October 22

11:00  Registration

12:00  Prof. Alexander Ivanov - Conference opening

12:05  Greetings: Governor of the region A. Travnikov, Deputy Mayor of Novosibirsk M. Kamaev, Director of the BINP Academician P. Logatchov, Rector of NSU Corr. Member M. Fedoruk

12:25  Lecture # 1. Prof. Shinichi Miyatake (Osaka Medical College, Japan)  
"Recent advancement of clinical BNCT on brain tumors including malignant gliomas and high-grade meningiomas, using reactor and accelerator”

13:25  Lecture # 2. Prof. Akira Matsumura (University of Tsukuba, Japan)  
“Clinical experience of BNCT in glioblastoma and current BNCT accelerator project in Tsukuba”

14:20  Lunch

15:20  Press conference

16:20  Lecture # 3. Prof. Wolfgang Sauerwein (University of Essen, Germany; President of German Society for BNCT)  
"Accelerator based BNCT: The challenges from a clinicians perspective“

tour on BNCT facility for accredited media

17:10  Coffee break

17:40  Lecture # 4. Prof. Hiroyuki Nakamura (Tokyo Institute of Technology, Japan; President of Japanese Society of Neutron Capture Therapy)  
“Current Status and Future prospects for boron agents in BNCT”

18:40  Get Together – 3rd floor on the str. Nikolaeva, 12
October 23

09:10 Lecture # 5. Prof. Alexey Krivoshapkin (European Medical Center, Moscow, Russia) “Promising technologies for local control of tumor growth in patients with malignant gliomas”

10:00 Lecture # 6. Prof. Vladimir Chernov (Research Medical Center, Tomsk, Russia) “Nuclear medicine in the diagnosis and prognosis of malignant neoplasms”

10:50 Coffee break

11:20 Lecture # 7. Prof. Grigory Dianov (University of Oxford, Great Britain) “Cellular responses to DNA damage”

12:10 Lecture # 8. Prof. Sergey Taskaev (BINP, Novosibirsk, Russia) “Budker Institute solution for BNCT”

13:00 Lunch

14:00 Lecture # 9. Prof. Andres Kreiner (CNEA, Argentina) "Status of Accelerator-Based BNCT worldwide"

14:50 Lecture # 10. Dr. Hiroaki Kumada (University of Tsukuba, Japan) “Treatment planning and dose estimation for BNCT”

15:40 Coffee break

16:10 Lecture # 11. Prof. Tooru Kobayashi (Kyoto University Research Reactor Institute, Japan) “Basic understanding of BNCT from the viewpoint of medical physics and engineering”

17:00 Lecture # 12. Prof. Saverio Altieri (University of Pavia, Italy) “Boron measurement and imaging techniques in BNCT”

October 24

09:00 Tour on BNCT facility

10:30 – 18:00 Conference sessions

Physics & Engineering

Chair: Prof. Sergey Taskaev (BINP, Novosibirsk, Russia)

10:35 Dr. Artem Smirnov (TAE Life Sciences, Foothill Ranch, California, USA) "TAE Life Sciences’ Clinical Neutron Beam System for BNCT"

10:55 Prof. Sang Moo Lim (Korea Institute of Radiological and Medical Sciences, Seoul, Korea) "Introduction of KIRAMS BNCT Project"

11:40 Dr. Ilia Urupa (National Research Nuclear University MEPhI, Moscow, Russia) "Neutron generator protection parameters calculated using the Geant4 software package"

12:00 Coffee break
Chemistry & Pharmacology

Chair: Prof. Vladimir Bregadze (Institute of Organoelement Compounds, Moscow, Russia)

12:30 Dr. Dmitry Gruzdev (Institute of Organic Synthesis, Ekaterinburg, Russia) "Carborane-containing amino acid derivatives and analogs as a platform for design of promising BNCT agents"

12:50 Dr. Ekaterina Andrewchuk (Institute of Organoelement Compounds, Moscow, Russia) "Получение 6,6'-замещенных арилпроизводных бис(дикарболлид)ов никеля(IV) и кобальта(III)"

13:10 Dr. Anna Druzina (Institute of Organoelement Compounds, Moscow, Russia) "New Boron-Containing Lipids for NCT"

13:30 Dr. Sergey Uspenskii (Institute of Synthetic Polymeric Materials, Moscow, Russia) "Experimental and feasibility study of using boron and gold particles in medicine"

13:50 Ms. Polina Khaptakhanova (Institute of Synthetic Polymeric Materials, Moscow, Russia) "Boron nanoparticles as a potential target drug for boron neutron capture therapy"

14:10 Lunch

Biological targeting

Chair: Prof. Vladimir Richter (Institute Chemical Biology and Fundamental Medicine, Novosibirsk)

15:00 Dr. Darya Novopashina (Institute Chemical Biology and Fundamental Medicine, Novosibirsk, Russia) "Novel approaches to the synthesis of high boron-loaded oligonucleotides for BNCT"

15:20 Prof. Vladimir Silnikov (Institute of Chemical Biology and Fundamental Medicine Novosibirsk, Russia) "Special features of albumin as a carrier for anticancer theranostic agents: A thiolactone entity as a latent thiol functionality to prepare multimodal closo-dodecaborate-conjugated human serum albumins"

15:40 Mrs. Tatyana Avramchuk (Institute of Chemical Biology and Fundamental Medicine, Novosibirsk, Russia) "Multifunctionalized human serum albumin as versatile theranostic nanoplatform for boron neutron capture therapy"

16:00 Prof. Boris Sukhov (Institute of Chemistry, Irkutsk, Russia) "New boron-, gadolinium-containing superparamagnetic nanosubstance’s for a multi-channel theranostics of the brain oncological diseases"

16:20 Coffee break

Clinical matters

Chair: Dr. Vladimir Kanygin (Novosibirsk State University, Novosibirsk, Russia), Dr. Alexander Zaboronok (University of Tsukuba, Tsukuba, Japan)

16:40 Dr. Vladimir Kanygin (Novosibirsk State University, Novosibirsk, Russia) "Results and prospects of BNCT biological research at the BINP accelerator based neutron source"

17:00 Dr. Alexander Zaboronok (University of Tsukuba, Tsukuba, Japan) "Absorbed dose evaluation using complex boron compounds for BNCT"

17:20 Dr. Rinat Mukhamadiyarov (Kuzbass Cardiology Center, Kemerovo, Russia) "Особенности синтеза и биораспределения препаратов бора при альтернативных способах доставки в опухоль"

17:40 Mr. Nikita Filin (Novosibirsk State University, Novosibirsk, Russia) "Преимущества интракраниального пути введения новых соединений бора на экспериментальных моделях"

18:00 Prof. Sergey Taskaev - Conference closing