

CURRICULUM VITAE
CHAGIT DENEKAMP-KARNI

General:

ID number: 059152330

Date and place of birth: 25 December 1964, Haifa, Israel.

Marital status: Married + 3

Academic Degrees:

- Ph.D., 1996, Department of Chemistry, Technion.
- M.Sc., 1992, Department of Chemistry, Technion.
- BA in Chemistry, 1989, Department of Chemistry, Technion.

Appointments:

- 2007-** Head Chemistry R&D Group, Chemistry and Materials Department, Rafael.
- 2002-2007** Senior Lecturer, Department of Chemistry, Technion
- 1999-2002** Lecturer, Department of Chemistry, Technion.
- 1998-1999** Guest researcher, Department of Pharmaceutical Sciences, University of Antwerp.
- 1996-1998** Post Doctorate Fellow, Department of Chemistry, University of Groningen.
- 1989-1996** Teaching assistant, Department of Chemistry, Technion.

Theses:

- Ph.D. theses, 1996, "Steric Effects in Gas Phase Protonation Processes upon Chemical Ionization Mass Spectrometry".
- M.Sc. theses, 1992, "Mechanistic Studies of [2+2] Photocycloaddition".

Chagit Denekamp - List of Publications:

1. Becker, D.; Denekamp, C.; Haddad, N. “*Diradical Intermediates in Intramolecular [2+2] Photocycloaddition*” *Tetrahedron Lett.* 33, 827-830, **1992**.
2. Denekamp, C.; Mandelbaum, A.; Weisz, A.; Ito, Y. “*Preparative Separation of Stereoisomeric 1-methyl-4-methoxymethyl cyclohexanecarboxylic acids by pH-zone-refining Counter-current Chromatography*” *J. Chromatogr. A*, 685, 253-257, **1994**.
3. Denekamp, C.; Mandelbaum, A. “*Configurational Effects on Internal Proton Transfer and Ion-Neutral Complex Formation in Stereoisomeric 1,4-Di(alkoxymethyl)cyclohexanes on Chemical Ionization*” *J. Mass Spectrom.* 30, 1421-1428, **1995**.
4. Denekamp, C.; Etinger, A.; Fokkens, R. H.; Khaselev, N.; Mandelbaum, A.; Nibbering, N. M. M. “*Effects of Conformation on Proton Affinities of Stereoisomeric Ethers*” *J. Mass Spectrom.* 30, 1174-1178, **1995**.
5. Denekamp, C.; Weisz, A.; Mandelbaum, A. “*Stereospecificity and Concertedness of Retro-Diels Alder Fragmentation in Some Diester Systems Upon Chemical Ionization*” *J. Mass Spectrom.* 31, 1028-1032, **1996**.
6. Denekamp, C.; Feringa, B. L “*Optically Active Diarylethenes for Multimode Photoswitching Between Liquid- Crystalline Phases*”. *Adv. Mater.* 10, 1080-1082, **1998**.
7. Denekamp, C.; Pocsfalvi, G.; Claeys, M. “*Charge-remote and Charge-proximate Fragmentations in Deuterium-labeled n-Hexadecyltriphenylphosphonium Cations upon High-energy Collisional Activation: Evidence for the Involvement of a Phenyl Biradical*” *Int. J. Mass Spectrom.* 188, 163-175, **1999**.
8. Denekamp, C.; Claeys, M.; Pocsfalvi, G. “*Mechanism of Cross-Ring Cleavage Reactions in Dirhamnosyl Lipids: Effect of the Alkali Ion*” *Rapid Commun. Mass Spectrom.* 14, 794-799, **2000**.
9. Denekamp, C.; Van den Heuvel, H.; Voinov, V. G.; Claeys, M.; Seto, C.; Grossert, J. S.; Waddell, D. S.; Curtis, J. M.; Boyd, R. K. “*Charge-remote fragmentation characteristics of functionalized alkanes in high-energy collision-induced dissociation*” *Rapid Commun. Mass Spectrom.* 14, 1035-1043, **2000**.
10. Denekamp, C.; Mandelbaum, A. “*Proton Transfer via Strained Transition States in the Elimination of Alcohols from MH⁺ Ions of Stereoisomeric Diethers and Hydroxy*

