

Virtual Training Course on Mathematical Modelling for Radiation Processing (RER1021-EVT2101729)

06-08 July 2021, Virtual

Tentative AGENDA

Tuesday, 06 July 2021

Session I: Introductory Session

10:00 – 10:30 Opening of the Training by:
 - Ms Tomoko Furusawa, PMO, TCEU (IAEA)
 Scope and Objectives of the Training,
 Adoption of the agenda,
 Introduction of Experts.

Session II: Introduction to Modelling

Moderator: Mr Josef Mittendorfer

10:30 – 11:15	Introduction to Modelling	<i>Mr Florent Kuntz (Aerial), France</i>
11:15 – 11:30	<i>Coffee Break</i>	
11:30 – 12:15	History of Mathematical Modelling	<i>Mr Mark Bailey (Risø), Denmark</i>
12:15 - 12:30	<i>Discussion Q&A Morning Session</i>	
12:30 – 13:30	<i>Lunch Break</i>	
13:30 – 14:15	Physics and Modelling	<i>Mr Mark Bailey (Risø), Denmark</i>
14:15 – 15:00	Overview of Methods and Tools	<i>Mr Josef Mittendorfer (High Tech), Austria</i>
15:00 – 15:15	<i>Discussion Q&A Afternoon Session</i>	

Wednesday, 07 July 2021

Session III: Tools for Modelling		Moderator: Mr Mark Bailey
10:00 – 10:45	Interpretation of Model Output	<i>Mr Josef Mittendorfer (High Tech), Austria</i>
10:45 – 11:00	<i>Coffee Break</i>	
11:00 – 11:45	Introduction to EGSnrc	<i>Mr Mark Bailey (Risø), Denmark</i>
11:45 – 12:30	Introduction to Geant4 and GATE	<i>Mr Abbas Nasreddine and Mr Thomas Deschler (Aerial), France</i>
12:30 - 13:30	<i>Lunch Break</i>	
13:30 – 14:15	Introduction to RayXpert	<i>Mr Josef Mittendorfer (High Tech), Austria</i>
14:15 – 15:00	Comparison Model Experiments (MCNPX, GEANT4 and RayXpert)	<i>Mr Abbas Nasreddine (Aerial), France</i>
15:00 – 15:15	<i>Discussion Q&A Session III</i>	

Thursday, 08 July 2021

Session IV: Case Studies		Moderator: Mr Florent Kuntz
10:00 – 10:45	CAD Input Example and Demonstration	<i>Mr Josef Mittendorfer (High Tech), Austria</i>
10:45 – 11:00	<i>Coffee Break</i>	
11:00 – 11:45	Case Studies Gamma and E-Beam	<i>Mr Mark Bailey (Risø), Denmark</i>
11:45 – 12:30	Case Study X-Ray and E-Beam (RayXpert)	<i>Mr Abbas Nasreddine (Aerial), France</i>
12:30 - 13:30	<i>Lunch Break</i>	
13:30 – 14:15	Future Developments. What do we need for our application?	<i>Mr Thomas Deschler (Aerial), France</i>
Session V: Closing Session		
14:15 – 15:00	<i>Discussion, Questions, Feedback</i>	

- 15:00 – Closing of the Training by:
- Ms Tomoko Furusawa, PMO, TCEU (IAEA)
 - Mr Bumsoo Han, TO, NAPC (IAEA)
 - Ms Celina Horak, TO, NAPC (IAEA)