photomedicine and Laser Surgery.

He also is editorial board of Journal of International Academy of Periodontology, BioMed Res International, Case Reports in Dentistry and Brazilian Oral Research.

Prof. Shibli was ranked at position 20o. in the world based on his number of publications on Oral Implantology field according the Tarazona et al. Clin Oral Implants Res 2016.

He has more than 165 papers published on PubMed.

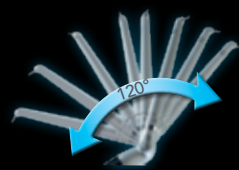




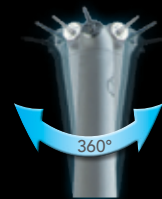
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## LITETOUCH™ Er:YAG Laser-in-Handpiece



APPLICATOR  
120° ROTATION



HANDPIECE  
360° SWIVEL



APPLICATOR  
FLEXIBLE CORD

Get the Best Results with  
the Smallest Er:YAG Laser



Light Instruments Ltd. Tel: +972-732563222 E-mail: Office@Light-Inst.com Web: www.Light-Inst.com

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## Histological evaluation of soft and hard tissue irradiated by LiteTouch™ laser



Dr. Takashi Takiguchi Matsuo Yamamoto

**Abstract:** Conventional Er: YAG laser has energy loss and breakage of fibers due to the fragile hollow fiber. On the other hand, LiteTouch laser improved the transmission tool, it was possible to treat soft tissue incisions and caries treatment equivalent at low energy.

We evaluated the removal effect of dental calculus and caries on extracted teeth and the incision effect on mouse skin tissue in comparison of conventional Er: YAG laser and LiteTouch™ laser.

**Material and methods:** Twenty four extracted human teeth were used in the removal experiment of caries or subgingival calculus. The carious lesions and subgingival calculus were divided into 2 groups for Lite touch laser and conventional Er: YAG laser (Erwin AdvErL, Morita, Japan).

The morphological changes in hard tooth structures produced by Er: YAG laser irradiation were examined by using a scanning electron microscope (s.e.m.) or fluorescence/Raman intensity ratio.

We also pathologically investigated the effects of Er: YAG laser irradiation on wound healing in mouse skin in comparison of LiteTouch™ and conventional Er:YAG laser (DentLite, HOYA, Japan).

Twenty 6-week-old C57BL/6J mice were used in the present study.

Dermal wounds were generated on the skin of the backs using the LiteTouch™ laser and Dentlite laser.

Mice were sacrificed on day 0 and 3 after laser irradiation, and the thermal coagulation layer were evaluated pathologically.

**Results:** LiteTouch™ was able to laser scaling with less time than Erwin AdvErL.

Then s.e.m. analysis revealed a characteristic micro roughness on the lased surface. In addition, the fluorescence/ Raman intensity ratio decreased with calculus debridement.

The time taken to remove caries by the LiteTouch™ laser irradiation was shorter than the Erwin AdvErL. In addition the cutting surface by laser irradiation showed a rough surface, and exposed dentinal tubules were observed. The time required for soft tissue incision was shorter than the DentLite laser compared with the LiteTouch™ laser. The thermal coagulation layer was observed in the DentLite group.

Conclusion: The present study that LiteTouch laser was able to scaling, caries removal and incision more efficiently than conventional lasers.



### Dr. Takashi Takiguchi

Instructor of the Department of Periodontology, Showa University School of Dentistry, Japan.

Certified Doctor of Periodontics by Japanese society of Periodontology.

Lecturer Department of periodontics, School of Dentistry, Showa University Tokyo Japan.

Previously served as Assistant Professor Department of periodontics, School of Dentistry, Showa University Tokyo Japan.

Member of Japanese society of Periodontology, International Association for Dental Research, Japanese society of Oral Implantology & The Japanese Journal of Conservative Dentistry.

Author of a large list of publications.

## Soft tissue management by Er:YAG Laser

Prof. Jiangwu Yao



Laser applications for periodontal and implant therapy have gradually expanded as a result of the increase in published basic and clinical. Laser can be used adjunctively for initial periodontal therapy, not only to debride connective tissue and epithelium within periodontal pockets, but also to inactivate bacteria that invade the periodontal tissues. In addition, erbium lasers can ablate calculus with efficiency comparable with that of hand or ultrasonic instruments. Esthetic gingival procedures, such as recontouring or reshaping of gingiva in peri-implant soft tissue, crown lengthening and depigmentation, can be performed by lasers. For esthetic gingival procedures, an erbium laser can be more safely utilized because of its minimal thermal side effects than CO<sub>2</sub>, diode and Nd:YAG lasers. If small and delicate contact tips are used, the amount of soft tissue ablated with an Er:YAG laser can be controlled with more precision than with the other lasers; in addition, with less thermal alteration of the treated surface, wound healing can be more rapid. Furthermore, when used in combination with a surgical microscope, an Er:YAG laser with low energy can almost completely eliminate even small areas of gingival troughing, by carefully irradiating the delicate and fragile gingival margin and papilla without causing postsurgical gingival recession.



