CURRICULUM VITAE

Volova T.G. is a specialist in microbial physiology and biotechnology. She has produced and investigated unique biotechnical producing systems based on hydrogen biosynthesis (protozoan protein, amino acids, enzymes); conducted integrated investigations of microbial degradable bioplastics. For the past five years, comprehensive biomedical investigations of polymers have been carried out and clinical tests started. The first in Russia pilot production of degradable bioplastics has been established.

Name: Volova Tatyana Grigorievna

Position: head, the chemoautotroph biosynthesis laboratory
Affiliation: Institute of Biophysics (Russian Academy of Sciences, Siberian Branch)

Teaching: Professor and head of the Department of Biotechnology Siberian Federal University,

Education, Scientific Titles: biologist (Krasnoyarsk State Pedagogical Institute – 1967; Candidate of Sciences (Biology) – microbiology (1974); Doctor of Sciences (Biology) – microbiology (1985); full professor Microbiology (1995)

Research Interests: Microbiology. Biotechnology. Metabolic and Biopolymer Engineering: degradable biopolymers, biosynthetic process, polymer structure and properties, kinetics and degradation of polymers, scientific basis of constructing polymer carriers, deposition of preparations

Major Results:
Volova T.G. is a specialist in microbial physiology and biotechnology. She has produced and investigated unique biotechnical producing systems based on microbiol biosynthesis (protozoan protein, amino acids, enzymes ets). She has originated and developed a new original field of chemoautotrophic biosynthesis, which combines two major lines of technologies in the 21st century – hydrogen-based energy and biotechnology. Volova T.G. has initiated in Russia and developed integrated studies of synthesis of single-cell protein from hydrogen and microbial degradable bioplastics. The results, which cover various aspects of biosynthesis, metabolism, physiological function, structure, and properties of these biopolymers, have been protected by a number of priority publications and patents. Functioning of the cellular cycle of the synthesis of storage polymers (PHAs) has been studied and heteropolymers of different, including new, chemical structures have been synthesized; their structure and physicochemical properties have been investigated in pioneering fundamental studies of interactions between biosynthesis conditions and PHA structure and properties. Polymer solubility and behavior in different phase states have been investigated, providing a scientific basis for the construction of specialized polymer products of various geometries intended for different purposes: polymer coatings, implants, sutures, scaffolds for cell cultivation, delivery systems for drugs and biologically active compounds. PHA biodegradation has been studied under natural conditions (in freshwater environments, brackish lakes, marine ecosystems, various soils), providing original results, which can be used to forecast degradation of commercially produced PHAs. The innovative aspect of T.G. Volova's research includes results of intellectual activity protected by RF patents; Gosstandart certificates for a family of polymers; registered specifications for polymers and specialized products for various applications. The results obtained make up a scientific basis for using polymers of this type.
Publications – more 280**:** 12 monographs, 7 higher school textbooks, 279 articles.

WoS:	Scopus	РИНЦ

hi 18	hi 20	hi 24
IC 1129	IC 1538	IC 279
cited articles 139	cited articles 181	cited articles 279

profile T.G. Volova:
Google :
https://scholar.google.com/citations?view_op=list_works&hl=en&user=WEj1qD4AAAAJ
Thomson Reuters (WoS) http://www.researcherid.com/rid/P-3767-2015
Scopus https://www.scopus.com/authid/detail.uri?authorId=7003736560

Major Monographs:

Shabanov V.F., Kuznetsov B.N., Shchipko M.L., Volova T.G., Pavlov .Fundamentals of overall processing of KATEK coals to obtain power, synthesis gas, and novel materials with target properties. Novosibirsk. Nauka.-2005. (in Russian).

Volova T.G., Sevastianov V.I., Shishatskaya E.I. Polioxialkanoaty – biorazrushaemyye polimery dlya meditsiny (Polyhydroxyalkanoates – biodegradable polymers for medicine) (Ed. by V.I. Shumakov)-2006-Krasnoyarsk: Platina. (in Russian)

Volova T.G. "Hydrogen-Based Biosynthesis" Nova Science Pub. Inc. NY, USA. 2009.

Prudnikova S.V., Volova T.G. The ecological role of polyhydroxyalkanoates as analog of synthetic plastics: mechanisms of biodegradation in the environment and interaction with microorganisms. Krasnoyarsk: Krasnoyarskiy pisatel, 2012 (in Russian)

Volova T.G., Shishatskaya E.I., Sinskey A.J. Degradable polymers: Production, properties, applications. NY: Nova Science Pub. Inc., 2013.

