

## Curriculum vitae: Vinokurov L.M.

---

### Address

Shemyakin–Ovchinnikov Institute of bioorganic chemistry RAS, Moscow, Russia

### Contacts

<https://www.ibch.ru/en/users/728>

---

### IBCh positions

Head

---

### Scientific interests

### Scientific societies' membership

### Titles

Doctor of Philosophy (Chemistry)

---

### Publications

1. Solovyev ID, Gavshina AV, Katti AS, Chizhik AI, **Vinokurov LM**, Lapshin GD, Ivashina TV, Khrenova MG, Kireev II, Gregor I, Enderlein J, Savitsky AP (2018). Monomerization of the photoconvertible fluorescent protein SAASoti by rational mutagenesis of single amino acids. *Sci Rep* 8 (1), 15542, [10.1038/s41598-018-33250-z](https://doi.org/10.1038/s41598-018-33250-z)
2. Firsov A, Tarasenko I, Mitouchkina T, Shaloiko L, Kozlov O, **Vinokurov L**, Rasskazova E, Murashev A, Vainstein A, Dolgov S (2018). Expression and Immunogenicity of M2e Peptide of Avian Influenza Virus H5N1 Fused to Ricin Toxin B Chain Produced in Duckweed Plants. *Front Chem* 6, 22, [10.3389/fchem.2018.00022](https://doi.org/10.3389/fchem.2018.00022)
3. Firsov A, Shaloiko L, Kozlov O, **Vinokurov L**, Vainstein A, Dolgov S (2016). Purification and characterization of recombinant supersweet protein thaumatin II from tomato fruit. *Protein Expr Purif* 123, 1–5, [10.1016/j.pep.2016.03.002](https://doi.org/10.1016/j.pep.2016.03.002)
4. Goryashchenko AS, Khrenova MG, Bochkova AA, Ivashina TV, **Vinokurov LM**, Savitsky AP (2015). Genetically encoded FRET-sensor based on terbium chelate and red fluorescent protein for detection of caspase-3 activity. *Int J Mol Sci* 16 (7), 16642–16654, [10.3390/ijms160716642](https://doi.org/10.3390/ijms160716642)
5. Lapshin G, Salih A, Kolosov P, Golovkina M, Zavorotnyi Y, Ivashina T, **Vinokurov L**, Bagratashvili V, Savitsky A (2015). Fluorescence color diversity of great barrier reef corals. *J Innov Opt Health Sci* 8 (4), , [10.1142/S1793545815500285](https://doi.org/10.1142/S1793545815500285)
6. Arslanbaeva LR, Zherdeva VV, Ivashina TV, **Vinokurov LM**, Morozov VB, Olenin AN, Savitskii AP (2011). Induction-resonance energy transfer between the terbium-binding peptide and the red fluorescent proteins DsRed2 and TagRFP. *Biophysics (Oxf)* 56 (3), 381–386, [10.1134/S0006350911030043](https://doi.org/10.1134/S0006350911030043)
7. Markvicheva KN, Bilan DS, Mishina NM, Gorokhovatsky AY, **Vinokurov LM**, Lukyanov S, Belousov VV (2011). A genetically encoded sensor for H<sub>2</sub>O<sub>2</sub> with expanded dynamic range. *Bioorg Med Chem* 19 (3), 1079–1084, [10.1016/j.bmc.2010.07.014](https://doi.org/10.1016/j.bmc.2010.07.014)
8. Rusanov AL, Ivashina TV, **Vinokurov LM**, Goryashchenko AS, Zherdeva VV, Savitsky AP (2010). FRET-sensor for imaging with lifetime resolution. *Proc SPIE Int Soc Opt Eng* 7376, , [10.1117/12.871367](https://doi.org/10.1117/12.871367)
9. Rusanov AL, Ivashina TV, **Vinokurov LM**, Fiks II, Orlova AG, Turchin IV, Meerovich IG, Zherdeva VV, Savitsky AP (2010). Lifetime imaging of FRET between red fluorescent proteins. *J Biophotonics* 3 (12), 774–783, [10.1002/jbio.201000065](https://doi.org/10.1002/jbio.201000065)
10. Arslanbaeva LR, Zherdeva VV, Ivashina TV, **Vinokurov LM**, Rusanov AL, Savitsky AP (2010). Genetically encoded FRET-pair on the basis of terbium-binding peptide and red fluorescent protein. *APPL BIOCHEM MICRO+ 46* (2), 154–158, [10.1134/S0003683810020055](https://doi.org/10.1134/S0003683810020055)
11. Markvicheva KN, Gorokhovatskii AY, Mishina NM, Mudrik NN, **Vinokurov LM**, Lukyanov SA, Belousov VV