### Prof. Jiangwu Yao

Dr. Yao Jiang-Wu. Professor, doctoral tutor, chief dentist and the chief dental expert in Xiamen Stomatology Hospital. Expert of obtaining the special allowance of State Council. A Star Teacher in Fujian province. Standing Committee Member in prosthodontics professional committee of Chinese stomatological association, Standing Committee Member in education professional committee of Chinese stomatological association, Vice-chairman in digital dental industry branch of the national association of health industry enterprises management. Vice-chairman in Fujian province stomatological association. Chairman in Xiamen stomatological association. 13 books editor of oral work and oral textbook.

## Indications and possibilities of lasers use for the treatment of periimplantitis and bone regeneration

Prof. Marzena Dominiak



Over the years, there has been a noticeable increase in the frequency of implantological procedures for the purpose of replacing missing teeth but it is also associated with the more frequent occurrence of peri-implant infections. The aim of a periimplantitis therapy is to remove inflammation tissue, stop progression of the disease and maintain the functionality of the implant with the healthy tissue surrounding it, therefore the therapeutic algorithm depends on the clinical condition and the stage of advancement.

The lecture will present practical aspects of the use of lasers in the treatment of periimplantitis. Also the protocol of the procedure will be presented, depending on the type of using lasers and lasers' influence on the implant's surface. An additional element in the presentations will be a comparative assessment of the effectiveness of laser treatment in perimplantological procedures, eg, maxillary sinus lifting.



### Prof. Marzena Dominiak

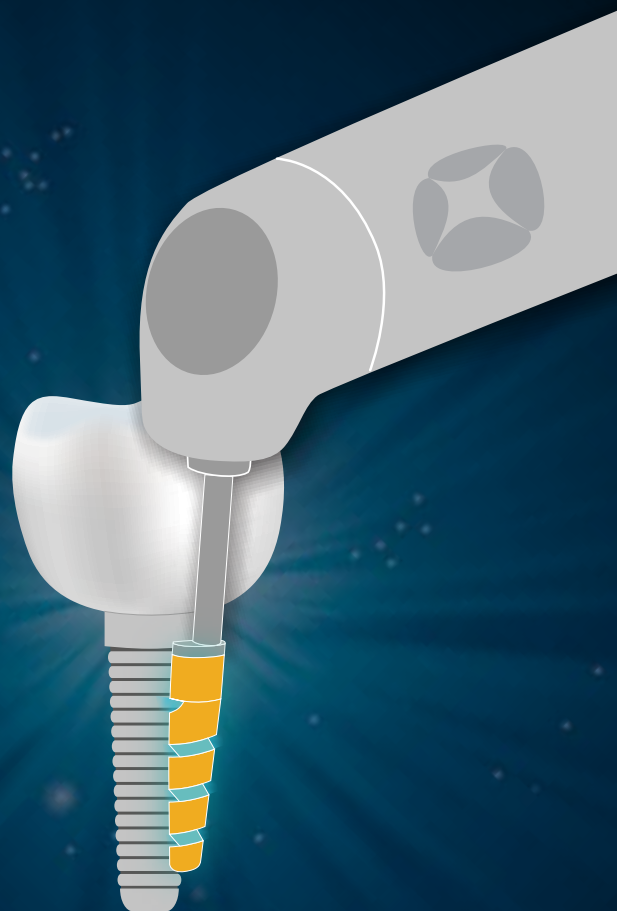
Head of the Department of Oral Surgery, Medical University of Wrocław.  
Visiting professor in TU Dresden, Germany.  
Former President of Lower Silesian Branch of the Polish Dental Association.  
President of Polish Dental Association and member of FDI Education Committee.  
Author of more than 200 full-text publications, book chapters and / or abstracts published in journals in Polish, English and German.  
Editor and / or co-edited of 5 books in Polish and English and head and / or co-author of 40 research projects, including the EU and international research projects supported by Camolg Foundation®, Osteology Foundation®, Osteohelth Company®  
Winner of numerous national and international awards like: DGZI Implant Dentistry Award, Camlog Foundation® Award, FDI Award, Dentsplay International Award, "Platinum Elite" for the contribution in the field of implantology and periodontology.



