Program November 13th (Mon.)

| 9:00- 9:30 | Registration | | | | |
|-------------|---|--------------------------|--|--|--|
| 9:30 - 9:45 | Opening | | | | |
| 9:45-10:45 | Session 1 – Physics Chair: Yoshinori Sakurai, Ian Postuma | | | | |
| | S1-1 | Pablo Torres-Sánchez | On the upper limit of neutron energies suitable for BNCT | | |
| | S1-2 | Sakai Yusuke | Dosimetrically effective fast neutrons for boron neutron capture therapy (BNCT) of malignant melanoma | | |
| | S1-3 | Ricardo Luis Ramos | Thermal scattering libraries in neutron transport for BNCT dosimetry | | |
| | S1-4 | lan Postuma | Neutron beam tailoring for clinical BNCT: from physical parameters optimization to dose distribution evaluations in patient and in treatment room | | |
| 10:45-11:05 | Breal | Break | | | |
| | Sessi | on 2 - Accelerator Syste | em Chair: Hiroaki Kumada, Hanna Koivunoro | | |
| | S2-1 | Hiroaki Kumada | Characteristic measurements for neutron beam of the linac-based neutron source for BNCT device in University of Tsukuba | | |
| | S2-2 | Sergey Taskaev | Novosibirsk accelerator neutron source for BNCT | | |
| 11:05-12:35 | S2-3 | Kazuki Tsuchida | Compact Accelerator-Driven BNCT System Used Sealed Lithium Target | | |
| | S2-4 | Wei-Lin Chen | Optimal Composition of LiF-doped Neutron Moderator in Li-target-based AB- BNCT | | |
| | S2-5 | Hanna Koivunoro | Comparison of nuBeam and FiR 1 neutron beam parameters | | |
| | S2-6 | Valeria Monti | Characterization of the linac based photonuclear thermal neutron source E_LIBANS | | |
| 12:35-13:35 | Lunch | | | | |
| 13:35-14:35 | Poster Session 1 Chair: Hiroyuki Nakamura, Natsuko Kondo, Minoru Suzuki, Takushi Takata | | | | |
| 14:35-14:40 | Break | | | | |
| | Session 3 - Biology 1Chair: Hiroyuki Michiue, Andrea Monti Hughes | | | | |
| | S3-1 | Nicoletta Protti | BNCT irradiation of protein aggregates to evaluate the potentialities of NCT in the treatment of Alzheimer's Disease | | |
| 14.40.45.40 | S3-2 | Tooru Andoh | Contribution of L-type amino acid transporter-1 in clear cell sarcoma to accumulation of p-borono-L-phenylalanine in vitro and in vivo | | |
| 14:40-15:40 | S3-3 | Andrea Monti Hughes | BNCT preliminary studies in an oral cancer model that allows for the study of tumor control, mucositis in precancerous tissue and development of second primary tumors: Characterization of the 8-week cancerization model | | |
| | S3-4 | Hiroyuki Michiue | The next generation Boron agents with BSH fused Cell Penetrating Peptide toward clinical application | | |
| 15:40-16:00 | Break | | | | |
| | Session 4- Ongoing Projects and Future in BNCT Chair: Minoru Suzuki, liro Auterinen | | | | |
| 16:00-17:15 | S4-1 | Yoshinori Sakurai | Present status and future plan for physical engineering and medical physics for BNCT in KURRI | | |
| | S4-2 | Edyta Michaś | INTERDYSCYPLINARY APPROACH TO THE BORON NEUTRON CAPTURE THERAPY AT MARIA RESEARCH REACTOR (POLAND) | | |
| | S4-3 | Noah Smick | Features and present status of the Neutron Therapeutics nuBeam [™] BNCT system to be installed at Helsinki University Hospital | | |
| | S4-4 | Daniel Quah | Would you pay from your own pocket to have Boron Neutron Capture Therapy in Japan? – A survey of Singaporeans | | |
| | S4-5 | liro Auterinen | Global overview to the clinical BNCT facility development | | |
| 17:15-18:00 | Discussion 1 | | | | |

