

Laszlo Jicsinszky

Education:

1983 M.Sc. in organic chemistry, medicinal chemistry, Eötvös L. University, Budapest, Hungary

1991. PhD. in biochemistry, University of Debrecen, Debrecen, Hungary

Theses

MSc.: *Synthesis of 6-(5-chloro-2-pyridyl)-5,7-dioxo-5,6-dihydro-pyrrolo[3,4-b]pyrazine and its derivatives*

PhD: *Synthesis of cyclodextrin derivatives having pharmaceutical importance*

Positions and Employments:

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| <i>Mar 2014 – present</i> | Researcher
Dipartimento di Scienza e Tecnologia del Farmaco, Università degli Studi di Torino
Turin, Italy |
| <i>Sep 2012 – Oct 2014</i> | Scientific advisor
CycloLab - Cyclodextrin Research & Development Laboratory,
Budapest, Hungary |
| <i>Jan 2011 – Sep 2012</i> | Senior research scientist
Innovative Biologics Inc.,
Herndon, VA, USA |
| <i>Jan 1991 – Sep 2012</i> | Head of Synthetic Department
CycloLab - Cyclodextrin Research & Development Laboratory Ltd.,
Budapest, Hungary |
| <i>Jan 1989 – Dec 1990</i> | Research fellow
Cyclolab R&D Lab. aff. Chinoin Ltd.,
Budapest, Hungary |
| <i>Sep 1983 – Dec 1988</i> | Research fellow
G. Richter Pharm. Works Ltd.,
Budapest, Hungary |
| <i>Sep 1976 – Sep 1978</i> | Laboratory assistant
G. Richter Pharm. Works Ltd.,
Budapest, Hungary |

Skills & Activities

<i>Languages</i>	English, Hungarian, Spanish
<i>Scientific Memberships</i>	Hungarian Chemical Society Working Committee for Carbohydrates, Nucleic Acids and Antibiotics of the Hungarian Academy of Sciences

Publication:

> 125, including conference papers

Patents: > 10

Book Chapters: 1

L. Jicsinszky, H. Hashimoto, E. Fenyvesi, A. Ueno: Ch. 4.: *Cyclodextrin derivatives* pp. 57–188. (in Comprehensive Supramolecular Chemistry, Vol. 3. Cyclodextrins (1996, Pergamon Press, Oxford, ISBN: 978-0-08-040610-7))

Journal Publications of the last 10 years:

- V. Agostoni, P. Horcajada, M. Noiray, M. Malanga, A. Aykaç, L. Jicsinszky, A. Vargas-Berenguel, N. Semiramoth, S. Daoud-Mahammed, V. Nicolas, C. Martineau, F. Taulelle, J. Vigneron, A. Etcheberry, C. Serre, R. Gref: A “green” strategy to construct non-covalent, stable and bioactive coatings on porous MOF nanoparticles. *Scientific Reports* 01/2015; DOI:10.1038/srep07925
- M. Malanga, M. Bálint, I. Puskás, K. Tuza, T. Sohajda, L. Jicsinszky, L. Szente, É. Fenyvesi: *Synthetic strategies for the fluorescent labeling of epichlorohydrin-branched cyclodextrin polymers*. *Beilstein Journal of Organic Chemistry* 12/2014; 10:3007-3018. DOI:10.3762/bjoc.10.319
- K. Tuza, L. Jicsinszky, T. Sohajda, I. Puskás, É. Fenyvesi: *Synthesis of modified cyclic and acyclic dextrans and comparison of their complexation ability*. *Beilstein Journal of Organic Chemistry* 12/2014; 10:2836-43. DOI:10.3762/bjoc.10.301
- K. Németh, C. Domonkos, V. Sarnyai, J. Szemán, L. Jicsinszky, L. Szente, J. Visy: *Cationic permethylated 6-monoamino-6-monodeoxy- β -cyclodextrin as chiral selector of dansylated amino acids in capillary electrophoresis..* *Journal of Pharmaceutical and Biomedical Analysis* 06/2014; 99C:16-21. DOI:10.1016/j.jpba.2014.06.028
- R. Anand, F. Manoli, I. Manet, M. P. Donzello, E. Viola, M. Malanga, L. Jicsinszky, É. Fenyvesi, S. Monti: *Fluorescent cyclodextrin carriers for a water soluble ZnII pyrazinoporphyrazine octacation with photosensitizer potential*. *RSC Advances* 05/2014; 4(50):26359-26367. DOI:10.1039/C3RA47034B

