

1994 SHANGHAI

INTERNATIONAL CONFERENCE

ON

LASER APPLICATIONS IN MEDICINE



27-29 OCTOBER

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Welcome Address

Dear Colleagues,

On behalf of the Chinese Medical Association, and as the Honorary Chairman of the 1994 Shanghai International Conference on Laser Applications in Medicine, it is a great pleasure to welcome you and your accompanying persons to join this important meeting. With the development of technology and innovation of new equipments, laser has been increasingly used as an effective measure in the diagnosis and treatment of many diseases in various disciplines of medicine. This conference will provide you a good occasion to exchange experiences and achievements in the field of laser applications in medicine and to promote mutual understanding and strengthen friendship worldwide.

Finally, I wish you enjoy this conference and have a good time during your trip in our great country.

Sincerely yours,

Ming-Zhang Chen, M.D.
Professor of Medicine
Minister of Public Health,
People's Republic of China
President of Chinese Medical
Association

Chairman's Address

Dear Colleagues,

I take great pleasure and honor to invite you to join the 1994 Shanghai International Conference on Laser Applications in Medicine. Laser has been used increasingly for the diagnosis and treatment of many diseases in various fields and disciplines of medicine. New technology and equipments have been developed and innovated rapidly. The goal of this conference is to exchange the latest information, experiences and achievements concerning laser applications in medicine, including basic science and the applications of laser in various fields of medicine.

China's economy has developed rapidly over the pass few years. Shanghai, being the commercial and trade center, major cultural and scientific center, and one of the most important industrial bases, stands on the fore-front of this upsurge. Furthermore, China has many beautiful scenic spots and historic sites worthy for sightseeing because of her brilliant ancient history. It will be certainly attractive for those who has never been here, and even for those who had been here before. Doubtlessly, this meeting will be an exciting and enjoyable one. It will be scientifically most instructive and will also provide a good occasion to increase mutual understanding and foster friendship internationally.

Dear colleagues, warmly welcome you to attend this conference!

Sincerely yours,

Shu-Dong Xiao, M.D.
Professor of Medicine
Shanghai Second Medical University
Director,
Shanghai Medical Center for Laser
Research

ORGANIZING COMMITTEE

Honorary Chairman: Ming-Zhang Chen(China)
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CONTRIBUTORS

China National Natural Science Foundation
Olympus Optical Co., Ltd.
Astra (Wuxi) Pharmaceutical Co. Ltd.
Honeyclave Medical, Hong Kong
Coherent Co. Ltd.
Grand Med Tech Pharmaceutical Ltd.
CeramOptec Sdn Bhd, Kuala Lumpur, Malaysia
Shanghai Vital Med Tech Co.
Wu County Intellectual Instrument Factory
Tian - Feng Pharmaceutical Development Co., Ltd.
Shanghai Institute of Laser Technology
Shanghai Institute of Optics and Fine Mechanics Academia Sinica
Hongdou Group
Shanghai East Laser Instrument Company
Shanghai Leo Laser Equipment Factory

1994 SHANGHAI INTERNATIONAL CONFERENCE ON LASER APPLICATION IN MEDICINE

October 27-29, 1994
Shanghai, China

Programme

October 27 (Thursday)

8:30 – 9:10 OPENING SESSION

Shu-Dong Xiao: Chairman's Opening Address

Narong Nimsakul: Co-chairman's Address

Michael V. Sivak, Jr: Co-chairman's Address

Hugh Beckman Co-chairman's Address

William S.C.Chao: Co-chairman's Address

9:10 – 9:30 COFFEE BREAK

9:30 – 12:00 STATE-OF-ART LECTURES

Moderators: Shu-dong Xiao, William S.C. Chao

LASER IN PLASTIC AND COSMETIC SURGERY Narong
Nimsakul, Institute of Modern Medicine, Bangkok, Thailand

**LASER APPLICATIONS IN GASTROINTESTINAL
ENDOSCOPY** Michael V.Sivak, Jr.M.D., Professor of
Medicine, Case Western Reserve University School of
Medicine, Chief, Division of Gastroenterology, University
Hospital of Cleveland, Cleveland, Ohio, USA