- Esters upon Chemical Ionization and Collision-induced Dissociation*” *J. Mass Spectrom.* **36**, 422-429, **2001**.
11. Denekamp, C.; Claeys, M.; Pocsfalvi, G.; Ma, Y-L. “*Mechanism of Cross Ring Cleavage Reactions in Glycoconjugates: Effect of the Alkali Ion*” *Adv. Mass Spectrom.* **15**, 551-552, **2001**.
 12. Denekamp, C.; Stanger A. “*Substituent Effect and Multisite Protonation in the Fragmentation of Alkyl Benzoates*” *J. Mass Spectrom.* **37**, 336–342, **2002**.
 13. Denekamp, C.; Stanger A. “*Ion-Neutral Complex Formation and 1,3-Proton Transfer in the Chemical Ionization of Alkylcyclohexyl benzoates*” *J. Chem. Soc. Chem. Commun.* 236-237, **2002**.
 14. Denekamp, C.; Tenetov, E.; Horev, Y. “*Homolytic cleavage in pyridinium Ions, an excited state process*” *J. Am. Soc. Mass Spectrom.* **14**, 790–801, **2003**.
 15. Denekamp, C.; Egbaria, E. “*Remarkable Amine-TFA Self Assembly*” *J. Am. Soc. Mass Spectrom* **15**, 356–362, **2004**.
 16. Denekamp, C.; Sandlers, Y. “*Anomeric Distinction and Oxonium Ion Formation*” *J. Mass Spectrom.* **40**, 765–771, **2005** (DOI: 10.1002/jms.848).
 17. Denekamp, C.; Gottlieb, L.; Tamiri, T.; Tsoglin, A.; Shilav, R. and Kapon, M. “*Two Separable Conformers of TATP and Analogs Exist at Room Temperature*”. *Org. Lett.*, **7**, 2461-2464, **2005**.
 18. Denekamp, C.; Rabkin, E. and Tsoglin, A. “*A New Charge Derivatization Reagent*” *Org. & Biomol. Chem.*, **3**, 2503-2504, **2005** (10.1039/b505950j).
 19. Denekamp, C.; Sandlers, Y. “*Formation and Stability of Oxocarbenium Ions from Glycosides*” *J. Mass Spectrom.*, **40**, 1055–1063, **2005** (DOI: 10.1002/jms.880).
 20. Denekamp, C. and Tsoglin, A. “*Development of Mass Spectrometric Method for Analysis of Novel Cyclic Nitramine Explosives - DTIW and HNIW*” *Anal. Chem.*, **77**, 7796-7800, **2005** (DOI: 10.1021/ac051326z).
 21. Denekamp, C. and Sandlers Y. “*Electrophilicity-Nucleophilicity Scale Also in the Gas-phase*” *Angew. Chem.* **45**, 2093-2096, **2006**.
 22. Denekamp C. and Yaniv, M. “*Benzene Loss from Trityl Cations – a Mechanistic Study*” *J. Am. Soc. Mass Spectrom.* **17**, 730-736, **2006**.
 23. Denekamp, C.; Rabkin, E. and Tsoglin, A. “*Radical Induced Fragmentation of Peptides Using Triphenylcorrole(CuIII) Complexes*”. *J. Am. Soc. Mass Spectrom.* **18**, 791-801, **2006** (DOI: 10.1016/j.jasms.2006.12.010).

24. Denekamp, C.; Salman, H.; Abraham, Y.; Eichen, Y.; Suwinska, K. and Ben Ari, J. "Anion Binding of the Tripyrrole Methane Group: a Combined Theoretical and Experimental Study" *Chemistry - A Eur. J.* **13**, 657-665, **2007**. (DOI: 10.1002/chem.200600546).
25. Denekamp, C.; Rabkin, E. and Lacour, J. "Tris(2,4,6-trimethoxyphenyl) Carbenium Salt for Charge-derivatization of Amino Acids and Peptides". *J. Mass Spectrom.*, **43**, 623–627, **2008** (DOI: 10.1002/jms.1360).
26. Denekamp, C.; Wies, A.; Cohen-Arazi, Y. and Sokol, E. "Morphology and Shock Sensitivity in RDX Based Flexible PBX". In the proceedings of IMEM **2009**.
27. Denekamp, C.; Gonen, H.; Shulman, H.; Kaufman, I.; Klyman, D. and Hirshberg, B. "Thermal Analysis of Explosive – Compatibility and Relative Stability". In the proceedings of PARARI **2011**.
28. Hirshberg, B. and Denekamp, C. "First principles prediction of an insensitive high energy density material". *Phys. Chem. Chem. Phys.*, **15**, 623–627, **2013** (DOI: 10.1039/c3cp52734d).
29. Olga Meikler, Chagit Denekamp, Michael Zelter and Yoav Eichen "Controlling the Crystal Morphology and Polymorphism of 2,4-Dinitroanisole". *Cryst. Growth Des.*, **18**, 1350-1357, **2018** (DOI: 10.1021/acs.cgd.7b01199).
30. Galit Parvari, Moran Levi, Maya Preshel, Chagit Denekamp, Levi Gotlibb, Dan Grinstein, and Yoav Eichen "Proposed Proton-Transfer Mechanism for the Initial Decomposition Steps of BTATz". *J. Phys. Chem. A*, **122**, 5789-5798, **2018** (DOI: 10.1021/acs.jpca.7b12217).

Chapter in Book:

"Gas-phase Chemistry of Organolithium Compounds" Denekamp, C. in *The Chemistry of Organolithium Compounds* (Patai series; Eds. Rappoport, Z.; Marek, I), Wiley-Chichester, **2004**, 205.