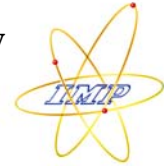


# NIRS-IMP Joint Symposium on Carbon Ion Therapy

14-15 August 2009, Lanzhou  
Institute of Modern Physics (IMP), China



8:30-8:40 Registration

## Opening Ceremony

8:40-8:45 Opening Remarks

Guoqing Xiao, IMP

8:45-8:50 Opening Remarks

Hirohiko Tsujii, NIRS

8:50-9:00 Group Photo

## Present Status of IMP Project and Other plans

**Chair : G. Xiao and H. Tsujii**

9:00-9:20 Present Status of IMP Therapy Project and Particle Therapy in China

G. Xiao, IMP

9:20-9:40 Brief Introduction of Plans in Japan

H. Tsujii, NIRS

## Clinical Experiences at NIRS and IMP

**Chair: H. Zhang and T. Kamada**

9:40-9:50 NIRS Introduction

A. Kitagawa, NIRS

9:50-10:20 Overview of the Carbon Ion Therapy at NIRS

H. Tsujii, NIRS

10:20-10:30 Discussion

10:30-10:45 *Coffee Break*

10:45-11:00 Skull Base Tumor

A. Hasegawa, NIRS

11:00-11:15 Head & Neck Tumor

K. Jingu/ J. Mizoe, NIRS

11:15-11:30 Lung Cancer

N. Yamamoto/ M. Baba, NIRS

11:30-11:45 Bone & Soft Tissue Sarcoma

S. Sugahara, NIRS

11:45-11:55 Discussion

11:55-13:55 *Lunch*

13:55-14:10 Hepatoma

H. Imada/ S. Yasuda, NIRS

14:10-14:25 P/O rec Rectal Cancer

S. Yamada, NIRS

14:25-14:40 Uterine Cancer

S. Kato, NIRS

14:40-14:55 Prostate Cancer

H. Tsuji, NIRS

14:55-15:05 Discussion

15:05-15:20 *Coffee Break*

15:20-15:45 Results of Carbon Ion Radiotherapy for Skin Carcinomas in 45 Patients

H. Zhang, IMP

15:45-16:10 About Particle Clinical Study

T. Kamada, NIRS

16:10-16:20 Discussion

## Ion Beam Biology

**Chair: G. Zhou and R. Okayasu**

16:30-16:45 Repair of DNA Double Strand Breaks Induced by Heavy Ion Irradiation

R. Okayasu, NIRS

16:45-17:00 Biological Effectiveness of Mammalian Cells Exposed to Heavy Ion Beams

Y. Furusawa, NIRS

17:00-17:15	Effects of Heavy Ion Radiation on Cancer Stem Cells of Xenograft Tumor in Nude Mice	S. Sai, NIRS
17:15-17:30	Effect of Hypofractionation on RBE and Estimation of Therapeutic Dose	Y. Matsumoto, NIRS
17:30-17:45	Discussion	

### **15 August (Saturday)**

#### **Ion Beam Biology**

**Chair: G. Zhou and R. Okayasu**

8:30-8:45	Radiosensitivity in Mesothelioma Cell Lines for X Rays and Carbon-ion Beams	C. Liu, NIRS
8:45-9:00	A Novel Mechanism of Cellular Radiosensitivity	G. Zhou, IMP
9:00-9:15	Cytometric Assessment of Histone H2AX Phosphorylation in Tumor Cells Irradiated with Carbon Ions	L. Zhou, IMP
9:15-9:25	Discussion	

#### **Ion Beam Physics**

**Chair: Q. Li and K. Noda**

9:30-9:45	15 Years Experience of the Carbon Ion Production; Stability and Reliability of HIMAC	A. Kitagawa, NIRS
9:45-10:00	New Treatment Facility Project at HIMAC	K. Noda, NIRS
10:00-10:15	Treatment Planning for Scanned Carbon Ion Beams	N. Kanematsu, NIRS
10:15-10:30	Status of New Carbon Therapy Facility at Gunma University	S. Yamada, Gunma University
10:30-10:45	Evaluation of Absolute Doses for Therapeutic Carbon Ion Beams	M. Sakama, Gunma University
10:45-11:00	Research for the RI Beam Medical Application at HIMAC and RI Production Techniques	M. Kanazawa, NIRS
11:00-11:15	<i>Coffee Break</i>	
11:15-11:30	Therapeutic Techniques Used in the Heavy Ion Therapy Project at IMP	Q. Li, IMP
11:30-11:45	The Beam Monitoring Detectors for the Heavy-Ion Therapy at IMP	Z. Hu, IMP
11:45-12:00	Accelerator Aspects of the Proposed Tumor Therapy System	M. Song, IMP
12:00-12:15	Injection and Slow Extraction for Carbon Ion Therapy at IMP	Y. Yuan, IMP
12:15-12:30	Injector Linac for Heavy Ion Therapy System in Japan	S. Tatsumi, Sumitomo Heavy Industries
12:30-12:40	Discussion	

#### **Closing Ceremony**

12:40-12:55	Closing Remarks	H. Tsujii, NIRS
12:55-13:10	Closing Remarks	G. Xiao, IMP