

# CURRICULUM VITAE (CV) /RESUME



**1. Veli Şahmurov (Native)/Veli Shakhmurov (English)**

**2. Title: Full Professor**

**3. Education:**

Degree	Department	University	Year
Bachelor	Mathematical Analysis	Azerbaijan State University Tusy, Faculty of Mathematics	1973
Master	Mathematical Analysis	Faculty of Mathematics	1975
Ph.Dr.,	Mathematical Analysis	Academy of Science Az. SSSR, and V. Steklov Mathematic Institute, Akademy of Science USSR, Moscow	1979,
Science Dr	Mathematical Analysis	V.Steklov Mathematic Institute, Academy of Science USSR, Moscow	1987

**4. Institution he is worked/working at:**

Title	Discipline	University	Year
Assistant Professor	Mathematic Analysis	Azerbaijan State University Tusy	1981
Associate Professor		Azerbaijan State University of Engineering	1983

Full Professor		Baku State University	1989
Full professor		Akdeniz University, Depart.of Mathematics	1993-1994
Full Professor		Istanbul University, Engineering Faculty	1997-2007
Full Professor		Okan University, Engineering Faculty	2007-2017

##### **5. Academic degree:**

1990. Full Professor

##### **6. Managed Master Theses:**

- 1). Continuous of embedding in Hilbert- valued Sobolev spaces and applications, 1989, Baku State University;
- 2). Compactness of embedding in vector-valued anisotropic spaces and applications, 1989, Baku State University;
- 3). Embedding of anisotropic Sobolev spaces and applications, 1990, Baku State University;
- 4). Normal solvability properties of boundary value problems for abstract elliptic equations, 1990, Baku State University;
- 5). Fredholm properties of boundary value problems for operator- elliptic equations, 1990, Baku State University;
- 6). Fredholm properties of boundary value problems for quasi elliptic equations, 1990, Baku State University;
- 7). Solvability properties of boundary value problems for regular degenerate elliptic equations, 1991, Baku State University;
- 8). Stability properties of initial value problems for parabolic equations, 1991, Baku State University;
- 9). Regularity properties of boundary value problems for singular degenerate elliptic equations, 1992, Baku State University;
- 10). Regularity properties of initial value problems for degenerate parabolic equations, 1992, Baku State University;
- 11). Fredholm properties of boundary value problems for degenerate elliptic equations, 1993, Baku State University;
- 12). Wel-posedeness of initial value problems for degenerate parabolic equations, 1994, Baku State University;

- 13). Approximation numbers of embedding operators in vector valued Sobolev spaces, 1995, Baku State University;
- 14). Spectral properties of degenerate differential operators considered in bounded domain, 1995, Baku State University;
- 15). Estimates of resolvents of degenerate elliptic operators in half plane, 1995, Baku State University;
- 16). Embedding theorems in abstract anisotropic spaces and applications, ( Hadica Ismail, Istanbul Technical University, 2009);
- 17). Fredholm properties of Agranovich-Vishik type elliptic equations,( Asuman Mert, Istanbul Technical University, 2010).

## **7. Managed Ph.D. Theses:**

- 1). Coercive boundary value problems for abstract differential equations on half plane ( Azad Babayev-1985, Baku State University);
- 2). Maximal regular properties of degenerate differential operator equations ( Emin Musayev-1986, Baku State University);
- 3). The stability properties of solutions of some nonlinear partial differential equations by means of finite element and Galerkin methods ( Gasim Farruh-1992, Baku State University )
- 4). Embedding theorems and application to differential-operator equations (Hummet Musayev-1997, IMM Baku)
- 5). Embedding in abstract Besov spaces and well-posedness of degenerate abstract equations in its ( Doctor of Science, Malik Cebrailev-1997, IMM Baku);
- 6). Maximal regularity properties of Agranovich-Vishik type abstract elliptic equations ( Asuman Mert, (Thesis defense phase, Istanbul Technical University).

## **8. Master and Dissertation:**

**Supervisor:** Prof. S. Yakubov

**Title of Master Thesis:** Embedding theorems in vektor-valued Sobolev spaces.

**Title of Dissertation (Ph.D.):** Embedding theorems in abstract Sobolev spaces and applications to elliptic and quasi elliptic differential-operator equations.

