

## Curriculum vitae: Alla Generalova

### Address

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

### Contacts

<https://www.ibch.ru/en/users/124>

### Education

2019–to date	Russia, Moscow	M.M. Shemyakin & Yu.A. Ovchinnikov Institute of Bioorganic Chemistry	Dr. habil.
2000–2000	Russia, Moscow	M.M. Shemyakin & Yu.A. Ovchinnikov Institute of Bioorganic Chemistry	PhD in chemistry
1982–1988	Russia, Moscow	M.V. Lomonosov Moscow State Academy of Fine Chemical Technology	Ms in chemistry

### IBCh positions

2020–to date Principal research fellow

### IBCh memberships

Scientific council

Dissertation council

### Scientific interests

Her research interests are the synthesis of the polymer dispersions for immunoassays (*i.e.* based on magnetic nanoparticles), new methods based on the reaction latex particles agglutination, biospecific reactions, interfacial layers, and dynamic surface tension of the absorbed polymers. Her technical skills include the synthesis of polymer nano-particles by emulsion, dispersion and suspension polymerization techniques; modification of the polymer particles surfaces; biomolecule immobilization and others.

### Titles

2019 Doctor of Science (Chemistry)

### Grants and projects

2019–2021 =

2018–2021 =

### Publications

1. Nikolaeva ME, Demina PA, Khaydukov KV, Trifanova EM, Khochenkov DA, Maslov MA, **Generalova AN**, Khaydukov EV, Akasov RA (2026). NIR-activated nanocomplexes based on novel PEG-Chlorin p6 derivatives for photodynamic therapy. *Colloids Surf B Biointerfaces* 266, 115800, [10.1016/j.colsurfb.2026.115800](https://doi.org/10.1016/j.colsurfb.2026.115800)
2. Демина АН, **Генералова АН** (2026). АЛЬТЕРНАТИВНЫЕ МЕТОДЫ РАЗРУШЕНИЯ БАКТЕРИАЛЬНЫХ БИОПЛЕНОК С ИСПОЛЬЗОВАНИЕМ НАНОЧАСТИЦ МЕТАЛЛОВ И ОКСИДОВ МЕТАЛЛОВ. *Биоорганическая химия* 52 (2), 178–199, [10.7868/S1998286026020047](https://doi.org/10.7868/S1998286026020047)
3. **Generalova AN**, Dushina AO (2025). Metal/metal oxide nanoparticles with antibacterial activity and their potential to disrupt bacterial biofilms: Recent advances with emphasis on the underlying mechanisms. *Adv*

*Colloid Interface Sci* 345, 103626, [10.1016/j.cis.2025.103626](https://doi.org/10.1016/j.cis.2025.103626)

4. Savelyev AG, Sochilina AV, Babayeva G, Nikolaeva ME, Kuziaeva VI, Prostyakova AI, Sergeev IS, Gorin DA, Khaydukov EV, **Generalova AN**, Akasov RA (2025). Photocrosslinking of hyaluronic acid-based hydrogels through biotissue barriers. *Biomater Sci* 13 (4), 980–992, [10.1039/d4bm01174k](https://doi.org/10.1039/d4bm01174k)
5. Stepanov ME, Vlasov AA, Demina PA, Akasov RA, Babayeva G, **Generalova AN**, Khaydukov EV (2024). Intravital microscopy: dorsal skinfold chamber model. *St. Petersburg State Polytechnical University Journal: Physics and Mathematics* 17 (32), 311–315, [10.18721/JPM.173.263](https://doi.org/10.18721/JPM.173.263)
6. Suchkov MY, Kuzyaeva VI, Sergeev IS, Babayeva G, Demina PA, Sochilina AV, Akasov RA, Egorova TV, Khaydukov EV, **Generalova AN** (2024). Modified natural polymers with bioactive additives for restoration of critical bone defect. *St. Petersburg State Polytechnical University Journal: Physics and Mathematics* 17 (32), 306–310, [10.18721/JPM.173.262](https://doi.org/10.18721/JPM.173.262)
7. Dushina AO, Stepanov ME, Arzhanov AI, Khaydukov EV, **Generalova AN** (2024). Conditions of AgNPs/flavin mononucleotide complex formation as a tool to tune optical properties of this complex. *St. Petersburg State Polytechnical University Journal: Physics and Mathematics* 17 (32), 301–305, [10.18721/JPM.173.261](https://doi.org/10.18721/JPM.173.261)
8. Stepanov ME, Vlasov AA, Demina PA, Akasov RA, Babaeva , Yusupov VI, Egorova TV, Karimullin KR, **Generalova AN**, Naumov AV, Khaydukov EV (2024). Intravital Microscopy – A Window Into The World Of Bioprocesses. *Photonics Russia* 2024 (8), 640–648, [10.22184/1993-7296.FRos.2024.18.8.640.648](https://doi.org/10.22184/1993-7296.FRos.2024.18.8.640.648)
9. **Generalova AN**, Vikhrov AA, Prostyakova AI, Apresyan SV, Stepanov AG, Myasoedov MS, Oleinikov VA (2024). Polymers in 3D printing of external maxillofacial prostheses and in their retention systems. *Int J Pharm* 657, 124181, [10.1016/j.ijpharm.2024.124181](https://doi.org/10.1016/j.ijpharm.2024.124181)
10. Demina PA, Khaydukov KV, Sochilina AV, Rocheva VV, Ivanov AV, Akasov RA, Lin Q, **Generalova AN**, Khaydukov EV, (2023). Role of energy transfer in a nanoinitiator complex for upconversion-driven polymerization. *Materials Today Advances* 19, , [10.1016/j.mtadv.2023.100388](https://doi.org/10.1016/j.mtadv.2023.100388)
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