GYVENIMO APRAŠYMAS

Vardas Pavardė Daumantas Matulis

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Išsilavinimas

1998-2001	Podaktarinės studijos. Minesotos Universitetas, Saint Paul, Minesota, JAV, 1998 birželis - 2001 gruodis. Ligandų jungimosi su DNR biofizika. Vadovas Profesorius Victor. A. Bloomfield.
1994-1998	Daktaratas (Ph.D.), Biochemija, Molekulinė Biologija ir Biofizika. Minesotos Universitetas, Saint Paul, Minesota, JAV, 1994 liepa - 1998 gegužė. Disertacija: Anijoninių sulfonatų ligandų jungimasis su baltymais bei poveikis baltymų struktūrai ir stabilumui. Vadovas - Profesorius Rex E. Lovrien.
1988-1993	Bakalauro (5 metų diplomo) studijos. Biochemija. Vilniaus Universitetas, Vilnius, Lietuva, 1988 rugsėjis - 1993 birželis. Diplominis darbas: *E. coli* V38 kamieno atsparumo nikelio jonams mechanizmas. Vadovas Dr. Jonas Rubikas.
1992	Vasaros mokykla: Energetikos planavimas ir aplinkosauga, Oslo universitetas, Oslas, Norvegija.1992 liepa - rugpjūtis.

Mokymo patirtis, Švietimas

2009 ruduo	FEBS kursas “Structure, Folding and Dynamics of Proteins and Their Complexes”, Budapeštas, Vengrija
2005 - dabar	Baltymų fizikinės chemijos kursas, VU GF, Bioch ir Biofiz katedra
Minesotos Universitete	dėsčiau bei buvau asistentu šiuose kursuose:
1999, 2000	Gamtos mokslų vasaros mokyklos seminarų vedėjas, 1999 bei 2000 vasaros.
1999	Biochemijos laboratoriniai darbai (dėstytojas, 130 studentų), 1999 ruduo.
1996, 1997	Biochemijos laboratoriniai darbai (asistentas), 1996 žiema bei 1997 pavasaris.

Darbo patirtis

2005-iki dabar	Biotermodinamikos ir vaistų tyrimo laboratorijos (ankščiau Rekombinantinių baltymų laboratorijos) vedėjas, Biotechnologijos institutas, Vilnius, Lietuva.
2001 12-2004 11	Mokslininkas, 3-Dimensional Pharmaceuticals (vėliau Johnson&Johnson)
1998-2001	Mokslininkas stažuotojas, minesotos universitetas, JAV
1994-1998	Doktorantas, Minesotos universitetas, JAV
1993-1994	Jaunesnysis mokslo darbuotojas, Biochemijos Institutas

Mokslinės publikacijos 2001-2010 m.

