

MEDICAL PHYSICS IN THE BALTIC STATES 9 (2011)

CONFERENCE & WORKSHOP PROGRAM

Thursday, 13 October 2011

BRACHYTHERAPY SEMINAR

10.00-10.30 Registration of participants at **Klaipėda University Hospital, Liepojos 41, Klaipėda**

10.30-11.00 Welcome to the Klaipeda University Hospital (*Head of Klaipeda University Hospital prof. Vinsas Janušonis*)

11.00-11.15 Rasa Dagienė. Brachytherapy in Klaipeda University Hospital.

11.15-11.30 Romas Vilkas, M.Laurikaitis, V.Andrijaitienė. QA in Brachytherapy.

11.30-12.00 Lena-Marie Lundberg, N.Pettersson. Description of treatment with brachytherapy at Sahlgrenska University Hospital, Göteborg, Sweden.

12.00-12.15 Karolis Jakštas, M.Šniurevičiūtė, D.Adlienė. Dosimetric evaluation of prostate brachytherapy using I-125 seeds.

12.15-12.30 Aista Plieskienė. Presentation of Radiotherapy department at Klaipeda University Hospital.

12.30-13.30 Visit to the Radiotherapy department (*Head of department dr. A.Plieskienė*)

Friday, 14 October 2011

09.00-10.00 Registration of participants at **Kaunas University of Technology**,
Studentų g.50–325F, Kaunas

10.00-10.15 Conference opening: **Representative of Kaunas University of Technology**
Vytautas Janilionis, Dean of the Faculty of Fundamental Sciences, Giedrius Laukaitis, Head of Physics Department, Sören Mattsson, Lund University, Skåne University Hospital Malmö, Diana Adlienė, Kaunas University of Technology

Session 1. Chair: prof. Peter Sharp

- 10.15-10.45 Sören Mattsson. Radiation protection of the patient in diagnostic radiology and nuclear medicine. – Are we doing enough?
- 10.45-11.00 Svetlana Sarycheva, V. Golikov, M. Balonov, A. Bratilova, S. Kalnitsky, I. Shatsky, V. Vodovatov. Studies of patient doses from radiological examinations in St.Petersburg and the Leningrad region.
- 11.00-11.15 Neringa Vaičiūnaitė, M.Laurikaitis, J.Laurikaitienė, R.Čerapaitė-Trušinskienė, G.Adlys. Verification of lead equivalent for protective aprons used in radiology.
- 11.15-11.30 Christian Bernhardsson, Ch.L. Rääf, S. Mattsson. Radiation exposure of inhabitants in Russia and Belarus due to fall out from the Chernobyl reactor.
- 11.30-11.45 Irina Zvonova. Radionuclide diagnostics in St. Petersburg, Russia.
- 11.45-12.00 Andrej Rožkov, R.Jerenkevič. Von GAHLEN nuclear medicine and hot laboratory radiation protection solutions.

Coffee break 12:00-12:15

Session 2. Chair: prof. Yuri Dekhtyar

- 12.15-12.30 Pernilla Peterson, S.Månsson. MR for quantitative fat imaging.
- 12.30-12.45 Jaroslav Denkovskij, E.Bernotienė, G. Kirdaitė, G. Streckytė, R.Rudys, S.Bagdonas. Surface markers of synovial mesenchymal stem cells: refinement of flow cytometric analysis.
- 12.45-13.00 R.Kubiliūtė, Akvilė Šlėktaitė, M.Burkanas, R.Grigienė, R.Rotomskis. Gold nanoparticles as a contrast agent for X-ray imaging.
- 13.00-13.15 J.Dadonienė, A.Cypienė, Diana Karpec, R.Rugienė, S.Stropuvienė, A.Laucevičius. Application of physical methods for determination of functional parameters of arteries in rheumatic patients.

Time for the lunch 13:15 – 14:15

Session 3. POSTER SESSION, Chair: dr. Judita Puišo

- P01 V. Nevulis-Obuchovska, E. Jakubovskij, A. Miller. Radiotherapy treatment planning methods comparison for pediatric retroperitoneal tumors: case report.
- P02 V.Rudžianskas, A.Inčiūra, E.Juozaitytė, R.Kubilius, S.Vaitkus, M.Zeniauskaitė. Interstitial high-dose-rate brachytherapy for recurrent and previously irradiated cervical lymphadenopathy from head and neck.
- P03 M.Gedvilas, B.Gricienė, N. Medvedevas. Assessment of ionising radiation doses delivered to cardiologists during interventional procedures.

- P04** *B.Gricienė, A.Urbonienė.* Individual monitoring of external exposure for medical, industry and research workers in Lithuania.
- P05** *J.Stonkutė, I.Prosyčevas, J.Puišo, J.Laurikaitienė, D.Adliene.* Low dose irradiation impact on stability of the FBX chemical dosimeter.
- P06** *L. Bumbure, Yu.Dekhtyar, T.Kirsanova, S.Bumbure.* Brightness histogram vs. visual evaluation in digital radiography- the final stage.
- P07** *Rita Plaipaitė-Nalivaiko, A.Meškauskas, D.Adliene, S.Mačiulaitienė, A.Jotautis.* Radiation impact on properties of layered PE/PA structures.
- P08** *V.Minialga, K.Martinaitytė.* Reading errors in through window infrared temperature measurements.

