

## Curriculum Vitae

- Name:** Larisa S. Abovyan
- Date of Birth:** November, 04, 1951
- Sex:** Female
- Citizenship:** Republic of Armenia
- Present Status:** Senior Researcher
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E-mail: larisa@ichph.sci.am;
- Education:** MS, 1969-1974: Chemical Department, Yerevan State University (YSU)  
Ph.D., 2004: IChPh NAS RA
- Area of Expertise:** Combustion processes; Materials science, Composite Materials; Kinetics and mechanism solid-state reactions, nanochemistry
- Inst. Affiliations:** 2005 to present: Senior Researcher, IChPh NAS RA  
1995-2005: Researcher in the same place  
1981-1995: Junior Researcher of IChPh NAS RA  
1978-1981: Junior Researcher, Institute of Fine Organic Chemistry NAS of Armenia  
1974-1978: Senior laboratory assistant, in the same place
- Grants:** Head of Republican Grant:  
18BL-011, "MESCS SC RA - BRF RB 2018" (2019-2021)  
International grant participant:  
INTAS Award # 97-1613 (1999-2001)  
CRDF Award # AC2-2051 (2000-2002)  
ANSEF Award # PS 86 (2003)  
Award # NFSAT CH 123-02 / CRDF 12047 (2003-2005)  
ISTC # A-2123 (2015-2016)
- Publications:** More than 40 scientific papers, 4 preprints, 1 educational and methodical work and 1 patent (USSR).

### Selected publications

1. Сардарян Ю.С., Абовян Л.С., Саркисян А.А., Харатян С.Л. "Закономерности образования пироуглерода при высокотемпературном пиролизе углеводородов на переходных металлах". *Арм. Хим. Журн.*, 1983, т.36, № 1, с. 54-59.
2. Абовян Л.С., Нерсисян Г.А., Харатян С.Л. "Закономерности горения вольфрама с углеродом в условиях термической активации и синтез карбида вольфрама". *Химическая физика*, 1994, т. 13, № 10, с. 127-133.
3. Abovyan L.S., Nersisyan H.H. and Kharatyan S.L. "Combustion of tungsten with carbon under thermal activation conditions and synthesis of tungsten carbide". *Chemical Physics Reports*, 1995, vol.13, No.10, p.1740-1747.
4. H.H. Nersisyan, L.S. Abovyan, S.L. Kharatyan. "Mechanism of initiation and combustion laws of SiO<sub>2</sub>-Al-C system activated by fluorocarbons". *International Journal of Self-Propagating High-Temperature Synthesis*, 1999, vol.8, No.2, pp. 153-163.

5. L.S. Abovyan, H.H. Nersisyan, S.L. Kharatyan. “Activated combustion of SiO<sub>2</sub>-Al-C system and synthesis of SiC/Al<sub>2</sub>O<sub>3</sub> composite powders”, *Combustion, Explosion, and Shock Waves*, 2000, vol.36, No.2, pp. 204-208.
6. L.S. Abovyan, H.H. Nersisyan, S.L. Kharatyan, R. Saiu, R. Orru, G. Cao and D. Zedda. "Synthesis of Alumina–Silicon Carbide Composites by Chemically Activated Self-Propagating Reactions", *Ceramics International*, 2001, vol.27, No.2, pp. 163-169. DOI: 10.1016/S0272-8842(00)00057-2. IF: 0.677.
7. G.A. Nersisyan, S.L. Kharatyan, L.S. Abovyan, H.L. Khachatryan. “Transformations of the Thermal Structure of the Combustion Wave and Morphology of the Combustion Products of the SiO<sub>2</sub>-Al(Zr)-C System Near the Extinction Limit”. *Combustion, Explosion, and Shock Waves*, 2001, vol.37, No.4, pp. 423-428. /10.1023/A:1017944828019. IF: 0.2
8. L.S. Abovyan, H.H. Nersisyan, S.L. Kharatyan, R. Orru, G. Cao. “The effect of degassing modes on the self-propagating reactions for the SiO<sub>2</sub>-Al-C system in the presence of reaction promoters”. *Ceramics International*, 2003, vol. 29, No.2, pp. 175-182. DOI: 10.1016/S0272-8842(02)00102-5. IF: 0.839.
9. H.A. Mahmoudi, L.S. Abovyan, S.L. Kharatyan. “SHS processing of copper waste into copper powder”. *Chemical Journal of Armenia*, 2017, v.70, №4, pp. 477-486.
10. M.K. Zakaryan, H.V. Kirakosyan, L.S. Abovyan, S.V. Aydinyan, S.L. Kharatyan. “Magnesio-carbothermal reduction of CuWO<sub>4</sub>/MeO nanostructured precursors & synthesis of W/Cu composite materials”. *Chemical Journal of Armenia*, 2017, v.70, №4, pp. 450-461.
11. S.V. Aydinyan, H.V. Kirakosyan, M.K. Zakaryan, L.S. Abovyan, S.L. Kharatyan, A. Peikrishvili, G. Mamniashvili, B. Godibadze, E.Sh. Chagelishvili, D.R. Lesuer, M. Gutierrez. “Fabrication of Cu-W Nanocomposites by Integration of Self-propagating High-temperature Synthesis and Hot Explosive Consolidation Technologies”. *Eurasian Chemico-Technological Journal*, 2018. v.20, pp. 301-309. DOI: 10.18321/ectj763. . IF: 0.468.
12. H.A. Mahmoudi, L.S. Abovyan, S.V. Aydinyan, S.L. Kharatyan. “SHS reprocessing of copper oxide waste into copper powder”. *International Journal of Self-Propagating High-Temperature Synthesis*, 2019, v. 28, No. 4, pp. 233-238. DOI: 10.3103/S1061386219040095. IF: 1.031
13. H.A. Mahmoudi, V.V. Vardapetyan, L.S. Abovyan, S.L. Kharatyan. “Combustion in copper (I) oxide waste-NiO-NH<sub>4</sub>NO<sub>3</sub> system and synthesis of Cu-Ni alloy”. *Chemical Journal of Armenia*, 2019 v. 72, No. 4, pp. 409-418.
14. H.A. Mahmoudi, V.V. Vardapetyan, L.S. Abovyan. “Processing of copper (I) oxide waste into powders copper and copper-nickel alloys by SCS method“. *Chemical Journal of Armenia*, 2021, v. 74, No. 1-2, pp. 9-24.
15. Kh. Nazaretyan, H. Kirakosyan, M. Zakaryan, S. Aydinyan, L. Abovyan, M. Kulak, B. Khina. “The influence of high-energy ball milling and nanoadditives on the kinetics of heterogeneous reaction in Ni-Al system”. *IOP Conference Series: Materials Science and Engineering*, 2021, v. 1140, No. 1, p. 012052. DOI: 10.1088/1757-899X/1140/1/012052. IF: 0.51
16. Nazaretyan K, Kirakosyan H, Zakaryan M, Abovyan L, Volobujeva O, Aydinyan S. The Interaction Pathway in the Mechano-Ultrasonically Assisted and Carbon-Nanotubes Augmented Nickel–Aluminum System. *Metals*. 2022; 12(3):436. DOI: 10.3390/met12030436. IF: 2.695.

17. N. Amirkhanyan, H. Kirakosyan, M. Zakaryan, A. Zurnachyan, MA. Rodriguez, L. Abovyan, S Aydinyan. "Sintering of Silicon Carbide obtained by Combustion Synthesis". *Ceramics International*, 2023, v. 49, pp. 26129-26134. DOI: 10.1016/j.ceramint.2023.04.233. IF: 5.532 (Q1)