**Title of Dissertation (Doctor of Science):** Embedding theorems in weighted Sobolev spaces and applications to degenerate differential operator equations

I am interested with in the following scientific fields of analysis :

1. Abstract harmonic Analysis;
2. Operator-valued singular integral operators and multiplier theorems in abstract function spaces;
3. Embedding and trace theorems in Sobolev-Lions and Besov-Lions type spaces of vector-valued functions;
4. Compactness of embedding and estimates of approximation numbers of embedding operators in abstrac function spaces;
5. Separability properties of boundary value problems for operator-differential equations in Banach spaces;
6. Well-possedness of abstract parabolic equations;
7. Maximal regularity properties of linear and nonlinear abstract differential equations with small parameters;
8. Maximal regularity properties of linear and nonlinear degenerate operator-differential equations;
9. Maximal regularity properties of linear and nonlinear convolution elliptic equations in Banach spaces;
10. Carleman estimates and unique continuation results for abstract differential equations;
11. Spectral properties of differential operators;
12. Maximal regularity properties of abstract Stokes operators in  $L_p$  spaces;
13. Novier Stokes problems;
14. Boussinesg equatios;
15. Nonlinear wave equations
16. Schrödinger equations;
17. Mathematical Medicine, the dynamics of a tumor growth models.

## **9. Publications:**

**Total number of publications:** 200

**Total citation:** 1078

## **International peer-reviewed Journal Publications (SCI)**

- 1 (SCI) Shakhmurov V. B. (with Yakubov S. Y.), Theorems on imbedding in anisotropic spaces of vector-valued functions, Mathematical Notes., 22 ( 1-2 )1977, 657-659.
- 2 (SCI) Shakhmurov V. B., Compactness of embedding in anisotropic vector function spaces and applications, Doklady Akademii Nauk SSSR, (6)241,1285-1287, 1978.
- 3 (SCI) Shakhmurov V. B. (with Maksudov F. G.), On the completeness of the system of the eigen and attached vectors of the non local boundary -value problems for the quasi-elliptic partial -differential-operator equations, Doklady Akademii Nauk SSSR, 268 ( 1 ) 1983, 33-35.
- 4 (SCI) Shakhmurov V. B. (with Maksudov F. G.), The estimations of resolvent for some class of quasi- elliptic partial differential-operator equations, Doklady Akademii Nauk SSSR, 268 ( 4 ), 1983, 799-802.
- 5 (SCI) Shakhmurov V. B., The embedding theorems in abstract anisotropic spaces and their applications, Doklady Akademii Nauk SSSR, 281, (5), 1985, 1068-1072.
- 6 (SCI) Shakhmurov V. B., Coercive boundary- value problems for degenerate abstract equations, Doklady Akademii Nauk SSSR, 280 ( 6 ), 1985, 1316-1320.
- 7 (SCI) Shakhmurov V. B., Coercive boundary value problems for strongly degenerated differential-operator equations, Doklady Akademii Nauk SSSR, 290 ( 3 ) 1986, 37-40.
- 8 (SCI) Shakhmurov V. B., Theorems of embedding compactness of in weighted anisotropic spaces and their applications, Doklady Akademii Nauk SSSR, 291, ( 6 ) 1986,1305-1309.
- 9 (SCI) Shakhmurov V. B., The embedding theorems in abstract function spaces and their applications, Mathematics of the USSR-Sbornik, 134(1-2), 1987, 261-276.
- 10 (SCI) Shakhmurov V. B., Embedding theorems and their applications to degenerate equations, Differential Equations, 24, ( 4 ) 1988, ), 475-482.
- 11 (SCI) Shakhmurov V. B.(with Lizorkin P. I.), Embedding theorem for vector-valued functions. 1, Izvestiya Vushkh Uchebnykh Zavedenie Matematika (1), 1989, 70-79.
- 12 (SCI) Shakhmurov V. B, Coercive boundary value problems for degenerate anisotropic equations, Izvestiya Vushkh Uchebnykh Zavedenie Matematika ( 8 ) 1989, 69-78.
- 13 (SCI) Shakhmurov V. B. (with Lizorkin P. I.),Embedding theorem for vector-valued functions. 2, Izvestiya Vushkh Uchebnykh Zavedenie Matematika (2), 1989, 47-54.
- 14 (SCI) Shakhmurov V. B.(with Babaev A. A.), Coercive problems for equations with parameters, Doklady Akademii Nauk SSSR, 315 (1 ), 1990, 799-802.
- 15 (SCI) Shakhmurov V. B., Embedding theorems and maximal regular differential operator equations in Banach-valued function spaces, Journal of Inequalities and Applications, ( 4 )