**LASER ENDOSCOPIC TREATMENT IN EARLY GASTRIC
CANCER IN JAPAN** Yanao Oguro, National Cancer Center
Hospital, Tokyo, Japan

12:00 – 13:30 LUNCH

13:30 – 17:00 FREE PAPER PRESENTATION (15:00 – 15:30

COFFEE BREAK)

Session A. (Ophthalmology: State-of-Art Lecture and Free Paper Lecture)

Moderators: Björn M. Tengroth, V-P Gabel

13:30 - 15:00

FOUR YEARS EXPERIENCE WITH PHOTOREFRACTIVE KERATECTOMY Björn M. Tengroth, Department of Ophthalmology, Karolinska Institute, Stockholm, Sweden

OPHTHALMIC LASER IN CHINA:CLINICAL APPLICATION AND RESEARCH Kang-sun Wang, Rui Jin Hospital, Shanghai Second Medical University, China

15:30 - 17:00

PHOTOTHERAPEUTIC EXCIMER LASER SURGERY Per Fagerholm, St Eriks Eye Hospital, Karolinska Institute, Stockholm, Sweden

BIOLOGIC EFFECTS OF Er:YAG LASER WITH DIFFERENT PULSE WIDTHS ON RABBIT CORNEAS Jing-cai Lian, MD.,PhD., Department of Ophthalmology, Rui Jin Hospital, Shanghai, China

DAMAGE EFFECTS ON CORNEA AND SKIN BY ULTRAVIOLET LASER IRRADIATION Qing Xu, Department of Biophysics, Shanghai Second Medical University, Shanghai, China

SESSION B.

Moderators: Wan-Chun Chen, Shigeru Suzuki

13:30 - 15:00

TREATMENT OF UPPER DIGESTINE TRACT DISEASES BY HOLMIUM LASER: A REPORT OF 52 CASES. Ying-cai Huang, Department of Gastroenterology, General Hospital of PLA, Beijing, China

NEW ENDOSCOPIC TREATMENT FOR GASTRIC

MUCOSAL LESIONS BY LASER WITH SUBMUCOSAL SALINE INJECTION Haruo Watanabe, Department of Gastroenterology, Juntendo University School of Medicine, Tokyo, Japan

PALLIATIVE Nd:YAG LASER TREATMENT OF MALIGNANT STENOSIS IN UPPER GASTRO-INTESTINAL TRACT Koichi Futatsuki, Department of Gastroenterology, Saitama Cancer Center, Saitama, Japan

CLINICAL OBSERVATION ON LASER THERAPY IN 110 PATIENTS WITH UPPER GASTROINTESTINAL DISEASES. Zhen-ke Zhang, Department of Medicine, The Second Affiliated Hospital, Hebei Medical College, Shijiazhuang, China

15:30 - 17:00

NOVEL REGIONAL THERAPY BY Nd:YAG LASER FOR LIVER TUMOR Daijo Hashimoto, Department of Surgery, Tokyo Metropolitan Police Hospital, Tokyo, Japan

HYPERGLYCEMIA ENHANCES THE EFFECTIVENESS OF PDT Kai-chun Fan, Department of Digestive Diseases, Great Wall Hospital, Beijing, China

A STUDY ON THE USE OF LASER-FLUORESCENCE IN DIAGNOSING MALIGNANT TUMOUR Ai-hua Ding, Hospital of Gynecology and Obstetrics, Shanghai Medical University, Shanghai, China

PERCUTANEOUS LASER DISC DECOMPRESSION (PLDD) WITH INTRAOPERATIVE ULTRASOUND MONITORING Qiang Qi, Department of Orthopaedics, Third Teaching Hospital of Beijing Medical University, Beijing, China

CLINICAL EXPERIENCE OF He-Ne LASER FOR WOUND HEALING Le Van Dai, M.D., Hospital of City Qui Nhon, Province Binh Dinh, Vietnam

SESSION C.