- O. A. Krumkacheva, M. V. Fedin, D. Polovyanenko, L. Jicsinszky, S. R. A. Marque, E. G. Bagryanskaya: *Structural Equilibrium in New Nitroxide-Capped Cyclodextrins: CW and Pulse EPR Study*. The Journal of Physical Chemistry B 06/2013; 117(27). DOI:10.1021/jp404173j
- G. Cravotto, K. Martina, M. Caporaso, G. Heropoulos, L. Jicsinszky: *Highly efficient Synthesis of per-substituted amino-cyclodextrins under Microwave Irradiation in a closed Cavity*. Materials Research Society symposia proceedings. Materials Research Society 01/2013; 1492:177-182. DOI:10.1557/opl.2013.176
- N. Kandoth, M. Malanga, A. Fraix, L. Jicsinszky, E. Fenyvesi, T. Parisi, I. Colao, M. T. Sciortino, S. Sortino: *A Host-Guest Supramolecular Complex with Photoregulated Delivery of Nitric Oxide and Fluorescence Imaging Capacity in Cancer Cells*. Chemistry - An Asian Journal 12/2012; 7(12). DOI:10.1002/asia.201200640
- G. Tárkányi, K. Németh, R. Mizsei, O. Tőke, J. Visy, M. Simonyi, L. Jicsinszky, J. Szemán, L. Szenté: *Structure and stability of warfarin-sodium inclusion complexes formed with permethylated monoamino- β -cyclodextrin..* Journal of pharmaceutical and biomedical analysis 09/2012; 72. DOI:10.1016/j.jpba.2012.09.003
- A. P. Plazzo, C. T. Höfer, L. Jicsinszky, É. Fenyvesi, L. Szenté, J. Schiller, A. Herrmann, P. Müller: *Uptake of a fluorescent methyl- β -cyclodextrin via clathrin-dependent endocytosis*. Chemistry and Physics of Lipids 04/2012; 165(5):505-11. DOI:10.1016/j.chemphyslip.2012.03.007
- Y. Wang, B. Cohen, L. Jicsinszky, A. Douhal: *Femtosecond to Second Studies of a Water-Soluble Porphyrin Derivative in Chemical and Biological Nanocavities*. Langmuir 03/2012; 28(9):4363-72. DOI:10.1021/la204949e
- M. Malanga, L. Jicsinszky, É. Fenyvesi: *Rhodamine-labeled cyclodextrin derivatives*. Journal of Drug Delivery Science and Technology 01/2012; 22(3):260-265. DOI:10.1016/S1773-2247(12)50037-7
- K. Yannakopoulou, L. Jicsinszky, C. Aggelidou, N. Mourtzis, T. M. Robinson, A. Yohannes, E. M. Nestorovich, S. M. Bezrukov, V. A. Karginov: *Symmetry requirements for effective blocking of pore-forming toxins: comparative study with alpha-, beta-, and gamma-cyclodextrin derivatives..* Antimicrobial Agents and Chemotherapy 07/2011; 55(7):3594-7. DOI:10.1128/AAC.01764-10
- H. Law, J. M. Benito, J. M. García Fernández, L. Jicsinszky, S. Crouzy, J. Defaye: *Copper(II)-Complex Directed Regioselective Mono-p-Toluenesulfonylation of Cyclomaltoheptaose at a Primary Hydroxyl Group Position: An NMR and Molecular Dynamics-Aided Design*. The Journal of Physical Chemistry B 06/2011; 115(23):7524-32. DOI:10.1021/jp2035345
- G. Uccello-Barretta, C. Evangelisti, F. Balzano, L. Vanni, F. Aiello, L. Jicsinszky: *Water soluble heptakis(6-deoxy-6-thio)cyclomaltoheptaose capped gold nanoparticles via metal vapour synthesis: NMR structural characterization and complexation properties*. Carbohydrate research 02/2011; 346(6):753-8. DOI:10.1016/j.carres.2011.02.001
- K. Németh, E. Varga, R. Iványi, J. Szemán, J. Visy, L. Jicsinszky, L. Szenté, E. Forró, F. Fülöp, A. Péter, M. Simonyi: *Separation of cis-beta-lactam enantiomers by capillary electrophoresis using cyclodextrin derivatives*. Journal of pharmaceutical and biomedical analysis 11/2010; 53(3):382-8. DOI:10.1016/j.jpba.2010.04.026