## New "Perio Tip" for LiteTouch™

Introducing the brand new "Perio Tip" for LiteTouch™, specifically designed for periodontal and peri-implant therapy, to obtain disinfection and de-contamination of roots and implants.

- The "Perio Tip" is a hollow, conical flexible tip, which allows side-firing of the laser beam. The tip has circumferential spiral slits along its length and is sealed at its far end.
- The new "Perio Tip" delivers the laser energy circumferentially to the infected periodontal tissues and the infected pocket wall. Its kidney-like shape lengthwise enables optimal adaptation to the root/implant anatomy.
- The New "Perio Tip" can be used for non-surgical removal of sub-gingival deposits and for disinfection in intra-bony defects during surgical procedures.



### New "Perio Tip" for LiteTouch™

Get optimal results with the most innovative technology, for treatment of periodontal and peri-implant diseases.

The "Perio Tip" was developed by Prof. Ayala Stabholz, Prof. Adam Stabholz and Light Instruments Ltd.

LiteTouch™, the world's most versatile non-fiber Er:YAG laser device for soft and hard tissue dental treatments.

To learn more about our innovative technologies please visit:

[www.light-inst.com](http://www.light-inst.com)



## A novel concept in laser irradiation for the treatment of Periodontitis and Peri-implantitis

Prof. Ayala Stabholz



Periodontology is a field of dentistry that focuses on treating pathologies of the tissues around natural teeth as well as around implants. Both, periodontitis and peri-implantitis involve infection and inflammation and leads to bone loss around teeth and implants. The primary etiology of these diseases is believed to be the microbial biofilm which accumulates on the tooth and implant surfaces. Therefore, it is natural that the elementary treatment of these pathologies is aimed at eliminating this biofilm. Non-surgical and surgical methods as well as chemical therapy have been developed during the years with different rates of success. Though, the search for new minimally invasive methods has been continuing. Laser technology has gained much interest among clinicians and patients as a new tool for periodontal treatment and this field is growing fast. However, there are still several limitations that need to be addressed in order to enable optimal outcomes. At present, the angle of the beam output which is continuous through a straight tip is a major disadvantage to the clinician. When inserted into the periodontal or peri-implant pocket, the laser beam should ideally release the energy laterally towards the tooth or implant surface in order to directly affect the bacterial biofilm on their surface. Such tip should be wide enough to cover as much of the root or implant surface as possible but at the same time be narrow enough to be easily inserted into the pocket space. In search for such a device, a new "Perio tip" has been designed which enables the clinician place it in the periodontal/peri-implant pocket and exert the laser energy effectively.



### Prof. Ayala Stabholz

Associate professor at the department of Periodontology at the Hebrew University-Hadassah Faculty of Dental Medicine, Jerusalem, Israel.

Director of under-graduate training in periodontics at the dental faculty as well as an instructor in the graduate program in Periodontology.

Official delegate of the Israeli Periodontal Society to the European Federation of Periodontology and a member of the scientific committee of the Israeli Dental Association.

Past president of the Israeli Periodontal Society and a member of professional committees, boards and dental organizations.

## Aesthetic Dentistry & Applications on Teeth, Crowns & Veneers

Aldo Brugnera Junior, DDS, MS, PhD  
Fatima Zanin, DDS, MS, PhD



Hands on with LiteTouch™ laser using different sapphire tips, will demonstrate innovative procedures in Aesthetic Dentistry, allowing:

1. Selective cutting of dental tissues: enamel and dentine (hand on)
2. Caries and composite removal (hands on)
4. Minor corrections of gingival asymmetries (gingivoplasty) and desensitization of exposed root dentine with a gentle treatment.
5. Debonding of laminates, veneers and porcelain onlays
6. Dental treatment with LiteTouch™ Er:YAG laser is safe and efficient providing more comfort for the patient and confidence for the dentist. Clinical Cases in Aesthetic Dentistry



### Prof. Aldo Brugnera Junior

Emeritus Professor at the Camilo Castelo Branco University – Unicastelo- São Paulo- Brasil  
Associate Researcher of National Institute of Science and Technology-INCT, "Basics Optics to Applied and Sciences to Life Sciences – IFSC-USP, Brazil  
Professor at the European Master Degree in Oral Laser applications EMDOLA University of Liege -BE  
Past President of WFLD- World Federation of Lasers in Dentistry  
President of WFLD-SA – World Federation of Laser in Dentistry – South America Division  
Past President of WALT- World Association for Laser Therapy  
Senior Editor of Journal of Photomedicine and Laser Therapy and of the International Journal e of Laser in Dentistry.  
Author of 5 books of Laser in Dentistry, author of various chapters in other books and over 150 scientific publications in the lasers field.