1. Toleikis, Z., Cimmperman, P., Petrauskas, V. and Matulis, D. 2011. Determination of the volume chantes induced by ligand binding to heat shock protein 90 using high-pressure denaturation. *Analytical Biochemistry*. 413 (2011) : 171-178.
2. Cimmperman, P. and **Matulis, D.** 2011. Protein Thermal Denaturation Measurements via a Fluorescent Dye. In „*Biophysical Approaches Determining Ligand Binding to Biomolecular Targets. Detection, Measurement and Modeling*". Eds. Podjarny, A., Dejaegere, A. and Kiefer, B. RSC Publishing. Chapter 8.
3. Petrikaitė, V. and **Matulis, D**. 2010. Thermodynamics of Natural and Synthetic Inhibitor Binding to Human Hsp90. In "*Thermodynamics*". Intech Publishing. 77-92.
4. Zubrienė, A., Gutkowska, M., Matulienė, J., Chaleckis, R., Michailovienė, V., Voroncova, A., Venclovas, Č., Zylicz, A., Zylicz, M., and **Matulis, D**. 2010. Thermodynamics of radicicol binding to human Hsp90 alpha and beta isoforms. *Biophys. Chem*. 152(1-3): 153-63.
5. Rink, C., Sasse, F., Zubrienė, A., **Matulis, D**. and Maier, M. E. 2010. Probing the influence of an allylic methyl group in zearlenone analogues on binding to Hsp90. *Chemistry*, 16(48):14469-78.
6. Čapkauskaitė, E., Baranauskienė, L., Golovenko, D., Manakova, E., Gražulis, S., Tamkevičius, S., **Matulis, D**. 2010. Indapamide-like substituted benzenesulfonamides as inhibitors of carbonic anhydrases I, II, VII, and XIII. *Bioorg. Med. Chem*.18:7357-7364.
7. Sūdžius, J., Baranauskienė, L., Golovenko, D., Matulienė, J., Michailovienė, V., Torresan, J., Jachno, J., Sukackaitė, R., Manakova, E., Gražulis, S., Tumkevičius, S. and **Matulis, D**. 2010. 4-[*N*-(Substituted 4-Pyrimidinyl)amino]benzenesulfon-amides as Inhibitors of Carbonic Anhydrase Isozymes I, II, VII and XIII. *Bioorg. Med. Chem.* 18:7413-7421.
8. Baranauskienė, L.; Hilvo, M.; Matulienė, J.; Golovenko, D.; Manakova, E.; Dudutienė, V.; Michailovienė, V.; Torresan, J.; Jachno, J.; Parkkila, S.; Maresca, A.; Supuran, C. T.; Gražulis, S. and **Matulis, D**. 2010. Inhibition and binding studies of carbonic anhydrase isozymes I, II and IX with benzimidazo[1,2-c][1,2,3]thiadiazole-7-sulfonamides, *J. Enz. Inhib. Med. Chem.*, 25(6):863-70.
9. Zurawska, A.; Urbanski, J.; Matulienė, J.; Baraniak, J.; Klejman, M. P.; Filipek, S.; **Matulis, D**. and Bieganowski, P. 2010. Mutations that increase both Hsp90 ATPase activity in vitro and Hsp90 drug resistance in vivo. *BBA – Molec. Cell Res*.;1803(5):575-583.
10. Labanauskas, L.; Dudutienė, V.; **Matulis, D**.; Urbelis, G. 2009. Synthesis of a new heterocyclic system: 3 phenylbenzimidazo [1,2-*c*]-[1,2,3]selenadiazole . *Chem. Heterocycl. Comp*. No. 9, 1435-1436.
11. Ugele, M.; Sasse, F.; Knapp, S.; Fedorov, O.; Zubriene, A.; **Matulis, D**.; Maier ME.; 2009. Propionate Analogues of Zearalenone Bind to Hsp90. *ChemBioChem* , 10, 2203 – 2212.
12. Baranauskienė, L.; Petrikaitė, V.; Matulienė, J.; **Matulis, D**.; 2009. Titration Calorimetry Standards and the Precision of Isothermal Titration Calorimetry Data. *Int. J. Mol. Sci. 10*:2752-2762.
13. Zubrienė, A.; Matulienė, J.; Baranauskienė, L.; Jachno, J.; Torresan, J.; Michailovienė,

V.; Cimmperman, P.; **Matulis, D**.; 2009. Measurement of Nanomolar Dissociation Constants by Titration Calorimetry and Thermal Shift Assay – Radicicol Binding to Hsp90 and Ethoxzolamide Binding to CAII. *Int. J. Mol. Sci. 10*:2662-2680.

