



Department of
Chemistry
Faculty of Exact Sciences
Bar-Ilan University



Chemistry Hall | 03.08.22 | 11:00

Coffee will be served at 10:45

Dr. Yury Torubaev

Energetic patterns of intermolecular interactions in crystals engineering

Visiting scientist at Weizmann Institute of Science

Analysis of the energetic patterns of intermolecular interactions (or in other words, of its Energy Frameworks) allows to (a) visualize supramolecular reactions; (b) find long-range supramolecular synthons; (c) predict the packing pattern of the new co-crystals ; (d) understand (and predict) a crystal habit; (e) investigate the mechanical properties of the crystals; (f) understand the hierarchy of molecular crystal structure, polymorphism .

Apart from this, the potential of molecular co-crystals in fundamental research, material science and pharmaceuticals will be discussed.

Y. V. Torubaev, D. K. Rai, I. V. Skabitsky, S. Pakhira, and A. Dmitrienko, *New Journal of Chemistry*, 2019; DOI: 10.1039/C9NJ00347A

Y. Torubaev and I. V. Skabitsky, *CrystEngComm*, 2020; doi: 10.1039/d0ce01093f

Y. Torubaev, Ivan Skabitsky and Konstantin A. Lyssenko, *Crystal Growth & Design*, 2022; DOI: 10.1021/acs.cgd.1c01207

. Y V. Torubaev, Ivan V. Skabitsky, Aleksei A. Anisimov, Ivan V. Ananyev, *CrystEngComm*, 2022; DOI: 10.1039/D1CE01487K