Poster Sessison 1

November 13th 13:35-14:35

| | Chai | r: Hiroyuki Nakamura | Seminor room 1&2 |
|--------------------|------|----------------------|--|
| Chemistry | P1-1 | Goeun Choi | Sodium Borocaptate Nano Drug Delivery System for Boron Neutron Capture Therapy |
| | P1-2 | CHUNLEI BI | Verification of boron compounds concentration measurement using LC/MS for combination of boronophenylalanine (BPA) and borocaptate (BSH) in rat plasma |
| | P1-3 | Tomáš Jelínek | New potential BNCT agent: Chemistry of $[B_{10}H_{10}]^{2-}$ |
| | P1-4 | Jun Kawamura | Preparation of boron cluster encapsulating liposomes using microflow system |
| | P1-5 | Satoshi Dowaki | Suppression of Melanoma Metastasis by Kojic Acid Modified Carborane |
| | Chai | r: Natsuko Kondo | Seminor room 1&2 |
| | P2-1 | Rui Akayama | Cell Survival and DNA-double-strand-breaks in Glioblastoma Cell Lines with Different p53 Status after Neutron Irradiation and Exposure to DNA-alkylating Agent |
| вююду | P2-2 | Yoshitaka Matsumoto | Folate-modified cyclodextrin improves the intratumoral accumuration of existing boron compounds |
| | P2-3 | Kazuyo Igawa | Evaluation Scheme of Boron 10 Compound for Accelerator-based Boron Neutron Capture Therapy |
| | Chai | r: Minoru Suzuki | Seminor room 1&2 |
| Medicine | P3-1 | Takuya Fujmoto | Evaluation of Boron Neutron Capture Therapy for Leiomyosarcoma |
| | P3-2 | Keita Endo | Boron analysis and imaging by using Micro-PIXE/PIGE(Particle Induced X/ γ -ray Emission) |
| | Chai | r: Minoru Suzuki | Seminor room 1&2 |
| Medical Physics | P4-1 | Yi-Wei Chen | The impact of target positioning on dose in boron neutron capture therapy for brain tumor |
| | P4-2 | Pei-Yi Lee | Dosimetry calculation for BNCT using medical image-based lattice models with coarse and fine structures |
| | Chai | r: Takushi Takata | Seminor room 3&4 |
| Dosimetry | P5-1 | Xingcai Guan | Performance study of the neutron flux monitors from 20 keV to 1 MeV using accelerator-based BNCT neutron sources |
| | P5-2 | Moe Shinohara | Experimental verification of real-time gamma-ray spectrum / dose monitor - Measurement in a fuel strage room- |
| | P5-3 | Shingo Tamaki | Improvement of a liquid moderator based neutron spectrometer for BNCT |
| | P5-4 | Koki Tochitani | Gamma-ray dose measurement in neutron/gamma-ray mixed field using radio- photoluminescence glass dosimeter and two kinds of filter |
| | P5-5 | Kentaro Baba | GPU-based optical photon transport simulation system for the SOF detector optimization |
| | P5-6 | M. El Ais | Monte Carlo study of a CdZnTe detector response to the neutron and gamma background in a BNCT treatment room |
| | P5-7 | Agustina Portu | Enhanced resolution neutron autoradiography: UV-C sensitization of different nuclear track detectors to form imprints of biological samples |
| | P5-8 | Carolina Vidal | BNCT-AR: Software development for the analysis of histological and autoradiographic images |

Program November 14th (Tue.)

