

NanoPorT online Workshop

January 26, 2023

nanoparticles and proton therapy for cancer treatment

The NanoPorT Workshop (online, January 26, 2023, 9–5 pm CET) brings together scientific professionals from the fields of nanoparticles in biomedical applications, proton therapy and cancer treatment to highlight recent outcomes of the field and the **SYNGOPRO** project. It sets the stage for keynote lectures, networking opportunities and discussions about possibilities, challenges and future perspectives of nanoparticles and proton therapy for cancer treatment among a targeted audience.

Contributions to the program (talks, poster) are very welcome. Please submit your abstract during the registration process via <https://www.uni-due.de/zmb/syngopro/>.

Topics

nanoparticles for biomedical applications
proton therapy
cancer treatment

Keynotes



Prof. Dr. George Iliakis

Experimental Radiation Biology, University Hospital Essen
Pathways of DNA Double Strand Break Repair and their mechanistic contributions to tumor cell radiosensitization.



Prof. Dr. Inge Herrmann

Nanoparticle Systems Engineering Laboratory, ETH-Zürich
Nanoparticle-enhanced photon and proton therapy.



Prof. Dr. Oliver Jäkel

Medical Physics in Radiotherapy, DKFZ Heidelberg
Light ion beams for radiotherapy.

Scientific Organizers

Prof. Dr. Beate Timmermann, Clinic for Particle Therapy, West German Proton Therapy Centre Essen, University Hospital Essen

Prof. Dr. Stephan Barcikowski, Technical Chemistry I, CENIDE, University of Duisburg-Essen

Prof. Dr. Alexander Schramm, West German Cancer Center, Dept. of Medical Oncology, Molecular Oncology, University Hospital Essen

Dr. Stephan Tippelt, Pediatrics III, Pediatric Oncology and Hematology, University Hospital Essen

The **SYNGOPRO** consortium aims to apply synergistic effects of gold nanoparticles and proton radiation in the treatment of childhood brain tumors. Successful establishment of this combinatorial therapeutic approach may contribute to a significant increase in the effectiveness of proton therapy. Consequently, shorter irradiation times will result, which will allow a larger number of children with cancer to have access to this life-saving therapy.



Universitätsmedizin Essen
Universitätsklinikum
Innere Klinik – Tumorforschung



University Medicine Essen
University Hospital Essen
Clinic for Particle Therapy



Universitätsmedizin Essen
Universitätsklinikum
Klinik für Kinderheilkunde III



University Medicine Essen
West German Proton Therapy Centre

ZMB

Zentrum für Medizinische Biotechnologie
Center of Medical Biotechnology