14. Cikotiene, I.; Kazlauskas, E.; Matuliene, J.; Michailoviene, V.; Torresan, J.; Jachno, J.; **Matulis, D**.; 2009. 5-Aryl-4-(5-substituted-2,4- dihydroxyphenyl)-1,2,3-thiadiazoles as inhibitors of Hsp90 chaperone. *Bioorg Med Chem Lett*. 19:1089-1092.
15. Hilvo, M.; Baranauskiene, L.; Salzano, A.M.; Scaloni, A.; **Matulis, D**.; Innocenti, A.; Scozzafava, A.; Monti, S.M.; Di Fiore, A.; De Simone, G.; Lindfors, M.; Jänis, J.; Valjakka, J.; Pastoreková, S.; Pastorek, J.; Kulomaa, M.S.; Nordlund, H.R.; Supuran, C.T.; Parkkila, S.; 2008. Biochemical characterization of CA IX: one of the most active carbonic anhydrase isozymes *J Biol Chem* 283: 27799-27809.
16. Cimmperman, P.; Baranauskiene, L.; Jachimoviciute, S.; Jachno, J.; Torresan, J.; Michailoviene, V.; Matuliene, J.; Sereikaite, J.; Bumelis, V.; **Matulis, D**.; 2008. A Quantitative Model of Thermal Stabilization and Destabilization of Proteins by Ligands. *Biophys. J.* 95:3222-3231.
17. Baranauskienė, L.; Matulienė, J.; **Matulis, D**.; 2008. Determination of the thermodynamics of carbonic anhydrase acid-unfolding by titration calorimetry. *J. Biochem. Biophys. Meth.* 70:1043–1047.
18. Dudutienė, V., Baranauskienė, L., **Matulis, D**., 2007. Benzimidazo[1,2-c][1,2,3]thiadiazole-7-sulfonamides as inhibitors of carbonic anhydrase, *Bioorg Med Chem Lett, 17*, 3335–3338
19. **Matulis, D**., Kranz, J. K., Salemme, F. R., and Todd, M. J. 2005. Thermodynamic stability of carbonic anhydrase: measurements of binding affinity and stoichiometry using ThermoFluor. *Biochemistry.* 44, 5258-5266.
20. **Matulis, D**. and Todd, M. 2004. Thermodynamics – structure correlations of sulfonamide inhibitor binding to carbonic anhydrase. In "Biocalorimetry 2", eds. Ladbury, J.E. and Doyle, M.L. Wiley. 107-132.
21. **Matulis, D**., Rouzina, I., and Bloomfield, V. 2002. Thermodynamics of cationic lipid binding to DNA and DNA condensation: Roles of electrostatics and hydrophobicity. *J. Am. Chem. Soc.* 124, 7331-7342.
22. **Matulis, D**. 2001. Thermodynamics of the hydrophobic effect. III. Condensation and aggregation of alkanes, alcohols, and alkylamines. *Biophys. Chem.* 93, 67-82.
23. **Matulis, D**., and Bloomfield, V. 2001. Thermodynamics of the hydrophobic effect. II. Calorimetric measurement of enthalpy, entropy, and heat capacity of aggregation of alkylamines and long aliphatic chains. *Biophys. Chem.* 93, 53-65.

Visuomeninė veikla

1996-iki dabar	JAV Lietuvių Bendruomenės Filadelfijos Apylinkės pirmininkas, 2003 gegužė - 2004 gegužė. Nuo gegužės pabaigos atsistatydinau iš JAV LB Filadelfijos Apylinkės bei Jaunimo Sąjungos pirmininko pareigų, nes vasaros pabaigoje išvykau į Lietuvą, kur esu Biotechnologijos Instituto laboratorijos vedėjas bei dėstau Vilniaus Universitete. Amerikos Chemikų Asociacijos narys.

1996-iki dabar JAV Biofizikų Draugijos narys.

2002-2004 JAV Lietuvių Jaunimo Sąjungos Filadelfijos Skyriaus pirmininkas, 2002 lapkritis - 2004 gegužė

- Lietuvių, gyvenusių Amerikoje, visuomeninės organizacijos "Sugrįžus" prezidentas
- Lietuvos Respublikos Prezidento Valdo Adamkaus visuomeninis patarėjas emigracijos klausimais
- Užsienio lietuvių mokslo forumo narys

Patentai

1. "Benzimidazo[1,2-C][1,2,3]thiadiazol-7-sulfonamides as inhibitors of carbonic anhydrase and the intermediates for production thereof" PCT/LT2007/000005
2. „5-aryl-4-(5-substituted 2,4-dihydroxyphenyl)-1,2,3-thiadiazoles as inhibitors of Hsp90 chaperone and the intermediates for production thereof". PCT/LT2008/000003, (WO/2009/134110).