Moderators: Jia-Jun Wu, Mao-Lin Jin

13:30 - 15:00

COMPARISON OF LASER INDUCED AUTO-FLUORESCENCE BETWEEN NORMAL AND S-180 SARCOMA BRAIN TISSUES IN KUMMING MICE Jing Zhu, Department of Laser, Renji Hospital, Shanghai, China

COMPARISON OF INTIMAL HYPERPLASIA IN ACCELERATED ATHEROSCLEROSIS RABBIT ARTERY ANASTOMOSED WITH LASER VS SUTURE Liang-ping Zhang, Department of Cardiothoracic Surgery, Shanghai Sixth People's Hospital, Shanghai, China

LASER FOR MICROVASCULAR WELDING IN SEVERED RABBIT EAR Pham Hnn Nghi, Hospital Tran Hung Dao, Medical College of Hanoi, Vietnam

COMPARISON OF ENDOTHELIN GENE EXPRESSION BETWEEN ARTERIES AFTER BALLOON ANGIOPLASTY AND LASER ANGIOPLASTY Jian-ping Liu, Department of Cardiology, Renji Hospital, Shanghai Second Medical University, Shanghai, China

EFFECT OF CAPTOPRIL ON CELL CYCLE AND PROLIFERATION OF VASCULAR SMOOTH MUSCLE CELL AFTER LASER ANGIOPLASTY Ning-yuan Fang, Department of Cardiology, Renji Hospital, Shanghai Second Medical University, Shanghai, China

15:30 - 17:00

PRESENT STATUS OF LASER APPLICATIONS IN MEDICINE IN VIETNAM Tran Ngoc Liem, Ph.D., Institute of Laser Technology, Hanoi, Vietnam

Nd:YAG LASER THERAPY FOR GLANDULAR CYSTITIS: REPORT OF 3 CASES Sheng-guo Dai, Renji Hospital, Shanghai Second Medical University, Shanghai, China

A CLINICAL ANALYSIS OF 131 CASES OF BLADDER CANCER TREATED BY PHOTODYNAMIC THERAPY (PDT) WITH HEMATOPORPHYRIN DERIVATIVE (HPD) - LASER AND Nd:YAG LASER Bing-ze Xu, Cancer Institute (Hospital), Chinese Academy of Medical Sciences, Beijing, China

TREATING PROSTATIC TISSUE WITH PHOTODYNAMIC THERAPY Qun Chen, Research and Development, P/SL Medical Center, Denver, Colorado, USA

TREATMENT OF BLADDER CANCER BY Nd:YAG LASER LOCAL IRRADIATION AND WHOLE BLADDER PHOTODYNAMIC THERAPY COMBINED WITH HEMATOPORPHYRIN DERIVATIVE Chang-ling Li, Department of Urologic Oncology and Laser Medicine, Cancer Institute (Hospital), CAMC, Beijing, China

PHOTODYNAMIC THERAPY WITH GOLD VAPOR LASER IN THE TREATMENT OF BLADDER CANCER Jian Qian, Department of Laser Medicine, RenJi Hospital, Shanghai Second Medical University, Shanghai, China

19:00 - 21:00 WELCOME BANQUET

October 28 (Friday)

8:30 - 12:00

STATE-OF-ART LECTURE (10:00 - 10:30 Coffee Break)

SESSION A. (Ophthalmology: State-of-Art Lecture and Free Paper Presentation)

Moderators: Hugh Beckman, Per Fagerholm

8:00 - 10:00

PRACTICE IMPLICATIONS OF THE GLAUCOMA LASER TRIAL AND GLAUCOMA LASER TRIAL FOLLOW-UP STUDY TRIAL Hugh Beckman, Department of Ophthalmology, Sinai Hospital, Detroit, Michigan, U.S.A.

ONE MONTH COMPARISON OF NEEDLE, HOLMIUM:
YAG AND ERBIUM: YAG ENDOSCOPIC GONIOTOMY
Karen M. Joos , Department of Ophthalmology and Visual
Sciences, Vanderbilt University, Nashville, Tennessee, 37232-
2540, USA and Department of Ophthalmology, University of
Miami, Miami, Florida, 33136, USA

10:30 — 12:00

CONTACT TRANSSCLERAL Nd:YAG CYCLO-
DESTRUCTION WITH PLANE FIBER TIP IN
INTRACTABLE GLAUCOMA Wei Zhou, Henan Institute of
Ophthalmology, Zhengzhou, China

NON-CONTACT Ho: YAG LASER THERMAL KERATO-
PLASTY: BASIC PRINCIPLE AND CLINICAL USE Qiu-shi
Ren, Department of Ophthalmology, University of
California, Irvine, CA, U.S.A.