- 2005, 605-620.
- 16 (SCI) Shakhmurov V. B., Coercive boundary value problems for regular degenerate differential-operator equations, *Journal of Math. Anal. Appl.*, 292, 2004 (2), 605-620.
- 17 (SCI) Shakhmurov V. B. (with Shahmurova A. M.), Fractional Time-Varying Energy Distributions of Biological signals, *Applicable Analysis*, ( 85) 2005, 539-553.
- 18 (SCI) Shakhmurov V. B. (with Agarwal R., Bohner M.), Maximal regular boundary value problems in Banach-valued weighted spaces, *Boundary value problems*, (1)2005, 9-42.
- 19 Shakhmurov V. B., Maximal regular boundary value problems for differential operator equations in Banach-valued function spaces, *International journal of Mathematics and Mathematical Sciences*, v. 2006, (2006), 1-26.
- 20 (SCI) Shakhmurov V. B., Embedding theorems in Banach-valued B-spaces and maximal B-regular differential operator equations, *Journal of Inequalities and Applications*, v. 2006, 1-22.
- 21 (SCI) Shakhmurov V. B., Separable anisotropic differential operators and applications, *J. Math. Anal. Appl.* 2006, 327(2), 1182-1201.
- 22 (SCI) Shakhmurov V. B. (with Agarwal R., Bohner M.), Linear and nonlinear nonlocal boundary value problems for differential-operator equations, *Applicable analysis* 2006, 85 (6-7), 701-716.
- 23 (SCI) Shakhmurov V. B., Embedding and maximal regular differential operators in Sobolev-Lions spaces, *Acta Mathematica Sinica*, 22(5) 2006, 1493-1508.
- 24 (SCI) Shakhmurov V. B., Nonlinear abstract boundary value problems in vector-valued function spaces and applications, *Nonlinear Analysis Series A: Theory, Method & Applications*, v. 67(3) 2006, 745-762.
- 25 (SCI) Shakhmurov V. B., Maximal B-regular boundary value problems with parameters, *J. Math. Anal. Appl.* 320, (2006), 1-19.
- 26 (SCI) Shakhmurov V. B., Degenerate differential operators with parameters, *Abstract and Applied Analysis*, 2007 , V. 2006, 1-27
- 27 (SCI) Shakhmurov V. B, Embedding theorems in B-spaces and applications, *Chinese Annals of Mathematics, Ser. B*, v.29, no 1, 2008.
- 28 (SCI) Shakhmurov V. B. (with Agarwal R., O' Regan, D.), Separable anisotropic differential operators in weighted abstract spaces and applications, *J. Math. Anal. Appl.* 2008, 338, 970-983.
- 29 (SCI) Shakhmurov V. B., Carleman estimates and unique continuation property for the anisotropic differential operator equations, *Science in China, Ser. A: Mathematics*, 2008, v. 51, no 7, 1215-1231.
- 30 (SCI) Shakhmurov V. B. (with Shahmurov R.), Maximal B-regular integro-differential equations, *Chinese Annals of Mathematics*, 30B(1), 2008, 39-50.