Volova T.G., Zhila N.O., Prudnikova S.V., Boyandin A.N., Shishatskaya E.I. Fundamental bases for construction and application of new-generation agricultural. Krasnoyarsk: IBP SB RAS, 2016. (in Russian)

Volova T.G., Vinnik Yu.S., Shishatskaya E.I., Markelova N.M., Zaikov G.E. Natural-based polymers for biomedical applications. Canada: Appl.Acad.Perss. 2017: 460 p.

Chapter in book:

Brigham C.J., Zhila N., Shishatskaya E., Volova T.G., Sinskey A.J. Manipulation of Ralstonia eutropha carbon storage pathways to produce useful bio-based products // X. Wang et al. (eds.) Subcellular Biochemistry. Series "Reprogramming microbial metabolic pathways". – Springer Science+Business Media Dordrecht. 2012. V. 64. Chapter 17. P. 343-366.

Volova T.G., Shishatskaya E.I. Results of biomedical studies of PHAs produced in Institute of Biophysics SB RAS and Siberian Federal University. Chapter in the book "Polyhydroxyalkanoates (PHA): Biosynthesis, Industrial Production and Applications in Medicine" (Nova Scienses Publ. Inc. NY. USA). 2014

T. Volova, D.Goncharov, E.Nikolaeva, E. Shishatskaya. Chapter "Electrospinning of degradable PHAs: process, properties, applications" // Nova Science Publishers, Inc. (N.Y.) In book: "Electrospinning: Fundamentals, Methods and Applications" -2017.

Major Publications 2014-2018 Years:

Volova T. G., Zhila N. O., Shishatskay E. I., Mironov P. V., Vasil'ev A. D., Sukovatyi A. G., and Sinskey A. J.The Physicochemical Properties of Polyhydroxyalkanoates with Different Chemical Structures. Polymer Science, Ser. A, 2013, Vol. 55, No. 7, pp. 427–437

Boyandin A.N., Prudnikova S.V., Karpov V.A., Ivonin V.N., Đỗ Ngọc Lanh, Nguyễn Thị Hoài, Lê Thị Mỹ Hiệp, Filipenko M.L., Volova T.G., Gitelson I.I. Microbial degradation of polyhydroxyalkanoates in tropical soils // International Biodeterioration & Biodegradation. – 2013. – V.83. – P.77-84

Volova T., Kiselev E., Shishatskaya E., Zhila N., Boyandin A., Syrvacheva D., Vinogradova O.,

Kalacheva G., Vasiliev A., Peterson I. Cell growth and PHA accumulation from CO_2 and H_2 of a hydrogen-oxidizing bacterium, *Cupriavidus eutrophus* B-10646 // Bioresource Technology – 2013.-Vol.146.-P.215-222

Goreva A.V., Shishatskaya E.I., Kuzmina A.M., Volova T.G., Sinskey A.J. Microparticles prepared from biodegradable polyhydroxyalkanoates as matrix for encapsulation of cytostatic drug // Journal of Materials Science: Materials in Medicine – 2013 – Vol.24- № 8.-P.1905-1915

Volova T., Zhila N., Kalacheva G., Brigham C., Sinskey A. J. The effects of the intracellular poly(3-hydroxybutyrate) reserves on physiological-biochemical properties and growth of *Ralstonia eutropha* // Research in Microbiology. 2013-Vol.164.-P.164-171.

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Shishatskaya E.I., Kamendov I.V., Starosvetsky S.I., Vinnik Yu.S., Markelova N.N., Shageev A.A., Khorzhevsky V.A., Peryanova O.V., Shumiliva A. An *in vivo* study of osteoplastic properties of resorbable poly-3-hydroxybutyrate in models of segmental osteotomy and chronic osteomyelitis // Artificial Cells, Nanomedicine and Biotechnology. – 2013.-Vol.41, № 3

Volova, TG; Shishatskaya, EI. Results of biomedical studies of PHAs produced in Institute of Biophysics SB RAS and Siberian Federal University. In: Wu LP, editor. Polyhydroxyalkanoates (PHA): Biosynthesis, Industrial Production and Applications in Medicine. NY, USA: Nova Scienses Publ. Inc.; 2014; 331–349.