Kviestiniai pranešimai tarptautinėse konferencijose:

1. Matulis, D. Structural biothermodynamics of inhibitor binding to human recombinant carbonic anhydrases and Hsp90. "The 66th Calorimetry Conference". Hawaii, USA. (2011.06.14).
2. Matulis, D. Carbonic anhydrase inhibitors as anticancer agents. Molėtai, Lithuania. (2010.06.16).
3. Matulis, D. Structural biothermodynamics and the search for drug-like compounds. Plenary lecture given at the Institute of Theoretical Physics and Astronomy of Vilnius university, Molėtai Astronomical Observatory, Molėtai, Lithuania. (2010.07.31).
4. Matulis, D. Structural biothermodynamics and the search for drug-like compounds. Plenary lecture given at the Conference of Organic Synthesis, Kaunas University of Technology, Kaunas, Lithuania. (2009.04.22).
5. Matulis, D. Carbonic anhydrase and Hsp90 inhibitor binding measurements by TSA, ITC, and X-ray crystallography. Instruct meeting. Budapest, Hungary (2009.03.30).
6. Matulis, D. Characterization of carbonic anhydrases and determination of inhibitor binding by thermal shift assay. Invited by Prof. Seppo Parkkila, Institute of Medical Technology / University of Tampere, Biokatu 6, 33520 Tampere, Finland (2007.11.19).
7. Matulis, D. Characterization of carbonic anhydrases and determination of inhibitor binding by thermal shift assay. Invited by Prof. Claudiu Supuran, Universita Degli Studi Di Firenze, Dipartimento Di Chimica, Italy (2007.11.23).
8. Matulis, D. Human Hsp90 stability and radicicol binding by thermal shift assay. Invited by Prof. Maciej Zylicz, International Institute of Molecular and Cell Biology in Warshaw. Poland (2006.12.15).
9. Matulis, D., and Todd, M. July 2003. Thermodynamics of sulfonamide inhibitor binding to carbonic anhydrase using titration calorimetry: an interesting effect of protein, ligand, and buffer protonation. Presented at the 2003 Current Trends in Microcalorimetry, Boston, USA.

10. Matulis, D., Rouzina, I., and Bloomfield, V. November 1999. Thermodynamics of DNA binding and condensation: isothermal titration calorimetry and electrostatic mechanism. Presented at the Nucleic Acid Interest Group, University of Minnesota.
11. Matulis, D. March 1998. Using isothermal titration calorimetry to evaluate the energetics of intermolecular interactions. Presented at the Nucleic Acid Interest Group, University of Minnesota.

Kiti žodiniai pranešimai konferencijose ir susitikimuose:

1. Matulis, D. Structural biothermodynamics of inhibitor binding to human recombinant carbonic anhydrases. "FEBS satellite CA meeting". 2011 06 22 – 24. Montecatini, Italija.
2. Zubrienė, A., Kazlauskas E., Baranauskienė, L., Petrauskas, V., Matulis, D. Towards the intrinsic lead binding thermodynamics. COST TD 0905. 2011 04 28 – 05 01. Splitas, Kroatija.
3. Matulis, D. Determination of the Volume Changes Induced by Ligand Binding to Hsp90 Using High Pressure Denaturation. Biophysical Society 55th Annual Meeting. 2011 03 05 – 09. Baltimore, JAV.
4. Matulis, D. Structural biothermodynamics of inhibitor binding to human recombinant carbonic anhydrases and Hsp90. Johnson & Johnson. 2011 03 10. JAV.
5. Toleikis, Z., Cimmperman, P., and Matulis, D. The Volumes of Ligand Binding to Hsp90 by High Pressure Denaturation. The 6th International Conference on High Pressure Bioscience and Biotechnology (HPBB2010). 2010 08 28-09 01. Munchenas, Vokietija.
6. Zubrienė, A., Matulis, D. Thermodynamics of radicicol binding to human Hsp90 alpha and beta isoforms. ESBES+ISPPP+ISB. 2010 09 05-08. Bolonija, Italija.
7. Zubriene, A., Maier, E.M., Sasse, F., Kazlauskas, E., Toleikis, Z., Chaleckis, R., Michaoloviene, V., Petrikaite, V., Grinius, L., Matuliene, J., Matulis, D. Radicicol, a natural compound and an efficient inhibitor of Hsp90, as a lead for anticancer drug design. COST CM0804, "Natural Products as Drug and Leads to Drugs". 2010 10 12 – 15. Kreta, Graikija.
8. Zubriene, A., Baranauskiene, L., Kazlauskas, E., Toleikis, Z., Chaleckis, R., Michailoviene, V., Petrikaite, V., Capkauskaite, E., Dudutiene, V., Matuliene, J., Matulis, D. Drug Binding Energetics by Titration Calorimetry, Thermal and Pressure Shift Assay. COST Action TD09/05 Epigenetics - Bench to Bedside. 2010 11 22 – 25. Brno, Čekija.
9. Baranauskiene, L., Kazlauskas, E., Cikotiene, I., Matuliene, J., Zubiene, A., Jachno, J., Torresan, J., Michailoviene, V., Cimmperman, P., Grazulis, S., and Matulis D. Carbonic anhydrase and Hsp90 inhibitor binding measurements by thermal shift assay, titration calorimetry, and x-ray crystallography. INSTRUCT meeting, 2009 03 29-31. Budapeštas, Vengrija.
10. Baranauskienė, L., Sūdžius, J., Michailovienė, V., Matulienė, J., Tumkevičius, S., Matulis, D. Carbonic anhydrase ligand binding by thermal shift assay and titration calorimetry. The 8-th International Conference on the Carbonic Anhydrases, 2009 09 16-

19. Florencija, Italija.

11. Cimmperman, P., Zubriene, A., Baranauskiene, L., Kazlauskas, E., Matuliene, J., and Matulis, D. Determination of protein-ligand binding thermodynamics by thermal shift assay. European Biophysics Congress Genova, 2009 07 11-15.Genova, Italija.
12. Petrikaitė, V., and Matulis, D. Thermal Shift Assay and Titration Calorimetry for Protein-Ligand Interactions. COST CM0804 konferencija "Chemical Biology with Natural Products, 2009 12 3-5. Siena, Italija.
13. Kazlauskas, E., Cikotiene, I., Matuliene, J., Zubriene, A., Jachno, J., Torresan, J., Michailoviene, V., Matulis, D. Resorcinol class Hsp90 inhibitor binding thermodynamics and the effect on cancerous cells. The 4th International Conference on the Hsp90 Chaperone Machine, 2008.10.2-6. Bavaria, Vokietija.
14. Baranauskiene, L., Dudutiene, V., Matulis, D. 2006. Benzimidazo [1,2-c][1,2,3] thiadiazole sulfonamides as carboinic anhydrase inhibitors. 7th International Conference on Carbonic Anhydrases: CA Research in the Postgenomic Era. Whitney Laboratory of the University of Florida, St. Augustine, USA.
15. Matulis, D., and Todd, M. August 2003. Thermodynamics of sulfonamide inhibitor binding to carbonic anhydrase using titration calorimetry: and interesting effect of protein, ligand, and buffer protonation. Presented at the 58th Calorimetry Conference, Honolulu, USA.
16. Matulis, D., and Bloomfield, V. September 2001. Determination of hydrophobic interactions between long aliphatic hydrocarbons: aliphatic amine aggregtion and protonation pKa shift. Presented at the 15th Annual Gibbs Conference on Biothermodynamics, Carbondale, USA.
17. Matulis, D., and Bloomfield, V. August 2001. Determination of hydrophobic interactions between long aliphatic hydrocarbons: aliphatic amine aggregtion and protonation pKa shift. Presented at the 56th Annual Calorimetry Conference, Colorado Springs, USA.
18. Matulis, D., Rouzina, I., and Bloomfield, V. May 2000. Thermodynamics of cationic lipid binding to DNA by isothermal titration calorimetry. The roles of electrostatics and hydrophobicity. Presented at the 14th Annual Gibbs Conference on Biothermodynamics, Carbondale, USA.
19. Matulis, D., Rouzina, I., and Bloomfield, V. May 2000. Thermodynamics of cationic lipid binding to DNA by isothermal titration calorimetry. The roles of electrostatics and hydrophobicity. Presented at 2000 Midwest Thermodynamics and Statistical Mechanics Conference, Minneapolis, USA.
20. Matulis, D., and Lovrien, R. July 1998. Protection of enzymes by aromatic sulfonates from inactivation by acid. Presented at the First International Conference on Protein Stabilization, Leeds, Great Britain
21. Matulis, D., and Lovrien, R. February 1998. ANS anion - protein binding primarily depends on ion pair formation. Given at the 42nd Annual Meeting of the Biophysical Society, Kansas City, USA.

