

Research & Services | Electron Microprobe Laboratory (Yissum) code: 34-2007-1756 Oded Navon, HUJI, Faculty of Science, The Institute of Earth Sciences

# Categories

Electron microprobe, electron probe microanalysis (EPMA), mineralogy, gemology, metallography, material sciences, chemistry, physics, electronics, biology, medicine, environmental science, and industrial engineering

# **Objective/function**

• The laboratory is active in the field of qualitative and quantitative compositional analyses of major and minor elements

# **Research provided**

- Full service analysis: For regular clients who have fairly consistent samples and analyses
- Partial service analysis: The client participates in the analysis, deciding how it is to be performed. This option is for clients with samples with which they are not familiar as well as for characterization purposes
- Students perform their own research to learn the operational requirements of the equipment and perform their own analyses

# Advantages

• Non-destructive, high precision major and minor element analysis on micrometer size spots

# **Client record**

- Dr. Ronit Kessel; Quantitative mineral analysis for silicate, oxide, sulphide, sulphate and carbonate minerals
- Dr. Oded Navon; Quantitative analysis of inclusions in diamonds and other minerals
- Dr. Itzhak Roman; Quantitative analysis of fluorine in human teeth
- The Hadassah Medical School; Quantitative analysis of metals for bio-medical technology

#### Available equipment

- Jeol 8600 EPMA including 4 four WDS detectors
- Automation system
- Pioneer Norvar EDS detector (133 eV)
- Digital Image analysis software

# Staff

• Oded Navon, PhD

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- Ronit Kessel, PhD
- Tamar Shalev, MEng

# Contact

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# **Contact for more information:**

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