Volova, TG; Kiselev, EG; Vinogradova, ON; Nikolaeva, ED; Chistyakov, AA; Sukovatyi, AG; Shishatskaya, EI. A glucose-utilizing strain, Cupriavidus eutrophus B-10646: growth kinetics, characterization and synthesis of multicomponent PHAs. Plos One, 2014, 9, 1–15.

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Zhila, NO; Kalacheva, GS; Volova, TG. Fatty acid composition and polyhydroxyalkanoates production by Cupriavidus eutrophus B-10646 cells grown on different carbon sources. Process Biochemistry, 2015, 50, 69–78.

Volova, TG; Zhila, NO; Shishatskaya, EI. Synthesis of poly(3-hydroxybutyrate) by the autotrophic CO-oxidizing bacterium Seliberia carboxydohydrogena Z-1062. The Journal of Industrial Microbiology and Biotechnology, 2015, 42, 1377–1387.

Volova, TG; Tarasevich, AA; Golubev, AI; Boyandin, AN; Shumilova, AA; Nikolaeva, ED; Shishatskaya, EI. Laser processing of polymer constructs from poly(3-hydroxybutyrate). Journal of Biomaterials Science. Polymer Edition, 2015, 26, 1210–1228.

Shishatskaya, EI; Nikolaeva, ED; Vinogradova, ON; Volova, TG. Experimental wound dressings of degradable PHA for skin defect repair. Journal of Materials Science: Materials in Medicine, 2016, 27, 1–16.

Volova, TG; Zhila, NO; Kiselev, EG; Prudnikova, SV; Vinogradova, ON; Nikolaeva, ED; Shumilova, AA; Shershneva, AM; Shishatskaya, EI. Poly(3-hydroxybutyrate)/metribuzin formulations: characterization, controlled release properties, herbicidal activity, and effect on soil microorganisms. Environmental Science and Pollution Research, 2016, 23, 23936-23950.

Volova, TG; Prudnikova, SV; Vinogradova, ON; Syrvacheva, DA; Shishatskaya, EI. Microbial degradation of polyhydroxyalkanoates with different chemical compositions and their biodegradability. Microbial Ecology, 2017. – V.73. – P.353-367

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Volova, TG; Prudnikova, SV; Boyandin, AN. Biodegradable poly-3-hydroxybutyrate as a fertilizer carrier. Journal of the Science of Food and Agriculture, 2016, 96, 4183–4193.

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Volova, TG; Zhila N., Vinogradova, ON; Shumilova, AA; Prudnikova, SV; Shishatskaya, EI. Characterization of biodegradable poly-3-hydroxybutyrate films and pellets loaded with the fungicide tebuconazole. Environmental Science and Pollution Research. 2016. V.23. P.5243-5254.

Shumilova, AA; Myltygashev, MP; Kirichenko, AK; Nikolaeva, ED; Volova, TG; Shishatskaya, EI. Porous 3D implants of degradable poly-3-hydroxybutyrate used to enhance regeneration of rat cranial defect. Journal of Biomedical Materials Research: Part A, 2017, 105, 566–577.

Volova, TG; Vinogradova, ON; Zhila, NO; Kiselev, EG; Peterson, IV; Vasil'ev, AD; Shishatskaya, EI.Physicochemical Properties of Multicomponent Polyhydroxyalkanoates: Novel Aspects. Polymer Science, Series A, 2017, 59, 98–106.

Volova T. G., Prudnikova S.V., Vinogradova O.N. Syrvacheva D.A., Shishatskaya E. I. Microbial degradation of polyhydroxyalkanoates with different chemical compositions and their biodegradability // Microbial Ecology. - 2017. – V.73. – P.353-367

Zhila N., Murueva A., Shershneva A., Shishatskaya E., Volova T. Herbicidal activity of slow-release herbicide formulations in wheat stands infested by weeds. J Env Sci Health, Part B., 2017. DOI:10.1080/03601234.2017.1356668.

T.G. Volova, S.V. Prudnikova, N.O Zhila, O.N Vinogradova, A.A Shumilova, E. D Nikolaeva, E. G Kiselev, E. I Shishatskaya. Efficacy of tebuconazole embedded in biodegradable poly-3-hydroxybutyrate to inhibit the development of Fusarium moniliforme in soil microecosystems. Pest Management Science, 2017, 73, 925-935.

Boyandin A.N., Kazantseva E.A., Varygina D.E., Volova T.G. Constructing slow-release formulations of ammonium nitrate fertilizer based on degradable poly(3-hydroxybutyrate). Journal of Agricultural and Food Chemistry, 2017, V. 65, 6745-6752.