- K. Németh, G. Tárkányi, E. Varga, T. Imre, R. Mizsei, R. Iványi, J. Visy, J. Szemán, L. Jicsinszky, L. Szenté, M. Simonyi: *Enantiomeric separation of antimalarial drugs by capillary electrophoresis using neutral and negatively charged cyclodextrins*. Journal of pharmaceutical and biomedical analysis 09/2010; 54(3):475-81. DOI:10.1016/j.jpba.2010.09.020
- J. Kovacs, I. Pinter, P. Meszaros, M. Kajtar- Peredy, L. Jicsinszky: *ChemInform Abstract: Cyclodextrin-Isocyanate: A New Access from Phosphinimines..* ChemInform 08/2010; 30(35). DOI:10.1002/chin.199935240
- L. Boffa, E. Calcio Gaudino, K. Martina, L. Jicsinszky, G. Cravotto: *A new class of cationic cyclodextrins: synthesis and chemico-physical properties*. New Journal of Chemistry 01/2010; 34(9). DOI:10.1039/c0nj00021c
- E. G. Bagryanskaya, D. Bardelang, S. Chenesseau, J.-P. Finet, L. Jicsinszky, H. Karoui, S. R. A. Marque, K. Möbius, D. Polovyanenko, A. Savitsky, P. Tordo: *EPR, NMR, and Thermodynamic Evidences for Forced Nuclear Spin-Electron Spin Interactions in the Case of 1-Phenyl-2-Methylpropyl-1,1-Dimethyl-2-Nitroxide (TIPNO) Attached to Permethylylated β -Cyclodextrin*. Applied Magnetic Resonance 12/2009; 36(2):181-194. DOI:10.1007/s00723-009-0036-0
- É. Fenyvesi, L. Jicsinszky: *Cyclodextrin-containing sensors to provide an early warning of contamination*. Land Contamination & Reclamation 11/2009; 17(3):405-412. DOI:10.2462/09670513.951
- M. Hardy, D. Bardelang, H. Karoui, A. Rockenbauer, J.-P. Finet, L. Jicsinszky, R. Rosas, O. Ouari, P. Tordo: *Improving the Trapping of Superoxide Radical with a β -Cyclodextrin-5-Diethoxyphosphoryl-5-methyl-1-pyrroline- N -oxide (DEPMPO) Conjugate*. Chemistry - A European Journal 10/2009; 15(42):11114-8. DOI:10.1002/chem.200901342
- G. Varga, G. Tárkányi, K. Németh, R. Iványi, L. Jicsinszky, O. Toke, J. Visy, L. Szenté, J. Szemán, M. Simonyi: *Chiral separation by a monofunctionalized cyclodextrin derivative: From selector to permethyl-beta-cyclodextrin bonded stationary phase*. Journal of pharmaceutical and biomedical analysis 09/2009; 51(1):84-9. DOI:10.1016/j.jpba.2009.08.009
- D. N Polovyanenko, S. R. A. Marque, S. Lambert, L. Jicsinszky, V. F. Plyusnin, E. G. Bagryanskaya: *Electron Paramagnetic Resonance Spin Trapping of Glutathionyl Radicals by PBN in the Presence of Cyclodextrins and by PBN Attached to β -Cyclodextrin*. The Journal of Physical Chemistry B 10/2008; 112(41):13157-62. DOI:10.1021/jp8050164
- G. Sicoli, I. Tomoyuki, L. Jicsinszky, V. Schurig: *A Maltooctaose Derivative ("Acyclodextrin") as a Chiral Stationary Phase for Enantioselective Gas Chromatography*. European Journal of Organic Chemistry 09/2008; 2008(25):4241-4244. DOI:10.1002/ejoc.200800508
- G. Uccello-Barretta, F. Balzano, F. Pertici, L. Jicsinszky, G. Sicoli, V. Schurig: *ChemInform Abstract: External vs. Internal Interactions in the Enantiodiscrimination of Fluorinated α -Amino Acid Derivatives by Heptakis[2,3-di-O-acetyl-6-O-(tert-butyl dimethylsilyl)]- β -cyclodextrin, a Powerful Chiral Solvating Agent for NMR Spectroscopy*. ChemInform 07/2008; 39(30). DOI:10.1002/chin.200830193
- G. Uccello-Barretta, F. Balzano, F. Pertici, L. Jicsinszky, G. Sicoli, V. Schurig: *External vs. Internal Interactions in the Enantiodiscrimination of Fluorinated α - Amino Acid Derivatives by Heptakis[2,3- di- O- acetyl- 6- O- (tert- butyldimethylsilyl)]- β - cyclodextrin, a Powerful Chiral Solvating*

