

Ing. Martin Hradilek, Ph.D.

List of Publications:

1. Böhm, S.; Kubík, R.; **Hradilek M.**; Němeček J.; Hušák, M.; Pakhomova, S.; Ondráček, J.; Kratochvíl B.; Kuthan, J.: "Sterically Crowded Heterocycles: I. Molecular Structure of 3-Chain Substituted 2-Phenylimidazo[1,2-a]pyridinium Salts." *Collect. Czech. Chem. Commun.* **1994**, *59*, 2677-2696.
2. Böhm, S.; Kubík, R.; **Hradilek M.**; Němeček J.; Hušák, M.; Kratochvíl B.; Kuthan, J.: "Sterically Crowded Heterocycles: II. Conformational Structure of 2-Phenyl--3-[(Z)-1,3-diphenyl-3-oxopropenyl]imidazo[1,2-a]pyridine and Related Compounds." *Collect. Czech. Chem. Commun.* **1995**, *60*, 115-126.
3. Kubík, R.; Němeček J.; Böhm, S.; **Hradilek M.**; Kuthan, J.: "Diastereoisomeric Imidazo[1,2-a]pyridines." *Mendeleev Commun.* **1995**, 29-30.
4. Konvalinka J.; Litera, J.; Weber, J.; Vondrášek, J.; **Hradilek, M.**; Souček, I. Pichová, P. Majer, P. Štrop, J. Sedláček, A.-M. Heuser, H. Kottler and H.-G. Kräusslich: Masojídková, M.; Holý, A.: "Configurations of Diastereoisomeric Hydroxyethylene Isosteres Strongly Affect Biological Activities of a Series of Specific Inhibitors of Human Immunodeficiency Virus Proteinase." *Eur. J. Biochem.* **1997**, *250*, 559-566.
5. Dohnálek, J.; Hašek, J.; Brynda, J.; Fábry, M.; Sedláček, J.; Konvalinka, J.; **Hradilek, M.**; Souček, Adams M.J.; Taylor C.E.: "Peptidomimetic Inhibitors Complexed with HIV-1 Protease: Crystallisation for X-ray Diffraction Studies." *Gen. Physiol. Biophys.* **1998**, *17*, Suppl 1:9-11.
6. Brožková, K.; Křížová, I.; Pavlíčková, L.; **Hradilek, M.**; Fusek, M.; Souček, M.; Pichová, I.: "Peptidomimetic Inhibitors of Extracellular Aspartic Proteinases of *Candida albicans* and *Candida tropicalis*." *Collect. Czech. Chem. Commun.* **1999**, *64*, 130-137.
7. Matušina, Z.; Olbřímková, R.; Votavová, H.; Neumann, J.; **Hradilek, M.**; Souček, M.; Maloň, P.; Kodíček, M.; Stibor, I.: "Linear Heptapeptides Containing DNA-Intercalators. Synthesis and Interaction with DNA" *Collect. Czech. Chem. Commun.* **1999**, *64*, 1419-1432
8. Rinnová, M.; **Hradilek, M.**; Bařinka, C.; Weber, J.; Souček, M.; Vondrášek, J.; Klimkait T.; Konvalinka J.: "A Picomolar Inhibitor of Resistant Strains of Human Immunodeficiency Virus Protease Identified by a Combinatorial Approach" *Arch. Biochem. Biophys.* **2000**, *382*, 22-30.
9. Dohnálek, J.; Hašek, J.; Dušková, J.; Petroková, H.; **Hradilek, M.**; Souček, M.; Konvalinka, J.; Brynda, J.; Sedláček, J.; Fábry, M.: "A Distinct Binding Mode of a Hydroxyethylamine Isostere Inhibitor of HIV-1 Protease." *Acta Crystallogr. D Biol. Crystallogr.* **2001**, *57*, 472-476..
10. Dohnálek, J.; Hašek, J.; Dušková, J.; Petroková, H.; **Hradilek, M.**; Souček, M.; Konvalinka, J.; Brynda, J.; Sedláček, J.; Fábry, M.: "Hydroxyethylamine Isostere of an HIV-1 Protease Inhibitor Prefers Its Amine to the Hydroxy Group in Binding to Catalytic Aspartates. A Synchrotron Study of HIV-1 Protease in Complex with a Peptidomimetic Inhibitor." *J. Med. Chem.* **2002**, *45*, 1432-1438.
11. Brynda, J.; Řezáčová, P.; Fábry, M.; Hořejší, M.; Šťouračová, R.; Sedláček, J.; Souček, M.; **Hradilek, M.**; Lepšík, M.; Konvalinka, J.: "A phenylnorstatine inhibitor binding to HIV-1 protease: Geometry, protonation, and subsite-pocket interactions analyzed at atomic resolution." *J. Med. Chem.* **2004**, *47*, 2030-2036.