THE EFFECT ON CELL DNA WITH 193 NM EXCIMER
LASER IRRADIATION Qing Xu, Department of Biophysics,
Shanghai Second Medical University, Shanghai, China

SESSION B.

Moderators: Michael V. Sivak, Jr., Yanao Oguro

8:00 — 10:00

SPECTROSCOPIC DIAGNOSIS AND TREATMENT OF
GASTRIC CANCER Shu-dong Xiao, M.D., Shanghai Second
Medical University, Renji Hospital, Shanghai Institute of
Digestive Disease, Shanghai 200001, China

REVIEW OF PHOTODYNAMIC THERAPY FOR UPPER
GASTROINTESTINAL TUMOURS OVER THE PAST TEN
YEARS Mao-Lin Jin, Beijing Institute for Cancer Research,
Beijing, China

ENDOSCOPIC LASER TREATMENT FOR UPPER
GASTROINTESTINAL CARCINOMA Shigeru Suzuki, M.D.,

EXPERIMENTAL STUDY OF ArF EXCIMER LASER
ABLATION OF RABBIT CORNEAS Wei-song Yang,
Department of Physics, Shanghai Second Medical
University, Shanghai, China

DIODE LASER APPLICATION IN RETINAL
PHOTOCOAGULATION V.-P. Gabel, M.D., Direktor der
Augenlinik und Poliklinik, der Universitaet Regensburg,
Regensburg

ARGON LASER PHOTOCOAGULATION IN
TOXOPLASMIC RETINOCHOROIDITIS Ming-heng Zhang,
Department of Ophthalmology, Rui Jin Hospital, Shanghai
Second Medical University, Shanghai, China

15:30 - 17:00

A REPORT OF 164 CASES OF RETINOPATHY TREATED
WITH "MICROLASE" LASER PHOTOCOAGULATION Ze-
ming Shen, Bao Gang Hospital, Shanghai Second Medical
University, Shanghai, China

PHOTOCOAGULATION TREATMENT OF TRAUMATIC
RETINAL BREAKS Su-jin Liu, Department of
Ophthalmology, Third Teaching Hospital of Beijing Medical
University, Beijing, China

SESSION B.

Moderators: Song-lin Xu, Xin-Li Tang

13:30 - 15:00

A PROMISING NEW DRUG FOR TUMOR
PHOTODYNAMIC THERAPY De-yu Xu, Laboratory for
Antimalarial Drug Research, Second Military Medical
University, Shanghai, China

SUPER-HIGH SENSITIVITY DETECTION AND
CHARACTERIZATION OF ULTRAWEAK PHOTON
EMISSION FROM HUMAN LIVING SAMPLES FOR
BIOMEDICAL APPLICATIONS Humio Inaba, Tohoku
Institute of Technology, Sendai, Japan

AN ULTRA-SENSITIVE FLUORESCENCE MICROSCOPE
Tian-min Chen, Optical Department, Beijing Institute of
Technology, Beijing, China

THE UV LASER INDUCED GENE TRANSFECTION Zi-wei
Shen, Department of Biological Science and Biotechnology,
Tsinghua University, Beijing, China

THEORETICAL CALCULATION AND MONTE CARLO
SIMULATION FOR PENETRATION DEPTH OF LIGHT IN
TISSUE Ci-Bo Mao, National Laboratory of Laser
Technology, Huazhong University of Science & Technology,
Wuhan, China

PREPARATION AND TUMOR-PHOTOBIOLOGICAL
ACTIVITY OF CHLORIN P DERIVATIVES Zhen-de Chen,
Laboratory for Antimalarial Drug Research, Second Military
Medical University, Shanghai, China

15:30 - 17:00

THE EFFECT OF 830 NM DIODE LASER ACUPUNCTURE
ON CARDIAC FUNCTION Bai-hua Cheng, Shanghai
Second Medical University, Shanghai, China

