

Gamma-Ray Spectrometry

Recent advances in research, development, and applications

Tuesday-Thursday, Feb. 20-22, 2018, The Unit of Nuclear Engineering, BGU

Tuesday, Feb 20	Topics
09:00 -10:20	1. Why is Gamma Ray Spectrometry Important in Israel & Workshop Objectives 2. History of Gamma-Ray Spectrometry
10:20- 10:40	Coffee Break
10:40-12:00	3. Nucleus Isotopes and Decay Schemes 4. Gamma Ray Interactions and Shapes of Spectra
12:00-13:00	Lunch Break
13:00-14:00	5. Participants' lectures
14:00-15:00	6. Germanium Detectors I
15:00-15:20	Coffee Break
15:20-16:30	7. Germanium Detectors II 8. Gamma Ray Spectrometer Electronics

Wednesday, Feb 21	Topics
09:00 -10:20	9. Germanium Detector Efficiency and Coincidence Effects 10. Dead Time and Pile Up Corrections
10:20- 10:40	Coffee Break
10:40-12:00	11. Background Radiation and Shielding 12. Gamma-Ray Self Attenuation
12:00-13:00	Lunch Break
13:00-14:00	13. Participants' lectures
14:00-15:00	14. Uncertainty of Measurement
15:00-15:20	Coffee Break
15:20-16:30	15. Detection Limits 16. Radiation Protection in a Counting Lab

Thursday, Feb 22	Topics
09:00 -10:20	17. Natural Occurring Radioactive Material in Oil and Gas Exploration 18. Compton Suppression
10:20- 10:40	Coffee Break
10:40-12:00	19. Neutron Activation Analysis 20. Quality Assurance and Quality Control
12:00-13:00	Lunch Break
13:00-14:00	21. Participants' lectures
14:00-15:00	22. Laboratories for Students 23. Room Temperature Detectors
15:00-15:20	Coffee Break
15:20-16:30	24. In Situ Gamma-Ray Detection 25. Gamma-Gamma Coincidence 26. Workshop Evaluation