Stendiniai pranešimai susitikimuose ir konferencijose:

1. Čapkauskaitė, E., Zubrienė, A., Baranauskienė, L., Tamulaitienė, G., Manakova, E., Gražulis, S., Tumkevičius, S., Matulis, D. Synthesis of pyrimidine derivatives as inhibitors of carbonic anhydrase. 23rd International Congress on Heterocyclic Chemistry (ICHC-23). 2011 07 31 – 08 04. Glasgow, D.Britanija.
2. Petrikaitė, V., Kazlauskas, E., Matulienė, J., Matulis, D. Anticancer activity and Admet properties of resorcinol – bearing lead compounds. 47-oji Vaistų chemijos tarptautinė konferencija „Drug Discovery and Selection“. 2011 07 06 – 08. Lyon, Prancūzija.
3. Dudutienė, V, Zubrienė, A., Kairys, V., Matulis, D. Probing of the carbonic anhydrase isozyme active center cavities with inhibitor functional groups. Konferencija „Frontiers in Medicinal Chemistry“. 2011 06 19 – 21. Stokholmas, Švedija.
4. Petrauskas, V., Zubrienė, A., Kazlauskas, E., Baranauskienė, L., Matulis, D. Intrinsic Binding Parameters as a Necessity to Correlate Energetics with Structure. 19th Biennial Meeting of the International Society for Molecular Recognition. 2011 06 16 – 19. Tavira, Portugalija.
5. Jogaitė, V., Zubrienė, A., Gylytė, J., Michailovienė, V., Matulis, D. Inhibitors binding to Recombinant Human CAXII. „FEBS satellite CA meeting“. 2011 06 22 – 24. Montecatini, Italija.
6. Petrikaitė, V., Kazlauskas, E., Matulienė, J., Matulis, D. Rezorcinolio darinių priešvėžinis aktyvumas ir farmakokinetinių savybių tyrimas. „XV pasaulio lietuvių mokslo ir kūrybos simpoziumas“, 2011 07 03 – 05. Kaunas - Vilnius.
7. Matulis, D. Carbonic anhydrase inhibitors as anticancer agents. 2010 06 16. Molėtai, Lietuva.
8. Matulis, D. Struktūrinė biotermodinamika bei vaistinių medžiagų paieška. Molėtų astronomijos observatorija. 2010 07 26- 08 04. Molėtai, Lietuva.
9. Toleikis, Z., Cimmperman, P., and Matulis, D. Determination of The Volume Changes Induced by Ligand Binding to Hsp90 Using High Pressure Denaturation. The 6th International Conference on High Pressure Bioscience and Biotechnology (HPBB2010). 2010 08 28-09 01. Munchenas, Vokietija.
10. Petrauskas, V., Maksimavičiūtė, E., Matulis, D. Thermodynamics of Ion Pair Formations in Proteins. ESBES+ISPPP+ISB. 2010 09 05-08. Bolonija, Italija.
11. Zubriene, A., Kazlauskas, E., Chaleckis, R., Michailoviene, V., Matuliene, J., Matulis, D. Thermodynamics of radicicol binding to human Hsp90 alpha and beta isoforms. The 5th International Conference on The Hsp90 Chaperone Machine. 2010 09 29 – 10 03. Les Diablerets, Šveicarija.
12. Petrikaitė, V., Kazlauskas, E., Zubrienė, A., Michailovienė, V., Matulienė, J., Matulis, D. Resorcinol - Bearing Hsp90 inhibitors as anticancer agents. COST Action TD09/05 Epigenetics - Bench to Bedside. 2010 11 22 – 25. Brno, Čekija.
13. Kazlauskas, E., Cikotiene, I., Matuliene, J., Zubriene, A., Jachno, J., Torresan, J., Michailoviene, V., Petrikaite, V., Grinius, L., Matulis, D. Resorcinol class Hsp90 inhibitor binding thermodynamics and the effect on cancerous cells. The 4th International Conference on the Hsp90 Chaperone Machine, 2008.10.2-6 d. Bavaria, Germany.
14. S. Gražulis, L. Baranauskienė, E. Manakova, R. Sukackaitė, D. Golovenko, G. Tamulaitienė, D. Matulis. Novel thiadiazoles inhibitors of human carbonic anhydrases.