### Dr. Fatima Zanin

President of Biophotonics Center - Instituto Brugnera and Zanin, São Paulo, Brazil  
Country Representative of WFLD World Federation for Laser in Dentistry  
Author of 3 books of Laser in Dentistry and author of various chapters in other books.  
More than 90 international scientific papers published

## Dentaray 9.6 μm CO<sub>2</sub> dental laser – Technical data and early clinical experience

Prof. Georgi Tomov



This lecture summarizes the latest findings of scientific researches on the inovative 9600 nm laser that led to the development of new list of clinical indications for CO<sub>2</sub> lasers while referencing its background in the 10 600 nm soft-tissue-only laser. The revolutionary technical advantages arm the 9600 nm wavelength with unique hydroxyapatite absorption characteristics for optimum energy transfer into dental hard tissues while it retains the excellent soft tissue surgical abilities of conventional CO<sub>2</sub> laser. A summary of laser device considerations that led to the first practical implementation of this new wavelength for the clinical environment is presented. Discussion on selected clinical capabilities and report of clinician experience with and patient response to this new laser are provided.



### Prof. Georgi Tomov

Prof. Georgi Tomov studied dentistry at the Faculty of Dental Medicine in Plovdiv Medical University. In 2008 he obtained specialty in Therapeutics Stomatology (MSc Endodontics) and after successful defense of his Doctoral Thesis he acquired PhD degree (2009). In 2011 after completing his Habilitation he was appointed as an Associated Professor at the Department of Oral Pathology at Faculty of Dental Medicine, Plovdiv Medical University.

Positions at Plovdiv Medical University

- Director: Department of Oral Pathology
- Director: Dental Laser Center of Plovdiv Medical University (DLCMUP)

Positions in scientific organizations:

- President: Bulgarian Society for Laser Dentistry (BDLS)
- Country representative for Bulgaria in WFLD

Editorial Board member:

- "Health Technology" AME Publishing Company, Hong Kong
- "Laser International Magazine" Oemus Media Leipzig, Germany
- "e-Dentico - Polish & English Journal for Dentists" Bestom DENTOnet.pl Sp. z o.o., Poland

Publications:

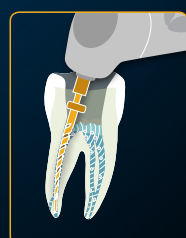
Author and co-author of 5 books and more than 70 publications in international Journals.

International activities and business contacts:

Prof. Georgi Tomov is an active lecturer on laser dentistry in Europe and Asia and also clinical consultant of W&H (Austria), LiteMedics (Italy) and Light Instruments (Israel).



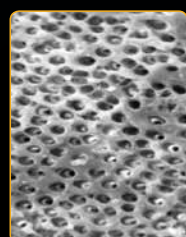
# NEW Endo TIP for LITETOUCH™



Introducing the brand new **Endo Tip** for LiteTouch™, a flexible, hollow, side-firing conical tip, with circumferential spiral slits located throughout the length of the tip.



The new **Endo tip's** special design allows omnidirectional (360°) laser beam delivery throughout the tip's length, rather than direct emission through a single opening at the tip end. This unique design enables more efficient cleaning, disinfection and removal of smear layer.



SEM studies\* of extracted teeth after using the new **Endo Tip** showed clean surfaces of the root canal walls, free of smear layer and debris.

**Get the best results  
with the most efficient  
technology for cleaning  
and disinfecting the root  
canal system.**

\* The Endo Tip was developed by Prof. Adam Stabholz and Light Instruments Ltd. The SEM studies were conducted at the Hebrew University - Hadassah School of Dental Medicine in Jerusalem, by Prof. Adam Stabholz & Dr. Sharonit Sahar-Helft.