| | Session 5 - Chemistry | | Chair: Makoto Shirakawa, Vincent Jallet | |
|----------------------------|---|---|--|--|
| 9:00-10:15 | S5-1 | Makoto Shirakawa | Improvement of encapsulation method of boron compounds for development of DDS formulation at high boron assembly | |
| | S5-2 | Satomu Ishii | Development of disulfide-bridged boron cluster-maleimide (SSMID) and identification of its conjugation sites on albumin | |
| | S5-3 | Fumiko Nakagawa | Development of boron cluster containing water-soluble folate derivatives for BNCT | |
| | S5-4 | Aoi Isono | Design and synthesis of new membrane permeable boron carriers for BNCT based on the pepducin technology | |
| | S5-5 | Vincent Jallet | Multifunctional silica nanoparticles for cancer treatment by BNCT | |
| 10:15-10:35 | Brea | Break | | |
| | Session 6 - Biology 2 | | Chair: Shoji Imamichi, Agustina Mariana Portu | |
| | S6-1 | Shin-ichiro Masunaga | Radio-Sensitivity of Pimonidazole-Unlabeled Intratumor Quiescent Cells to γ-Rays, Accelerated Carbon Ion Beams and Boron Neutron Capture Reaction (BNCR) | |
| | S6-2 | Shoji Imamichi | Investigation of biological effects of accelerator-based BNCT system in NCC | |
| 10.35-12.05 | S6-3 | Aleksandr Kichigin | Radiobiological studies on Vacuum Insulated Tandem Accelerator (VITA) for BNCT. | |
| 10.55 12.05 | S6-4 | Alexander Zaboronok | Accelerator-based neutron capture therapy: in-vitro efficacy evaluation and in- sample dosimetry using gold nanoparticles | |
| | S6-5 | María Pedrosa | Neutron radiobiology experiments and new weighting factors for improving Boron Neutron Capture Therapy treatment planning | |
| | S6-6 | Agustina Portu | BNCT + Electroporation: an autoradiographic analysis | |
| 12:05-13:05 | Lunc | h | | |
| 13:05-14:15 | Post | er Session 2 | Chair: Hiroaki Kumada, Hiroki Tanaka, Yoshinori Sakurai | |
| 14:15-14:20 | Break | | | |
| | Sess | ion 7 - Medical Physics | Chair: Takushi Takata, Ming-Chen Hsiao | |
| | S7-1 | Haiyan Yu | Computational dosimetry study for the limb osteosarcoma case under inhomogeneous structure and different voxel sizes | |
| | S7-2 | Takushi Takata | Dosimetric Comparison of Total Scalp Irradiation in Boron Neutron Capture Therapy Using Thermal and Epithermal Neutron Beams | |
| 14:20-15:50 | S7-3 | Katia Alikaniotis | BNCT neutron dose boost for brain tumors in radiotherapy | |
| | S7-4 | Ryoichi Hinoto | Dosimetric influence of respiratory motion in lung boron neutron capture therapy | |
| | S7-5 | Bill Park | Image guided patient positioning for the nuBeam™ BNCT system | |
| | S7-6 | Takahiro Onishi | Evaluation of the dose given to a patient's body outside the irradiation field for the iBNCT neutron source | |
| 15:50-16:10 | Brea | k | | |
| | Sess | ion 8 – Medicine | Chair: Natsuko Kondo, Yi-Wei Chen | |
| 16:10-17:25 | 58-1 | Shin-Ichi Mivatake | Boron neutron capture therapy with the combination of successive bevacizumab | |
| | 50 1 | , | freutinents for recurrent manghant gronnas Aprior study. | |
| 10.10 17.25 | S8-2 | Natsuko Kondo | Re-irradiation by combination of boron neutron capture therapy and IMRT for radiation-induced glioblastoma: a case report | |
| 10.10 17.25 | S8-2 S8-3 | Natsuko Kondo Tien-Li Lan | Re-irradiation by combination of boron neutron capture therapy and IMRT for radiation-induced glioblastoma: a case report Salvage Boron Neutron Capture Therapy (BNCT) for the First Case of Recurrent Glioblastoma in Taiwan | |
| 10.10 17.25 | S8-2 S8-3 S8-4 | Natsuko Kondo Tien-Li Lan Teruhito Aihara | Re-irradiation by combination of boron neutron capture therapy and IMRT for radiation-induced glioblastoma: a case report Salvage Boron Neutron Capture Therapy (BNCT) for the First Case of Recurrent Glioblastoma in Taiwan BNCT for Head and Neck Cancer : The history of our institution | |
| 10.10 17.23 | 58-2 58-3 58-4 58-5 | Natsuko Kondo Tien-Li Lan Teruhito Aihara Minoru Suzuki | Re-irradiation by combination of boron neutron capture therapy and IMRT for radiation-induced glioblastoma: a case report Salvage Boron Neutron Capture Therapy (BNCT) for the First Case of Recurrent Glioblastoma in Taiwan BNCT for Head and Neck Cancer : The history of our institution Boron neutron capture therapy (BNCT) for malignant thoracic tumors | |
| 17:25-18:05 | S8-2 S8-3 S8-4 S8-5 Disc | Natsuko Kondo Tien-Li Lan Teruhito Aihara Minoru Suzuki ussion 2 | Re-irradiation by combination of boron neutron capture therapy and IMRT for radiation-induced glioblastoma: a case report Salvage Boron Neutron Capture Therapy (BNCT) for the First Case of Recurrent Glioblastoma in Taiwan BNCT for Head and Neck Cancer : The history of our institution Boron neutron capture therapy (BNCT) for malignant thoracic tumors | |
| 17:25-18:05 18:05-18:15 | S8-2 S8-3 S8-4 S8-5 Disct Brea | Natsuko Kondo Tien-Li Lan Teruhito Aihara Minoru Suzuki ussion 2 | Re-irradiation by combination of boron neutron capture therapy and IMRT for radiation-induced glioblastoma: a case report Salvage Boron Neutron Capture Therapy (BNCT) for the First Case of Recurrent Glioblastoma in Taiwan BNCT for Head and Neck Cancer : The history of our institution Boron neutron capture therapy (BNCT) for malignant thoracic tumors | |