- (2010). Signaling function of phagocytic NADPH oxidase: Activation of MAP kinase cascades in phagocytosis. *Russ. J. Bioorganic Chem.* 36 (1), 124–129, [10.1134/S1068162010010140](https://doi.org/10.1134/S1068162010010140)
12. Markvicheva KN, Gorokhovatskiĭ AI, Mishina NM, Mudrik NN, **Vinokurov LM**, Lukianov SA, Belousov VV (2010). Signaling function of phagocytic NADPH oxidase: activation of MAP kinase cascades in phagocytosis. *Bioorg Khim* 36 (1), 133–138.
  13. Samarkina ON, Popova AG, Gvozdk EY, Chkalina AV, Zvyagin IV, Rylova YV, Rudenko NV, Lusta KA, Kelmanson IV, Gorokhovatsky AY, **Vinokurov LM** (2009). Universal and rapid method for purification of GFP-like proteins by the ethanol extraction. *Protein Expr Purif* 65 (1), 108–113, [10.1016/j.pep.2008.11.008](https://doi.org/10.1016/j.pep.2008.11.008)
  14. Rudenko NV, Sinagina LL, Arzhanov MA, Ksenzenko VN, Ivashina TV, Morenkov OS, Shaloiko LA, **Vinokurov LM** (2007). Barnase-barstar high affinity interaction phenomenon as the base for the heterogenous bioluminescence pseudorabies virus' immunoassay. *J Biochem Biophys Methods* 70 (4), 605–611, [10.1016/j.jbbm.2007.01.013](https://doi.org/10.1016/j.jbbm.2007.01.013)
  15. Zhang L, Gurskaya NG, Merzlyak EM, Staroverov DB, Mudrik NN, Samarkina ON, **Vinokurov LM**, Lukyanov S, Lukyanov KA (2007). Method for real-time monitoring of protein degradation at the single cell level. *Biotechniques* 42 (4), 446–450, [10.2144/000112453](https://doi.org/10.2144/000112453)
  16. Zubova NN, Korolenko VA, Astafyev AA, Petrukhin AN, **Vinokurov LM**, Sarkisov OM, Savitsky AP (2005). Brightness of yellow fluorescent protein from coral (zFP538) depends on aggregation. *Biochemistry* 44 (10), 3982–3993, [10.1021/bi048274c](https://doi.org/10.1021/bi048274c)
  17. Zubova NN, **Vinokurov LM**, Savitsky AP (2004). Aggregation of the yellow fluorescent protein zFP538 is pH-dependent. *Proc SPIE Int Soc Opt Eng* 5329, 187–191, [10.1117/12.531480](https://doi.org/10.1117/12.531480)
  18. Gorokhovatsky AY, Marchenkov VV, Rudenko NV, Ivashina TV, Ksenzenko VN, Burkhardt N, Semisotnov GV, **Vinokurov LM**, Alakhov YB (2004). Fusion of Aequorea victoria GFP and aequorin provides their Ca<sup>2+</sup>-induced interaction that results in red shift of GFP absorption and efficient bioluminescence energy transfer. *Biochem Biophys Res Commun* 320 (3), 703–711, [10.1016/j.bbrc.2004.06.014](https://doi.org/10.1016/j.bbrc.2004.06.014)
  19. **Vinokurov LM**, Gorokhovatsky AY, Rudenko NV, Marchenkov VV, Skosyrev VS, Arzhanov MA, Zakharov MV, Burkhardt N, Semisotnov GV, Alakhov YB (2003). Detection of protein-protein interactions using Aequorea victoria bioluminescence resonance energy transfer. *Proc SPIE Int Soc Opt Eng* 4967, 46–54, [10.1117/12.477881](https://doi.org/10.1117/12.477881)
  20. Temirov YV, Esikova TZ, Kashparov IA, Balashova TA, **Vinokurov LM**, Alakhov YB (2003). A catecholic siderophore produced by the thermoresistant Bacillus licheniformis VK21 strain. *Russ. J. Bioorganic Chem.* 29 (6), 542–549, [10.1023/B:RUBI.0000008894.80972.2e](https://doi.org/10.1023/B:RUBI.0000008894.80972.2e)