LiteTouch™, the world's most versatile non-fiber Er:YAG laser device for soft and hard tissue dental treatments. To learn more about our innovative technologies please visit: [www.light-inst.com](http://www.light-inst.com)

## Edodontic Therapy & New Endo Tip presentation

Prof. A. Stabholz  
Dr. S. Sahar Helft



Studies in the 80<sup>th</sup> of the 20<sup>th</sup> century have already shown that complete removal of all debris from the root canal system during endodontic treatment is virtually impossible.

The importance of removing the smear layer was emphasized in many research studies, since the smear layer itself may be infected and may protect the bacteria within the dentinal tubules.

The use of laser irradiation inside the root canal system was proven to be effective in removing the smear layer. For that purpose a brand new "Endo" side firing spiral tip was jointly developed by Prof. Adam Stabholz from the Hebrew University-Hadassah School of Dental Medicine in Jerusalem and by Light Instruments Ltd. - Israel. The tip was especially designed for cleaning and disinfecting the root canal system during endodontic treatment and endodontic retreatment.

The beam of the Erbium laser is delivered through a hollow tube and then emitted laterally through the slits of the tip, directly towards the walls of the root canal.

During the workshop recent SEM studies on freshly extracted teeth that clearly demonstrate open dentinal tubules in clean dentin walls of the root canal free of smear layer and debris will be presented.

Participants will become familiarized with the action of the new "Endo Tip" which is manufactured by Light Instruments Ltd.



### Prof. Adam Stabholz - Scientific committee chairman

Former Head of the department of endodontics at the Hebrew University-Hadassah School of Dental Medicine, Jerusalem, Israel.

Former Dean of Hebrew University-Hadassah School of Dental Medicine from 1993-2013 (re-elected four times).

Full professor in endodontics, at Hebrew University-Hadassah School of Dental Medicine since 1996.

Past President of IFEA-the International Federation of Endodontic Associations.

Former International President of Alpha Omega Fraternity.

Past Treasurer of WFLD (The World Federation of Lasers Dentistry).

Honorary degrees from the University of Bucharest, the Medical University of Plovdiv and the University of Buenos Aires.



### Dr. Sharonit Sahar Helft

Member and lecture of the Department of Endodontic at Hebrew University-Hadassah School of dental medicine in Jerusalem (HUHSDM), Israel.

Former clinical instructor in the Department of Restorative Dentistry at the Tel Aviv University Maurice and Gebriella Goldshlegger School of Dental Medicine.

Former Chairman of the Israeli society for Laser Dentistry Israeli representative at the WFLD Organization.

Private practice limited to endodontics.



**LITETOUCH™**  
Er:YAG Laser-in-Hand piece



NO MORE  
DRILLING



FASTER  
HEALING



NO  
VIBRATION



LESS  
INJECTIONS



KILLS  
GERMS



SOFTER  
SOUND



ZERO  
ANXIETY



LESS  
PAIN



HIGH  
TECH

Changing patient's perception of dental treatments

## Paediatric Dentistry

Prof. Roly Kornblit



The Er:YAG Laser, owns all the requirements of Minimal Invasive Dentistry. It is used today in the treatments of caries prevention, decayed tissue, periodontal disease, and oral surgery in Paediatric patients.

The bio stimulation effect, the tissue selective ablation, the low penetration deep, the small surface ablation and the antibacterial property are only some of the Er:YAG laser properties that guarantees optimal results of hard and soft tissue treatments. Er:YAG laser high technology.

The workshop will include a short presentation of the different clinical applications of the Litetouch™ Er:YAG Laser on soft and hard oral tissues and the scientific evidences that makes it the adapted High-Tech tool for those treatments. The presentation will be followed by hands on with the device on animal models and extracted teeth.



### Prof. Roly Kornblit - Scientific coordinator

Coordinator of the Laser Treatments at the Paediatric Dentistry Department, Goldschlegel School of Dental Medicine, Tel Aviv University.

Lecturer of Laser in Dentistry at The Hebrew University of Hadassah, School of Dental Medicine, Jerusalem (Israel).

Former Professor of Laser at the Master of Paediatric Dentistry, Department of Oral Science, Sapienza University of Rome (Italy)

Former Scientific Coordinator of the European Master Degree Program at the Sapienza University of Rome (Italy)

Former visiting professor of Laser in Paediatric Dentistry at the Master Degree Program at University of Parma (Italy), University of Barcelona (Spain), University of Liege (Belgium) and University of Nice (France).

Author of the Textbook Laser e Odontoiatria Pediatrica, 2012 T.U.E.O.R. Edition.

Scientific Laser Consultant for the Dental Tribune Journal (Italian Edition).