Contribution ID: **719** Contribution code: **WEPS047** Type: **Poster Presentation**

Report on Opera-3D hands-on session in the 7th International Accelerator School on Beam Dynamics and Accelerator Technology (ISBA24)

Wednesday 4 June 2025 16:00 (2 hours)

The 7th International School on Beam Dynamics and Accelerator Technology (ISBA24), held in Chiangmai University during November 1-9, 2024, encompassed 5 days opportunities where the foundation of accelerator physics is applied during the hands-on sessions with simulation software including ASTRA, ELEGANT, Opera-3D and CST Studio Suite. Opera-3D, an FEM based Maxwell's equation solver, is known for its powerful low-frequency electromagnetic simulation capabilities. Instructed by two lecturers from Synchrotron Light Research Institute (SLRI), 18 students from China, Japan, India and Thailand were trained on the Opera-3D software fundamentals in the application of magnet design for particle accelerator. The students showcased their knowledge in the group assignments including the design of H-shape dipole, C-shape dipole and combined horizontal and vertical correcting magnet with success. Thanks to the generous support of the ISBA24 sponsors and Sigma Solutions, who provided the software license during school. This article reports on the completion of the ISBA24 Opera-3D hands-on session provided to graduate students and young researchers from the Asian region.

Footnotes

Paper preparation format

Word

Region represented

Asia

Funding Agency

Author: SUNWONG, Prapaiwan (Synchrotron Light Research Institute)

Co-author: TANGYOTKHAJORN, Warissara (Synchrotron Light Research Institute)

Presenter: SUNWONG, Prapaiwan (Synchrotron Light Research Institute)

Session Classification: Wednesday Poster Session

Track Classification: MC5: Beam Dynamics and EM Fields: MC5.D11 Code Developments and Simulation Techniques