T.G. Volova, A.A. Shumilova, I.P. Shidlovskiy, E.D. Nikolaeva, A.G.Sukovatiy, A.D.Vasiliev, E.I. Shishatskaya. Antibacterial properties of films of cellulose composites with silver nanoparticles and antibiotics //Polymer Testing.-2018-V.65-P.54-68

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A.Shershneva, A.Murueva, E. Nikolaeva, E.Shishatskaya & T.Volova. Novel spray-dried PHA microparticles for antitumor drug release //J. Drying Technology -2018.-Vol.36, issue 11.- P.1387-1398.

J. Zhang Junyu, E. Shishatskaya, Guo-Qiang Chen, T.G. Volova, L.F. da Silva. Polyhydroxyalkanoates (PHA) for Therapeutic Applications// Materials Science & Engineering C- 2018 –Vol.86.-P.144-150.

S.Baker, T.Volova, S. Prudnikova, · A.Shumilova, O.Perianova, S.Zharkov, A. Kuzmin, O.Kondratenka, B.Kiryukhin, I.Shidlovskiy, Z.Potkina, O.Khohlova, T.Lobova. Bio‑hybridization of nanobactericides with cellulose films for effective treatment against members of ESKAPE multi‑drug‑resistant pathogens//Applied Nanoscience –2018-Vol 9, № 5.-P.1101-1110.

Baker, S., Volova, T., Prudnikova, S. V., Satish, S., & Prasad, N. (2017). Nanoagroparticles emerging trends and future prospect in modern agriculture system. Environmental Toxicology and Pharmacology, - 2017.-Vol. 53.-P.10-17.

T.G. Volova, S.V.Prudnikova, A.G. Sukovatiy, E.I. Shishatskaya. Production and properties of bacterial cellulose by the strain Komagataeibacter xylinus B-12068 // Applied Microbiology and Biotechnology-2018-Vol.102, № 17.- P. 7417-7428.

T.Volova, I.Peterson, E.Kiselev, E.Shishatskaya, O.Menshikova, A.Vasiliev, N. Zhila, Sabu Thomas. Biosynthesis and properties of P(3HB/3HV/3H4MV) produced by using *Cupriavidus eutrophus* B-10646// - Journal of Chemical Technology & Biotechnology/- 2018- https://doi.org/10.1002/jctb.5763

Minzhi Yu, Benjamin Mason, Santhanakrishnan Srinivasan, Ekaterina I. Shishatskaya, Steven P. Schwendeman, Anna Schwendeman. he Battle of Delivery Strategies for GPL-1 Peptide/ Advanced Drug Delivery Reviews.–2018-Vol. 132, (July 2018)- DOI: 10.1016/j.addr.2018.07.009.

A R. Ajitha; A. P. Mohammed; M K. Aswathi; P. Lovely; G. Geethamma; Kalarikkal, Nandakumar; Thomas Sabu; Volova Tatiana. An Effective EMI Shielding Material Based on Poly (trimethylene terephthalate) Blend Nanocomposites with Multiwalled Carbon Nanotubes//New Journal of Chemistry-2018-Vol 42 (16)-P.13915-13926.

Shishatskaya, N. Menzianova, N. Zhila, T.Volova, S.Thomas. By toxic effects of the fungicide tebuconazole on fusarium-infected wheat plants// Plant Physiology Biochemistry -2018 Vol.132.-P.400-407.

Grants Awarded 2012-2018 Years:

Mega- Grant of the Government of the Russian Federation designed to support research projects implemented by leading scientists at Russian institutions of higher learning. Order of the Government of the RF No. 220 from 09 April 2010 “Agropreparations of the new generation: a strategy of construction and realization” (Agreement No 14.Y26.31.0023) (2018-2020)

Grant of the Russian Foundation for Basic Research (RFBR) and Government of Krasnoyarsk Territory “The scientific bases of construction and application of biocompatible resorbable biomaterials and hybride tissue engineered systems for tissue formation repairing defects of skin” (№ 16-43-242024) (2016-2017)

Grant of the Russian Science Foundation (RSF) “A fundamental basis for constructing new-generation agricultural chemicals” (№14-26-00039) (2014-2016)

Research Project “Organization of research, development, and pilot production of the material based on polymers of microbial origin capable of degradation” Federal Target Program “Development of pharmaceutical and medical industry of the Russian Federation until 2020 and further” State Contract No. 13411.1008799.13.116 of 07 June 2013 for research and development (2013-2015).

