

SEEIIST working group meetings in Prishtina

June 16-17, 2022, SEEIIST working group meetings held in Prishtina.

The reports and activities of the Working Groups on Site Selection (WGSS) the Working Group on Legal Framework (WGLF) were presented and analyzed with the members of the Steering Committee.



HITRIplus Specialised Course in Heavy Ion Therapy Research, held in July 2022

The HITRIplus Specialised Course in Heavy Ion Therapy Research, covered the state-of-the-art science and technology delivered by world's leading scientists and engineers from various aspects in this highly diverse field. It was organised by **Manjit Dosanjh** (Scientific Coordinator at SEEIIST) with support of the Organising Committee composed of experts as well as 4 PhD students. This virtual course was run on Zoom from 4th July to the 8th July, and was a specialised course aimed and focused more directly for participants who are already currently working or starting to work in the fields related to heavy ion therapy. A crucial goal of the course was to increase interactivity, participation and networking between the students and faculties in a virtual environment.

The major part of the course consisted of a wide-range of lectures in this multidisciplinary field over the 5 days, given by a panel of global experts across the broad field of hadron therapy and beyond. These included plenaries by the two key founders and leaders of the field, **Ugo Amaldi** (CERN) and **Eleanor Blakely** (Lawrence Berkeley National Laboratory) overview lectures of the field, sessions on specialised topics such as gantry design, treatment planning and radiobiology, as well as lectures on Monte Carlo code theory and usage for simulations. In order to equip and train the future experts there was also a significant focus on complementary training such as hands-on training on treatment planning, public engagement, outreach and communication, preparation of project proposals as well as training related to industry and entrepreneurship.



36 faculty members representing leading institutions, research centres, hadron therapy facilities, and Small Medium Enterprises collaborated together to deliver this course. Among these are CERN, GSI, INFN, CNAO, HIT, MIT, MedAustron, NCI, PSI, DKFZ, SEEIIST, TERA, University of Oxford, University of Malta, University of Groningen, University of Pisa, University of Manchester, Imperial College, Ludwig, Maximilian University of Munich, University of Melbourne and Technical University of Vienna as well as two SMEs: Avo-ADAM and EBAMed.

SEEIIST participated to the International Fair of Thessaloniki



SEEIIST stand - Large panels respectively featured images of the SEEIIST architectural concept designs, and TV screens projected, among others, the SEEIIST video produced by Kaprinis Architects



From left to right: Y. Papaphilippou (CERN), the Greek PM K. Mitsotakis, A. Tzikas (Chair of the International Fair of Thessaloniki), D. Sampsonidis (AUTH), Yiota Foka (GSI).

September, 10-18 2022, SEEIIST participated to the International Fair of Thessaloniki, which hosted Emirates as honoured guest and was visited by 210.000 visitors. SEEIIST participated to the booth of CERN, which was the officially invited exhibitor, presenting applications for society from technologies developed for fundamental research focusing on facilities for cancer therapy.

For this occasion, a short leaflet was produced, 1000 copies were distributed in Greek and English during the exposition. The Greek Prime Minister visited the stand during the inauguration day and he stated that he would like to support such project. The stand was supported by 15 enthusiastic The Aristotle University of Thessaloniki (AUTH) students that guided interested visitors. The stand was organized by **Ms. Yiota Foka** with contributions from CERN, the EU-funded project HITRIplus and I-FAST but also GSI and the European ion therapy centre. A dedicated web page in Greek, accessible via QR code, provided detailed information on the HITRIplus clinical TNA access.

30th anniversary of the TERA Foundation

At the Symposium, the technical directors of the Foundation are described chronologically thirty years of TERA activities. Speakers reviewed the status of the field and among them our Elena Benedetto from SEEIIST Association.



September 15, 2022, in the CERN Council Chamber in Geneva, the 30th anniversary of the TERA Foundation – Symposium was opened by the CERN Director General Fabiola Gianotti. The TERA activities along the years 1991-2021 have been described.

Fabio Sauli summarised the TERA developments in detectors for medical diagnostics and Marco Durante, Roberto Orecchia, and Maurizio Vretenar gave keynote speeches respectively on radiobiology and clinics of hadron therapy, and on the Next Ion Medical Machine Study at CERN (NIMMS).

Our **Elena Benedetto**, from SEEIIST Association has participated and presented „Nov. 2018 - April 2021: Compact SC ion synchrotrons and gantries for CNAO, MedAustron and SEEIIST“

TERA was founded on 15 September 1992 by Ugo Amaldi, Elio Borgonovi, Giampiero Tosi and Gaudenzio Vanolo. Few years later, Roberto Orecchia joined the Board. Since 1995 the Accelerators and Detectors Section is hosted by CERN (Bld.182) and most activities have been performed in collaboration with CERN physicists and engineers.

Our Executive Team of SEEIIST Association



Elena Benedetto is Italian and joined SEEIIST in April 2021 as Technical Coordinator. She holds a PhD in Engineering and has 18 years experience in accelerator physics. She entered the field of medical accelerators four years ago, when she joined the TERA Foundation, and since 2019 is collaborating with CERN, where she contributed to the preparatory phase of the SEEIIST facility design by leading the synchrotron and gantry studies.



Luca Garolfi is Italian and has joined SEEIIST the 1st of September 2022 as Beam Physicist. He has a Ph. D in accelerators physics and has past experience in accelerators design and particles sources.



Peter Grübling is German and works for SEEIIST as CEO since January 2021. He has a PhD in Physics and a Master degree in Business and Engineering. He 20 years of experience in managing of particle therapy projects like MIT Marburg and MedAustron.



Petya Georgieva is a communication specialist, graduated in Switzerland and in France with master's degrees from University of Geneva, University of Neuchatel and University of Nice Sophia Antipolis. She has more than 8 years' experience in communications of international organisations working at CERN, CERN openlab, South East European International Institute for Sustainable Technologies and the International Rainwater Harvesting Alliance, Geneva, Switzerland.



Eleonora De Cata is Italian and has a broad experience In Finance, Accounting and Administration in Europe and United States in both multinationals and associations/ NGOs. She has joined SEEIIST at the beginning of 2021 and is responsible for finance, banks, payroll, taxes, accounting, administration and specific projects.



Mariusz Sapinski is Polish and has worked for SEEIIST until November 2021 as an expert on beam instrumentation and transfer lines. He has a Ph.D. degree in experimental physics and has experience in particle physics and astrophysics. Currently, he is responsible for beam instrumentation of proton beams at Paul Scherrer Institute, including the proton therapy center.



Luka Uskoković is Montenegrin and has a wide experience in economy, marketing, finance and project management in business and public sector. He works with SEEIIST since January 2021 as external Marketing Expert responsible for international marketing activities and digital marketing approach. He holds a PhD in economics and over 15 years experience in marketing, banking and economy.



Anna Vnuchenko is Ukrainian and works with SEEIIST since 1st October 2022 as Beam physicist. She has a PhD in Physics and an experience in experimental physics with a strong background in research, development and operation of particle accelerators. She has in-deep knowledge of RF engineering, accelerators, medical and plasma physics, and extensive background in all aspects of data analysis and simulation of various physical processes.