  21. Temirov IV, Esikova TZ, Kashparov IA, Balashova TA, **Vinokurov LM**, Alakhov IB (2003). Catechol siderophore, produced by thermoresistent strain of Bacillus licheniformis VK21. *Bioorg Khim* 29 (6), 597–604.
  22. Skosyrev VS, Kuleskiy EA, Yakhnin AV, Temirov YV, **Vinokurov LM** (2003). Expression of the recombinant antibacterial peptide sarcotoxin IA in Escherichia coli cells. *Protein Expr Purif* 28 (2), 350–356, [10.1016/S1046-5928\(02\)00697-6](https://doi.org/10.1016/S1046-5928(02)00697-6)
  23. Gorokhovatsky AY, Rudenko NV, Marchenkov VV, Skosyrev VS, Arzhanov MA, Burkhardt N, Zakharov MV, Semisotnov GV, **Vinokurov LM**, Alakhov YB (2003). Homogeneous assay for biotin based on Aequorea victoria bioluminescence resonance energy transfer system. *Anal Biochem* 313 (1), 68–75, [10.1016/S0003-2697\(02\)00514-6](https://doi.org/10.1016/S0003-2697(02)00514-6)
  24. Skosyrev VS, Rudenko NV, Yakhnin AV, Zagranichny VE, Popova LI, Zakharov MV, Gorokhovatsky AY, **Vinokurov LM** (2003). EGFP as a fusion partner for the expression and organic extraction of small polypeptides. *Protein Expr Purif* 27 (1), 55–62, [10.1016/S1046-5928\(02\)00595-8](https://doi.org/10.1016/S1046-5928(02)00595-8)
  25. Skosyrev VS, Gorokhovatsky AY, **Vinokurov LM**, Rudenko NV, Ivashina TV, Ksenzenko VN, Alakhov YB (2001). The dependence of stability of the green fluorescent protein-obelin hybrids on the nature of their constituent modules and the structure of the amino acid linker. *Bioorg Khim* 27 (5), 370–371.
  26. Skosyrev VS, Gorokhovatsky AY, **Vinokurov LM**, Rudenko NV, Ivashina TV, Ksenzenko VN, Alakhov YB (2001). The Dependence of Stability of the Green Fluorescent Protein-Obelin Hybrids on the Nature of Their Constituent Modules and the Structure of the Amino Acid Linker. *Russ. J. Bioorganic Chem.* 27 (5), 323–329, [10.1023/A:1012344414924](https://doi.org/10.1023/A:1012344414924)
  27. **Vinokurov LM**, Yakhnin AV, Ivashkina TV, Ksenzenko VN, Alakhov YB (1998). Stability of functionally active fusion proteins during their biosynthesis and isolation from expressing bacterial cells. *PROGR BIOTECHNOL*

- 15 (C), 645–650, [10.1016/S0921-0423\(98\)80096-8](https://doi.org/10.1016/S0921-0423(98)80096-8)
28. Yakhnin AV, **Vinokurov LM**, Surin AK, Alakhov YB (1998). Green fluorescent protein purification by organic extraction. *Protein Expr Purif* 14 (3), 382–386, [10.1006/prep.1998.0981](https://doi.org/10.1006/prep.1998.0981)
29. Matveev SV, **Vinokurov LM**, Shaloiko LA, Davies C, Matveeva EA, Alakhov YB (1996). Effect of the ATP level on the overall protein biosynthesis rate in a wheat germ cell-free system. *Biochim Biophys Acta* 1293 (2), 207–212, [10.1016/0167-4838\(95\)00244-8](https://doi.org/10.1016/0167-4838(95)00244-8)
30. Ryabova LA, **Vinokurov LM**, Shekhovtsova EA, Alakhov YB, Spirin AS (1995). Acetyl phosphate as an energy source for bacterial cell-free translation systems. *Anal Biochem* 226 (1), 184–186, [10.1006/abio.1995.1208](https://doi.org/10.1006/abio.1995.1208)