7th ScanBalt Forum & Biomaterial Days; Vilnius, Lithuania, 2008.09.24-26.

15. S. Gražulis, L. Baranauskienė, E. Manakova, R. Sukackaitė, D. Golovenko, G. Tamulaitienė, D. Matulis. Novel thiadiazoles inhibitors of human carbonic anhydrases. XXI Congress and General Assembly of the International Union of Crystallography; Osaka, Japan, 2008.08.23-31.
16. Cimmperman, P., Toleikis, Z., Matulis, D. A general model to describe protein thermal stabilization and destabilization by ligands. 2nd International Symposium on Biothermodynamics, Frankfurt am Main, Germany, 2008.02.21-22.
17. Matulis, D., and Todd, M. September 2002. Thermodynamics of inhibitor binding to carbonic anhydrase by titration calorimetry and ThermoFluor®. Presented at the 16th Gibbs Conference on Biothermodynamics, Carbondale, USA.
18. Matulis, D., and Todd, M. August 2002. Thermodynamics of inhibitor binding to carbonic anhydrase by titration calorimetry and ThermoFluor®. Presented at the 57th Annual Calorimetry Conference, New Brunswick, USA.
19. Matulis, D., Rouzina, I., and Bloomfield, V. February 2002. Determination of hydrophobic interactions between long chain aliphatic hydrocarbons by titration calorimetry. Presented at the 46th Annual Meeting of the Biophysical Society, San Francisco, USA.
20. Matulis, D., Rouzina, I., and Bloomfield, V. February 2001. Thermodynamics cationic lipid binding to DNA by titration calorimetry: the roles of electrostatics and hydrophobicity. Presented at the 45th Annual Meeting of the Biophysical Society, Boston, USA.
21. Lovrien, R., Wu, C., and Matulis, D. March 2000. Lectin and protease isolation from crude via coprecipitation matrix ligands. Presented at the American Chemical Society 219th National Meeting, San Francisco, USA.
22. Lovrien, R. and Matulis, D. March 2000. Isolation of proteins from crudes: Matrix entanglement ligand basis. Presented at the American Chemical Society 219th National Meeting, San Francisco, USA.
23. Matulis, D., Rouzina, I., and Bloomfield, V. February 2000. Thermodynamics of DNA binding and condensation: isothermal titration calorimetry and electrostatic mechanism. Presented at the 44th Annual Meeting of the Biophysical Society, New Orleans, USA.
24. Lovrien, R., Wu, C., and Matulis, D. February 2000. Forces, energetics, topology of outer directed hydrophobicity in organic ligand-protein matrices. Presented at the 44th Annual Meeting of the Biophysical Society, New Orleans, USA.
25. Matulis, D., Rouzina, I., and Bloomfield, V. October 1999. Thermodynamics of DNA binding and condensation: isothermal titration calorimetry and electrostatic mechanism. Presented at the Nucleic Acid Interest Group meeting.
26. Matulis, D., Rouzina, I., and Bloomfield, V. October 1999. Thermodynamics of DNA binding and condensation: isothermal titration calorimetry and electrostatic mechanism. Presented at the 13th Annual Gibbs Conference on Biothermodynamics, Carbondale, USA.
27. Matulis, D., and Lovrien, R. February 1999. Prediction of free energies and enthalpies of anionic aliphatic ligand binding to proteins based on experimental database and the enthalpy additivity principle. Presented at the 43rd Annual Meeting of the Biophysical