- 31 (SCI) Shakhmurov V. B., Embedding and separable differential operators in Sobolev-Lions type spaces, Mathematical Notes, 2008, v. 84, no 6, 906-926.
- 32 (SCI) Shakhmurov V. B. (with Agarwal R), Linear and nonlinear Degenerate Boundary Value Problems in Besov Spaces, Mathematical and Computer Modelling, V. 49, Issues 5-6, 2009, 1244-1259
- 33 (SCI) Shakhmurov V. B. (with) Agarwal R.), Multipoint problems for degenerate abstract differential equations, Acta Mathematica Hungarica, 123 (1-2), 2009, 65-89.
- 34 (SCI) Shakhmurov V. B. (with Agarwal R., O' Regan, D.), B-Separable boundary value problems in Banach-valued function spaces, Applied Mathematics and Computation, V. 210, Issue 1, 2009, P. 48-63.
- 35 (SCI) Shakhmurov V. B.(with Shahmurova A.), Nonlinear abstract boundary value problems atmospheric dispersion of pollutants, Nonlinear Analysis, Real World Applications, v.11 (2) 2010, 932-951. DOI: [10.1016/j.nonrwa.2009.01.037](https://doi.org/10.1016/j.nonrwa.2009.01.037)
- 36 (SCI) Shakhmurov V. B. (with) A. Favini and Ya. Yakubov), Regular boundary value problems for complete second order elliptic differential-operator equations in UMD Banach spaces, Semigroup form, V. 79 (1), 2009, 22-54
- 37 (SCI) Shakhmurov V. B. ( with R. Shahmurov), Sectorial operators with convolution term, Mathematical Inequalities and Applications, V.13 no.2, 2010, 387-404
- 38 (SCI) Shakhmurov V. B, Compact embedding in Besov spaces and B-separable elliptic operators, Science in Chine, Series A: Mathematics, V.53, no 4, 1067-1084, 2010.
- 39 (SCI) Shakhmurov V. B. (with Agarwal R., O' Regan, D.), Higher order nonlinear degenerate differential operator equations, Applied Mathematics Letter, v.22(10), 2009, 1556-1561
- 40 (SCI) Shakhmurov V. B, Abstract capacity of regions and compact embedding with applications, Acta Mathematica Scientia, V.31, no1, 2011, 49-67.
- 41 (SCI) Shakhmurov V. B.(with Agarwal R., O' Regan, D.), Uniform separable differential operators with parameters, Journal of Franklin Institute, 2010, V. 347 no1, 2-16.
- 42 (SCI) Shakhmurov V. B., Maximal regular abstract elliptic equations and applications, Siberian Mathematical Journal, V.51, No 5, 935-948, 2010
- 43 (SCI) Shakhmurov V. B., Linear and nonlinear abstract equations with parameters, Nonlinear Analysis, Theory, Method and Applications, 2010, v. 73, 2383-2397
- 44 (SCI) Shakhmurov V. B, Regular degenerate separable differential operators and applications, Potential Analysis, 2011, v.35, no.3, 201-212
- 45 (SCI) Shakhmurov V. B., Separable anisotropic elliptic operators and applications, Acta Mathematica Hungary, 131, ( 3 ), 2011, 208-229.
- 46 (SCI) Shakhmurov V. B. (with Agarwal R., O' Regan, D.), Degenerate anisotropic differential operators and applications, Boundary value problems, 2011 V. 2011, 27p.

- 47 (SCI) Shakhmurov V.B., Anisotropic elliptic equations with VMO coefficients, Applied Mathematics and Computation, 2011, 218, 1057-1062 .
- 48 (SCI) Shakhmurov V. B. (with Sahmurova), Singular perturbation degenerate problems occurring in atmospheric dispersion of pollutants, Applied Mathematics and Computation 218 (3), 1052-1056, 2011.
- 49 (SCI) Shakhmurov V. B. (with Sahmurova, A.), Degenerate anisotropic parabolic problems occurring atmospheric dispersion of pollutants, Proceeding AIP, 1389, 2011, 629-631.
- 50 (SCI) Shakhmurov V.B., Free boundary value problems for abstract elliptic equations and applications, Chinese Annals of Mathematics, Ser.B, 2011 v. 32 (5), 749-770.
- 51 (SCI) Shakhmurov V.B., Carleman estimates and unique continuation for abstract elliptic equations, Proceeding AIP, 1389, 632-634, 2011.
- 52 (SCI) Shakhmurov V. B, Estimates of approximation numbers for embedding operators and applications, Acta Mathematica Sinica, English Series, 2012, V. 28, (9), 1883-1896.  
doi:10.1007/s10114-012-9547-y
- 53 (SCI) Shakhmurov V.B ., Embedding operators in vector-valued weighted Besov spaces and applications, Journal of Function spaces and Applications, 2012 v. 2012. DOI :<http://dx.doi.org/10.1155/2012/819321>
- 54 (SCI) Shakhmurov) V. B , Optimal regular differential operators with VMO Coefficients, AIP Conf. Pr. 1504, 2012, 1269-1274.
- 55 (SCI) Shakhmurov V. B., Carleman estimates and unique continuation for abstract elliptic equations, Boundary Value Problems, 2012, 2012-46, <https://doi.org/10.1186/1687-2770-2012-46>.
- 56 (SCI) Shakhmurov V. B.( with A. Sahmurova), Parabolic problems with parameters arising in evolution model for phytoremediation, AIP Conf. Pr. 1504, 2012, 1265-1268.
- 57 (SCI) Shakhmurov V.B. (with Aida Sahmurova) Singular degenerate problems occuring in atmospheric dispersion of pollutants, Operator Theory: Advances and applications, v. 236, 2014, 455-461.
- 58 (SCI) Shakhmurov V.B., (with Aida Sahmurova), Parabolic Problems with Parameter Occuring in Environmental Engineering, AIP, 2012 V.1470,
- 59 (SCI) Shakhmurov V. B, Sahmurova A., Separable Convolution Equations Occurring in Atmospheric Dispersion of Pollutants, AIP, 2012, Volume: 1479.
- 60 (SCI) Shakhmurov V. B., Parameter dependent Navier-Stokes like problem, AIP, v. 1470, p. 259-261, 2013.
- 61 (SCI) Shakhmurov V. B., Carleman estimates and unique continuation property for elliptic operators, Mathematical Inequalities & Applications, V.16 (3), 2013, 873-885. DOI: 10.1063/1.3636810