Agent for NMR Spectroscopy. European Journal of Organic Chemistry 04/2008; 2008(11):1855 - 1863.
DOI:10.1002/ejoc.200701113

- K. Martina, F. Trotta, B. Robaldo, N. Belliardi, L. Jicsinszky, G. Cravotto: *Efficient regioselective functionalizations of cyclodextrins carried out under microwaves or power ultrasound*. Tetrahedron Letters 12/2007; 48(52):9185-9189. DOI:10.1016/j.tetlet.2007.10.104
- M. Nagy, L. Szöllősi, S. Kéki, P. Herczegh, Gy. Batta, L. Jicsinszky, M. Zsuga: *Synthesis and self-assembly behavior study of α,ω -dicarboxyl-poly(ethylene glycol)-permethyl-6-amino-6-deoxy- β -cyclodextrin-monoamide: A new β -cyclodextrin conjugate*. Journal of Polymer Science Part A Polymer Chemistry 11/2007; 45(22). DOI:10.1002/pola.22259
- G. Sicoli, F. Pertici, Z. Jiang, L. Jicsinszky, V. Schurig: *Gas-chromatographic approach to probe the absence of molecular inclusion in enantioseparations by carbohydrates. Investigation of linear dextrins ("acyclodextrins") as novel chiral stationary phases*. Chirality 05/2007; 19(5):391-400.
DOI:10.1002/chir.20383
- D. Bardelang, L. Charles, J.-P. Finet, L. Jicsinszky, H. Karoui, S. R. A. Marque, Valérie Monnier, Antal Rockenbauer, Roseline Rosas, Paul Tordo: *α -phenyl-N-tert-butyl-nitrone-type derivatives bound to beta-cyclodextrins: Syntheses, thermokinetics of self-inclusion and application to superoxide spin-trapping*. Chemistry 02/2007; 13(33):9344-54. DOI:10.1002/chem.200700369
- D. Bardelang, A. I. Rockenbauer, L. Jicsinszky, J.-P. Finet, H. Karoui, S. Lambert, S. R. A. Marque, P. Tordo: *Nitroxide bound beta-cyclodextrin: Is there an inclusion complex?*. The Journal of Organic Chemistry 10/2006; 71(20):7657-67. DOI:10.1021/jo061194p
- Cs. Novák, Zs. Éhen, M. Fodor, L. Jicsinszky, J. Orgoványi: *Application of combined thermoanalytical techniques in the investigation of cyclodextrin inclusion complexes*. Journal of Thermal Analysis and Calorimetry 05/2006; 84(3):693-701. DOI:10.1007/s10973-005-7605-8
- Zs. Éhen, F. Giordano, J. Sztatisz, L. Jicsinszky, Cs. Novák: *Thermal characterization of natural and modified cyclodextrins using TG-MS combined technique*. Journal of Thermal Analysis and Calorimetry 04/2005; 80(2):419-424. DOI:10.1007/s10973-005-0670-1
- F. Sallas, A. Marsura, V. Petot, I. Pintér, J. Kovács, L. Jicsinszky: *Synthesis and Study of New β -Cyclodextrin 'Dimers' Having a Metal Coordination Center and carboxamide or urea linkers*. Helvetica Chimica Acta 10/2004; 81(3-4):632 - 645. DOI:10.1002/hlca.19980810314
- R. Iványi, L. Jicsinszky, Z. Juvancz, N. Roos, K. Otta, J. Szejtli: *Influence of (hydroxy)alkylamino substituents on enantioseparation ability of single-isomer amino- β -cyclodextrin derivatives in chiral capillary electrophoresis*. Electrophoresis 08/2004; 25(16):2675-86. DOI:10.1002/elps.200406030
- T. Carofiglio, M. Cordioli, R. Fornasier, L. Jicsinszky, U. Tonellato: *Synthesis of 6I-amino-6I-deoxy-2I-VII, 3I-VII-tetradeca-O-methyl-cyclomaltoheptaose*. Carbohydrate Research 06/2004; 339(7):1361-6.
DOI:10.1016/j.carres.2004.03.007