Society, Baltimore, USA.

28. Lovrien, R., and Matulis, D. February 1999. Pushing agents, pulling agents in protein isolation. Presented at the 43rd Annual Meeting of the Biophysical Society, Baltimore, USA.
29. Matulis, D., and Lovrien, R. October 1998. Thermodynamics of the organic and inorganic anion binding to the strongest site on bovine serum albumin. Presented at the 12th Annual Gibbs Conference on Biothermodynamics, Carbondale, USA.
30. Matulis, D., and Lovrien, R. June 1998. Protection of enzymes by aromatic sulfonates from inactivation by acid. Presented at the First International Conference on Protein Stabilization, Leeds, Great Britain.
31. Matulis, D., and Lovrien, R. October 1997. ANS anion - protein binding primarily depends on ion pair formation. Presented at the 11th Annual Gibbs Conference on Biothermodynamics, Carbondale, USA.
32. Matulis, D., and Lovrien, R. May 1997. Alkane sulfates (SDS) bind to proteins by forming ion pairs with the positively charged amino acids. Presented at the 3rd International Conference on Lipid-Binding Proteins, Minneapolis, USA.
33. Matulis, D., Wu, C., and Lovrien, R. February 1997. Designing pushing, pulling, hybrid push-pull agents for protein precipitation. Presented at the 41st Annual Meeting of the Biophysical Society, New Orleans, USA.
34. Lovrien, R., and Matulis, D. February 1996. Biophysical perspectives on protein precipitation-coprecipitation. Presented at the 40th Annual Meeting of the Biophysical Society, Baltimore, USA.
35. Lovrien, R. and Matulis, D. February 1995. Hard and soft sulfate and sulfonate anions in protein precipitation-biorecognition. Presented at the 39th Annual Meeting of the Biophysical Society, San Francisco, USA.
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Moksliniai grantai

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2. „Lėtinės neinfekcinės ligos“ , LMT, (294.800 Lt), 2010 – 2011 12 31.
3. „Cheminė biologija su gamtiniais produktais”, COST, 2009.
4. „Priešvėžinių junginių kūrimas struktūrinės biotermodinamikos metodais“, EEE-Norvegijos grantas, (€565.037), 2008-10.
5. “Junginių, specifiškai slopinančių žmogaus karboanhidrazes, paieška biotechnologiniais metodais ”, LVMSF prioritetinių krypčių rėmimo grantas, (€362.000), 2005-9.

6. “Vaistų kūrimas struktūrinės biotermodinamikos metodais ”, FP6 Marie Curie reintegracijos grantas, (€80.000), 2004-6.