Project of the Krasnoyarsk Science Foundation for Support of Scientific and Scientific-Technological Activities No. KF-387 “Organization of batch production, production, testing, and

certification of a series of medical products from the innovative biomaterial, “Bioplastotan”, Collateral Agreement No. 57/13 of 05 November 2013 to Agreement No. 07 of 06 August 2009 (2013).

Mega-grant of the Government of the Russian Federation designed to support research projects implemented by leading scientists at Russian institutions of higher learning. Order of the Government of the RF No. 220 from 09 April 2010 “Biotechnologe of new Biomaterials” (2010-2014).

Mega-grant “Development of a system for infrastructural support of research, innovation, and education and innovative projects and integrated programs in the priority areas of scientific and technological development initiated by SFU, including those implemented on technological platforms”. Biotechnological Department of the Ministry of Education and Science of the Russian Federation. Order of the Government of the RF No. 219 (2010-2012).

Project of the Krasnoyarsk Science Foundation for Support of Scientific and Scientific-Technological Activities No. KF-256 “Scientific and practical basis for construction and using of new generation drugs; development and standardization of a prototype”, Collateral Agreement No. 07/12 of 10 July 2012 to Agreement No. 07 of 06 August 2009 (2012).

Project No. “Ecolan” T-1.8 “A study of degradation behavior of bioplastics in coastal waters of Vietnam” within the framework of the program of the Russian-Vietnamese Tropical Center (2009-2014).

Project assigned by the Ministry of Education and Science of the Russian Federation to SFU for scheduled research “A study of microbial synthesis of degradable bioplastics (polymers of hydroxy-derived alkanoic acids, PHAs) of a novel structure and investigation of the mechanisms of their interactions with biosystems” (2008-2012).

Project of the Program of the RAS Presidium “Fundamental sciences to medicine” No. 21.12 “Development and introduction into medicine of a new class of biodegradable biomaterials for construction of controlled sustained-release drug delivery systems and surgical implants” (2009-2015).

In previous years, a series of large grants and projects of different foundations was realized, including:

(ISTC) (№ 2218). «Scale-up of Technology and Establishment of Pilot Production of Degradable Bioplastics (Hydroxybutyrate-Hydroxyvalerate Copolymers) and Objects for Medical Applications (2000-2003)

Project of the Krasnoyarsk Science Foundation for Support of Scientific and Scientific-Technological Activities “Development and introduction into practical surgery of high-technology devices from the new generation material, “Bioplastotan” and the technologies of using them”, Collateral Agreement to Agreement No. 07 of 06 August 2009 (2010).

13. RFBR Grant No. 07-03-00112a “Development of the scientific basis for the construction of functional composite materials based on linear degradable polyesters and calcium-phosphate materials for reconstructive osteogenesis” (2007-2009).

Grants of the U.S. Civilian Research & Development Foundation (CRDF) and RF Ministry of Education and Science: (№ PG05-002-1) «Biotechnology of degradable bioplastics: synthesis of novel polymers with specified target properties to be applied in medicine; training of high quality specialists in biotechnology» (2006-2007); REC Y1-B-02-07. «Development and research of biodegradable constructions for surgical reconstruction of bone and cartilage tissues» (2001-2003);«Structural and functional organization of the cycle of microbial polyhydroxyalkanoates (PHAs) and search for factors of synthesis of polymers with given characteristics» (2001-2003); № BG5202 «Biocompatible stents based on PHA – natural biodegradable polymers: construction and investigation»(2001); № 92003); BG8102 «An investigation of PHAs aimed at developing controlled and prolonged drug delivery systems «Application of biodegradable natural polyethers (PHA) for construction of environmentally safe controlled-release pesticides » (2006-2007)

*Results of intellectual activity:*Results are protected by a series of protection documents on producing strains, methods of PHA synthesis, polymeric goods

Patents of Russian Federation (2012-2017):

№2439143; № 2427326; № 2436595; № 2484140; № 2484140; №2494621; № 2565819; №2565815; № 2568605; № 2582255; № 2436595; № 2380059.

Educational activity

Since 2000, T.G. Volova has been working as a part-time university teacher, preparing specialists of high qualification. Since 2007, when the Krasnoyarsk State University was transformed into the Siberian Federal University, she has headed the basic Department of Biotechnology, which trains Bachelors and Masters in biology majoring in "Microbiology and Biotechnology".