- 62 (SCI) Shakhmurov V. B., B-Separable Anisotropic Convolution Operators and Applications, Georgian Mathematical Journal, 2013, V. 20, no1, 129-149. DOI:[10.1515/gmj-2013-0005](https://doi.org/10.1515/gmj-2013-0005)
- 63 (SCI) Shakhmurov V.B., Singular degenerate boundary value problems and applications, Applied Mathematic Letter, 2013 (26), 87-90. [10.1016/j.aml.2012.03.037](https://doi.org/10.1016/j.aml.2012.03.037)
- 64 (SCI) Shakhmurov V.B., Linear and nonlinear abstract elliptic equations with VMO coefficients and applications, Fixed Point Theory and Applications 2013, 2013: 6. DOI:[10.1186/1687-1812-2013-6](https://doi.org/10.1186/1687-1812-2013-6)
- 65 (SCI) Shakhmurov V.B., Nonlocal Novier-Stokes problem with small parameter, Boundary Value Problems, 2013, V. 2013-107. DOI:[10.1186/1687-2770-2013-107](https://doi.org/10.1186/1687-2770-2013-107)
- 66 (SCI) Shakhmurov V.B., Optimal regular differential operators with variable coefficients and applications, Fixed Point Theory and Applications, 2013 , 2013: 42. DOI:[10.1186/1687-1812-2013-42](https://doi.org/10.1186/1687-1812-2013-42)
- 67 (SCI) Shakhmurov V.B. ( with A. Sahmurova), Singular degenerate problems occurring in biosorption process, Boundary Value Problems, 2013, V. 2013.30 (1).
- 68 (SCI) Shakhmurov V.B. (with A. Sahmurova), Abstract parabolic problems with parameter and application, Applied mathematics and Computation, 2013, V. 219, (17), 9561-9571 ). DOI:[10.1186/1687-2770-2013-30](https://doi.org/10.1186/1687-2770-2013-30)
- 69 (SCI) Shakhmurov V.B. (with I. Ekinci), Linear and nonlinear convolution elliptic equations, Boundary Value Problems, 2013, 2013:211, DOI:[10.1186/1687-1812-2013-6](https://doi.org/10.1186/1687-1812-2013-6)
- 70 (SCI) Shakhmurov V.B., Parameter dependent Stokes problems in vector-valued spaces and applications, Boundary Value Problems, 2013, V. 2013-172. DOI: [10.1186/1687-2770-2013-172](https://doi.org/10.1186/1687-2770-2013-172)
- 71 (SCI) Shakhmurov V.B. (with A. Sahmurova), Abstract elliptic operators appearing in atmospheric dispersion, Boundary Value Problems, 2014 V.2014:43. DOI :[10.1186/1687-2770-2014-116](https://doi.org/10.1186/1687-2770-2014-116).
- 72 (SCI) Shakhmurov V.B., Stokes operators with variable coefficients, Boundary Value Problems 2014, V. 2014:86 DOI: [10.1186/1687-2770-2014-86](https://doi.org/10.1186/1687-2770-2014-86)
- 73 (SCI) Shakhmurov V.B., Anisotropic differential operators with parameters and applications, Ukrainian Mathematical Journal, 2014, no.7, p. 985-1002. □ DOI <https://doi.org/10.1007/s11253-014-0997-5>.
- 74 (SCI) Shakhmurov V.B. (with A.Ozer) Maximal regularity properties of Agranovich-Vishik type abstractelliptic operators in the half-plane, Journal of inequalities and applications, 2014, V.2014:233. □ DOI:[10.1186/1029-242X-2014-233](https://doi.org/10.1186/1029-242X-2014-233)
- 75 (SCI) Shakhmurov V.B., Stokes equations with small parameters in half plane, Computers and Mathematics with Applications, 67, 2014, 91-115. DOI: [10.1016/j.camwa.2013.10.016](https://doi.org/10.1016/j.camwa.2013.10.016)
- 76 (SCI) Shakhmurov V.B., Singular degenerate differential operators and applications, Math.Slovaca 65(2015), No.6, 1-24. DOI: <https://doi.org/10.1515/ms-2015-0096>
- 77 (SCI) Shakhmurov V.B., Separable convolution-elliptic operators with parameters, Form . Math. 2015, 27(6), 2637-2660. DOI: <https://doi.org/10.1515/forum->