Session 4. Chair: prof.Soren Mattsson

- 14.15-14.30** *Yuri Dekhtyar.* Emission of weak electrons towards nanodosimetry.
- 14.30-14.45** *Birute Gricienė.* Lymphocyte chromosomal aberration assay in radiation biodosimetry.
- 14.45-15.00** *Henrik Svensson, S.Ceberg, S.Å.J.Bäck.* An investigation of a potential multi-purpose readout modality for two and three dimensional dosimetry using optical CT scanners.
- 15.00-15.15** *Artjoms Smakovs, A.Meijers, S.Plaude, S.Popovs, O.Utehina.* Evaluation of radiochromic films' post-exposure optical density changes.
- 15.15-15.30** *Donatas Limantas.* The OSL technology- new possibilities for personal dosimetry.

Coffee break 15:30-15:45

Session 5. Chair: prof. Diana Adliene

- 15.45-16.15** *Tony Svahn.* Breast tomosynthesis or digital mammography for breast cancer screening?
- 16.15-16.30** *Irena Kuzmickienė, E.Aleknavičius, K.P.Valuckas, V.Ostapenko, V.Atkočius, A.Burneckis.* Incidence of cardiovascular disease following breast radiation therapy.
- 16.30-16.45** *Ernestas Šileika, E.Aleknavičius, A.Burneckis, E.Jakubovskij, A.Ivanauskas.* Retrospective analysis of treatment management of patients with glioblastoma in Oncology institute of Vilnius University.
- 16.45-17.00** *Sandija Plaude, A.Meijers, D.Purina, A.Trans, S.Popovs, O.Utehina.* Hypofractionated stereotactic body radiation therapy for primary liver cancer and liver metastasis.
- 17.00-17.15** *Arturs Meijers, S.Plaude, O.Utehina, S.Popovs.* Quality assurance procedure for SRS and SRT treatments.
- 17.15-17.30** *N. Spizhenko, Sergii Luchkovskiy, I. Kadenko.* Risk assessment in radiation therapy of patients using probabilistic safety analysis of radiotherapy devices.
- 17.30-17.45** *Ulf Koscheda.* New laser technologies for virtual simulation.
- 17.45-18.00** *Peter Sharp, S.Christofides, C.Carwana, Wil van der Putten, R.Padovani, H.Bosmans, A.Torresin, J.Hand, P.Allisy-Roberts, K.-U.Kasch.* The role of EFOMP in European Medical Physics.
- 18.00-19.00** Meeting of Lithuanian Association of Medical Physicists and Biomedical Engineers, Medical physicists Society in Lithuania and Lithuanian Society of Radiation Therapy

19:30-22:00 Get-together party

Saturday, 15 October 2011

09.30-10.00 Registration of participants at **Kaunas University of Technology, Studentų g.50-325F, Kaunas.**

Session 6. Chair: Niclas Pettersson

- 10.00-10.15** **Kalle Kepler, A.Vladimirov.** Half value layer and AEC receptor dose compliance survey in Estonia.
- 10.15-10.30** **Nikolajus Medvedevas, I.Rutkauskaitė, D.Adlienė, J.Laurikaitienė.** Application of GAFCHROMIC films for the evaluation of lead eye shielding efficiency during superficial X-ray treatment.
- 10.30-10.45** **Sigita Ponelytė, A.Guobienė, J.Puišo, I.Prosyčėvas, R.Naujokaitis.** Bioadaptive polymers for active sensor elements in medical applications.
- 10.45-11.00** **Yaroslav Kmetyuk, H.Rabosh, I.Mikhnitskiy.** PET experience in Ukraine: commissioning and perspectives at All-Ukrainian Center for Radiosurgery.

Coffee break 11:00 -11.30

Session 7. Chair: Dr. Kalle Kepler

- 11.30-11.50** **Niclas Pettersson.** Clinical radiobiology for brachytherapy.
- 11.50-12.00** **Jurgita Laurikaitienė, D.Adlienė, K.Jakštas, I.Cibulskaitė, G.Adlys, A.Andrejaitis.** IMRT and Brachytherapy for head and neck cancer patients.
- 12.00-12.15** **Marius Laurikaitis, R.Vilkas, V.Andrijaitienė.** QA in brachytherapy.
- 12.15-12.30** **Andrius Ivanauskas, E.Aleknavičius, A.Burneckis, A.Miller.** Dosimetric options and possibilities of prostate LDR brachytherapy with permanent I-125 implants.
- 12.30-13.00** Final remarks (*prof. Sören Mattsson*)