

## Research & Services | Process and Environmental Catalysis Laboratory (Yissum)

**code:** 34-2007-1808

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### Categories

Process and environmental catalysis, process development, multiphase catalysis, organic chemical intermediates, hydrogen storage, upgrading of fuels, purification of combustion gasses

### Objective/function

- The Process and Environmental Catalysis Laboratory focuses on the application of multiphase catalysis to the synthesis of organic chemical intermediates for the pharmaceutical, fragrance and agrochemical industries

### Research provided

- Process development using unit syntheses such as halogenation, hydrogenation, oxidation, alkylation and carbonylation in heterogeneous and homogeneous systems.
- Phase transfer catalysis, where concurrent extraction and reaction were performed in the presence of amphiphilic multifunctional catalysts
- Creation of novel synthetic routes
- Research on fuel improvement
- Purification of combustion gases
- Refinement of hydrogen fuel carriers
- Removal of toxicants (NO<sub>x</sub> and Hg) from flue gasses

### Advantages

- The lab is staffed with highly knowledgeable, skilled researchers using state-of-the-art technologies and equipment

### Client record

- Will be supplied upon request

### Available equipment

- Variety of batch and continuous chemical reactors
- Automatic batch reactor with on-line IR monitor
- Several gas and liquid chromatographs. GCMS

### Staff


- Yoel Sasson, PhD
- Betty Hazan MSc

- Mandan Chidambaram PhD
- Sachin Sovanave PhD
- 20 MSc and PhD students

## Contact

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### Contact for more information:

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