Poster Sessison 2

November 14th 13:05-14:15

| | Chai | r: Hiroaki Kumada, Hirok | i Tanaka Seminor room 3&4 |
|---------------------------------|-------|--------------------------------------|---|
| | P6-1 | Yuka Fujiwara | Development of an extended beam collimator for the linac-based neutron source for BNCT in University of Tsukuba |
| | P6-2 | Daiki Furuzawa | Development of high heat removal technique for a sealed lithium target |
| | P6-3 | Kazuya Sato | Development of Beam Shaping Assembly for BNCT system in Nagoya University |
| | P6-4 | Masahiro Tanoshita | Pre-collimator Design for An Epi-thermal Neutron Source for BNCT Researches with A DT Neutron Source |
| | P6-5 | Naoto Hagura | A feasibility study of a new neutron-source facility by reusing the reactor pool under decommissioning |
| | P6-6 | Alexandr Makarov | Diagnostics of the high power proton beam in a tandem accelerator with vacuum insulation |
| Accelerator System | P6-7 | A. Badrutdinov | Investigation of the long-term exposure of a high power proton beam on the Ta-substrate of a neutron-generating target |
| | P6-8 | Alexey Koshkarev | Development and implementation of the automation system of the ion source for BNCT |
| | P6-9 | Yaroslav Alexandrovich Kolesnikov | Measurement of the space charge effect of a negative hydrogen ion beam |
| | P6-10 | A. Badrutdinov | In-situ observation of blistering during irradiation of metals by protons |
| | P6-11 | Ivan Shchudlo | Measurement of the emittance of negative hydrogen ion beam injected into vacuum insulation tandem accelerator |
| | P6-12 | Timofey Bykov | Data processing automatization for diagnostics of Budker Epithermal Neutron Source |
| | P6-13 | Jianfei Tong | Thermal-Hydraulic Design of Neutron Production Target for BNCT based on 3.5MeV RFQ Accelerator |
| | P6-14 | Chaobin Chen | R&D of BNCT in HEC |
| | Chai | r: Yoshinori Sakurai | Seminor room 1&2 |
| Reactor System | P7-1 | Łukasz Murawski | BNCT RESEARCH BEAM IN MARIA REACTOR (NCBJ, POLAND) |
| | P7-2 | Mikhail Anikin | Feasibility study of IRT-T core configuration optimization for BNCT |
| | P7-3 | Pavel Molodov | Modernization of IRT-T research reactor for BNCT applications |
| Prompt Gamma-ray Analysis | Chai | r: Yoshinori Sakurai | Seminor room 1&2 |
| | P8-1 | K. Babaiyan | Design of PGNAA facility at TRR for boron measurement |
| | P8-2 | Alexander Winkler | Guide to spectra analysis with photon counting CdTe/ CdZnTe detectors in BNCT |
| | P8-3 | Kentaro Minami | Design of a proto-type array detector using GAGG scintillator for BNCT-SPECT |
| | P8-4 | Jun Goto | Study of charged particle activation analysis -optimal configuration of γ-ray detectors for a sample with strong background from positron annihilation- |

Program November 15th (Wed.)

| | Session 9 - Prompt Gamma-ray Analysis Chair: Hiroki Tanaka, Alexander Winkler | | | | |
|-------------|---|-------------------|--|--|--|
| 9:00-10:30 | S9-1 | Hiroki Tanaka | Development of real-time neutron detector and prompt gamma-ray imaging monitor for BNCT | | |
| | S9-2 | Matìas Valero | Simulation approach for the adequation of the detection region in the PGNAA facility design at RA-3 | | |
| | S9-3 | Ryosuke Ohya | Experimental demonstration of real time measurement of 10B concentration for BNCT | | |
| | S9-4 | Setareh Fatemi | Monte Carlo study of the imaging performances of a 20x20x20 mm ³ CdZnTe detector prototype | | |
| | S9-5 | Chunhui Gong | GPU-based Compton Camera imaging of prompt gamma rays for melanoma case in BNCT | | |
| | S9-6 | Alexander Winkler | Tomographic reconstruction of a realistic ¹⁰ B target in BNCT | | |
| 10:30-10:50 | Break | | | | |
| | Sessior | n 10 – Dosimetry | Chair: Naonori Ko, Dmitrii Alexandrovich Kasatov | | |
| | S10-1 | Dmitrii Kasatov | Activation foil measuring on accelerator based neutron source | | |
| 10:50-12:20 | S10-2 | Kiyotaka Akabori | A real-time neutron monitor for BNCT | | |
| | S10-3 | Ryohei Uchida | Investigation of applicability of polymer gel dosimeters with Li compounds to dosimetry in boron neutron capture therapy | | |
| | S10-4 | James Vohradsky | Evaluation of silicon and diamond based microdosimetry for boron neutron capture therapy applications | | |
| | S10-5 | Naonori Ko | Investigation of SOI microdosimeter in Boron Neutron Capture Therapy | | |
| 12:20-12:35 | Closing | | | | |
| 12:35- | Lunch | | | | |