T.G. Volova has made a considerable contribution to the scientific and educational development of Krasnoyarsk; she has trained several tens specialists for the region, including more than 80 specialists, Bachelors, and Masters of Sciences; she has been a scientific supervisor for 12 Ph.D. and postdoctoral research fellows.

As Professor of the Department of Biotechnology, T.G. Volova conducts her original courses "Problems of ecological biotechnology", "Fundamentals of biotechnology", "Modern problems and methods of biotechnology". Under her leadership, complete sets of course books have been prepared and published: "Fundamentals of biotechnology" for Bachelors and Specialists of Biology; "Modern problems and methods of biotechnology" for Masters; "Ecological biotechnology" for Bachelors and Masters; "State-of-the-art devices and methods for studying biological systems".

Since 2008, the program developed under T.G. Volova's leadership, "Microbiology and biotechnology" has been used at Master's courses. Basic educational programs 020400.62.11 "Bioengineering and biotechnology" and 020400.68.01 "Microbiology and biotechnology" and basic professional program for further education 03.02.03 "Microbiology" have been developed.

Several course books have been prepared under T.G. Volova's leadership and published. Many Russian universities use such books as:

Volova T.G. "Vvedeniye v biotekhnologiyu" (Fundamentals of biotechnology) Krasnoyarsk: SFU, 2008.-108 p. (Vvedeniye v biotekhnologiyu: UMKD No. 143-2007)

Volova T.G., S.V. Markova, L.A. Frank, N.V. Zobova, E.I. Shishatskaya, N.A. Voinov "Sovremennyye problemy i metody biotekhnologii (Modern problems and methods of biotechnology) Krasnoyarsk : SFU, 2009.- UMKD No. 1323-2008

Volova T.G., Shishatskaya E.I., Mironov P.V. "Materialy dlya meditsiny, kletochnoi i tkanevoi inzhenerii (Materials for medicine, cellular and tissue engineering)-Krasnoyarsk. SFU, 2009.-: UMKD No. 1324-2008

Sovremennyye apparatura i metody issledovaniya biologicheskikh sistem (State-of-the-art devices and methods for studying biological systems) classified as UMO (Eds. Volova T.G. and A.J. Sinskey)- Krasnoyarsk, "Krasnoyarskii pisatel". 2011. 462 p.

Volova T.G., Afanasova E.N., Zadereev E.S., Zotina T.A., Mironov P.V., Prudnikova S.V., Sorokin N.D., Sukovatyi A.G., Shishatskaya E.I. Ekologicheskaya biotekhnologiya (Ecological biotechnology) / Course book – Krasnoyarsk: "Kopirka". 2012. 284 p.

Prizes and awards, participation in leading scientific organizations

Medal "For Services to the Motherland" (Second Class) (2008). Emeritus Professor of Krasnoyarsk (2009). Honorary Diploma for Conscientious Work and High Professionalism (2012) Diploma for the best original paper "Cultivation of multipotent mesenchymal bone marrow stromal cells on scaffolds prepared from resorbable bioplastotan" at the VI International Symposium "Topical issues of Genetic and Cellular Technologies", Moscow (2013). Diploma of the Krasnoyarsk Science Foundation for Support of Science and Innovative Activity for the best

project of the year (2013). T.G.Volova's presentation on the 8th European Symposium on Biopolymers (ESBP 2015, Roma, Italy, September 15–19, 2015) received a diploma and a prize of the Organizing Committee for leading scientific and engineering experience and achievements in PHA area. A paper of T.G.Volova et al "The Physicochemical Properties of Polyhydroxyalkanoates with Different Chemical Structures" published in Polymer Science, Ser. A (2013, 55, Issue 7; Springer) received a Journal prize. A diploma of the Presidium of Siberian Branch of Russian Academy of Sciences for a big personal contribution to scientific research and in connection with 60 years of SB RAS.

T.G.Volova is a scientific expert of Russian Academy of Sciences; a Member of Scientific Councils of RAS on Microbiology and Biotechnology; a member of the Presidium of the Krasnoyarsk Scientific Center at the Siberian Branch of RAS; a member of the Russian Society of Biotechnologists. A member of the Editorial Board of the Journal of Siberian Federal University. A member of Councils for Awarding Academic Degrees D 003.007.01 at Institute of Biophysics SB RAS and D 212.253.01 at Siberian State Technological University.