

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

code: 34-2007-1808

[Yoel \(Casali\) Sasson](#), HUJI, Faculty of Science, The Institute of Chemistry

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_x 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

- Yoel Sasson, PhD ysasson@vms.huji.ac.il

Contact for more information:

Itzik Goldwaser , VP, Head of Research Collaborations , +972-2-6586685

Yissum Research Development Company of the Hebrew University of Jerusalem
Hi-Tech Park, Edmond J. Safra Campus, Givat-Ram, Jerusalem P.O. Box 39135, Jerusalem 91390
Israel Telephone: 972-2-658-6688, Fax: 972-2-658-6689