A PRELIMINARY STUDY ON QUANTITATIVE LASER
HYPERTHERMIA COAGULATION OF BRAIN TISSUES
IN RABBITS Hui Liu, The People's Hospital of Liaoning
Province, Shenyang, China

EXPERIMENTAL APPLICATION OF He-Ne LASER FOR
THE TREATMENT OF ULCERS FROM LEPROSY Ngo
Van Lung, M.D., Leprosy Hospital Van Mon, Province Thai
Binh, Vietnam

LASER TREATMENT FOR ORAL FACIAL
HAEMANGIOMAS Bao-zhang Ma, Oral Maxillo Facial
Department, Ninth People's Hospital, Shanghai Second
Medical University, Shanghai, China.

Professor of Surgery and Endoscopy, Institute of Gastro-
enterology, Tokyo Women's Medical College, Tokyo, Japan

10:30 — 12:00

LASER APPLICATIONS IN LAPROSCOPIC SURGERY
Yasutsugu Bandai, M.D., Second Department of Surgery,
Faculty of Medicine, University of Tokyo

LAPAROSCOPIC SURGERY -- PRESENT STATE AND
FUTURE TRENDS Gerald Glantz, M.D., Associate Clinical
Professor, UCLA School of Medicine, Staff Surgeon and
Director of Laser Research, West Los Angeles Veterans
Hospital

USE OF LASER THERAPY IN RESPIRATORY DISEASE
Jung-Heng Li, M.D., Chinese PLA General Hospital, Beijing,
China

SESSION C:

Moderators: Hong-Shen Zhu, Ming-Chien Kao

8:00 — 10:00

LASER APPLICATION IN NEUROEDOSCOPOY:
ENDOSCOPIC SYMPATHECTOMY FOR CHILDREN
WITH PALMAR HYPERHIDROSIS Ming-chien Kao, M.D.,
Department of Surgery, National Taiwan University
Hospital, Taipei, China

EXCIMER LASER CORONARY ANGIOPLASTY -- AN
OVERVIEW Wan-Chun Chen, M.D., The Sixth Peoples
Hospital, Shanghai, China

USE OF LASER IN UROLOGICAL SURGERY Jia-jun Wu,
MD., Professor of Medicine, Department of Urology, Ren Ji
Hospital, Shanghai, China

10:30 — 12:00

PROGRESS IN LASER APPLICATION FOR

DERMATOLOGIC COSMETICOLOGY Rui-yao Yu,
Department of Dermatology, General Hospital of PLA,
Beijing, China

APPLICATION OF LASERS IN DERMATOLOGY, Avery S.
C. Chen, MBBS(HK), FRCP(Glasgow), DIP DERM(London)

12:00 - 13:30 LUNCH

13:30 - 17:00

SATELLITE SYMPOSIUM: What New in Cosmetic Laser
Surgery and How I Do It. (15:00 - 15:30 COFFEE BREAK)

Narong Nimsakul: WHICH LASER FOR WHAT? BASIC
PRINCIPLE

Jick Ting: SETTING-UP LASER COSMETIC DAY
PROCEDURE CENTER

Narong Nimsakul: CO2 LASER FOR UPPER EYELID,
RHYTIDECTOMY, MAMMOPLASTY AND ABDOMINAL
LIPECTOMY

Joseph T. C. Chung: LASER BLEPHAROPLASTY-LOW
EYELID, TRANSCONJUNCTIVA

Peter Hasan: LOW POWER LASER FOR COSMETIC
PURPOSES

Narong Nimsakul: LASARBRASION, LASER SKIN
REJUVENIZATION

13:30 - 17:00

FREE PAPER PRESENTATION (15:00 - 15:30 COFFEE
BREAK)

SESSION A. (Ophthalmology: State-of-Art Lecture and Free Paper
Lecture)

Moderators: Kang-Sun Wang, Qiu-Shi Ren

13:30 - 15:00

PHOTOREFRACTIVE KERATECTOMY FOR
CORRECTION OF MYOPIA Su-bing Liu, Ocular Fundar
Diseases Research Institute, Zhengzhou, China