2013-0101

- 78 (SCI) Shakhmurov V.B., *Linear and nonlinear abstract differential equations of high order*,  
Open mathematics (Cent.Euro.Math.) (2015) 13, 471-488. DOI: 10.1515/math-2015-0044
- 79 (SCI) Shakhmurov V.B., Nonlocal abstract Novier-Stokes problem, Nonlinear Analyzis, Real  
World Applications, 2015, 26, 15-43. DOI: [10.1016/j.nonrwa.2015.03.011](https://doi.org/10.1016/j.nonrwa.2015.03.011)
- 80 (SCI) V. B. Shakhmurov, Embedding operators of Sobolev spaces with variable exponents and  
applications, Analysis Mathematica, 41(2015), 273--297. DOI: [10.1007/s10476-015-0303-2](https://doi.org/10.1007/s10476-015-0303-2)
- 81 (SCI) Shakhmurov V.B.( with H. Musayev), Separability properties of convolution-differential  
operator equations in weighted L<sub>p</sub> spaces, Appl. Math. 2015, 14(2). DOI  
<https://doi.org/10.1007/s11253-018-1458-3>
- 82 (SCI) Shakhmurov V.B., Abstract elliptic equations with VMO coefficients in half plane,  
Mediterranen Journal of Mathematics, 2015, V.25, 1-21. □ DOI  
<https://doi.org/10.1007/s00009-015-0599-y>
- 83 (SCI) Veli Shakhmurov, Abstract elliptic equations with integral boundary conditions and  
applications, Chinese Annals of Mathematics,201(3B), 2016, 1-18. DOI: [10.1007/s11401-016-0948-6](https://doi.org/10.1007/s11401-016-0948-6)
- 84 (SCI) Shakhmurov V:B., Separable differential operators and applications, Journal of  
Moscow Math. Soc., 16 (2), 2016, 299-321. DOI: [10.1016/j.jmaa.2006.05.007](https://doi.org/10.1016/j.jmaa.2006.05.007)
- 85 (SCI) Shakhmurov V.B., Linear and nonlinear degenerate abstract differential equations with  
small parameters, Banach journal mathematical analysis, 10 (2016)(1), 147-168. DOI:  
[10.1215/17358787-3345071](https://doi.org/10.1215/17358787-3345071)
- 86 (SCI) Shakhmurov V.B. (with H. Musayev), Regularity properties of degenerate convolution-  
elliptic equations, Boundary Value Problems, 2016, 2016-50. □ DOI  
<https://doi.org/10.1186/s13661-016-0555-1>
- 87 (SCI) Shakhmurov V.B.,The Cauchy problem for generalized abstract Boussinesq equations,  
Dynamic systems and applications, 25, (2016),109-122. □ DOI  
<https://doi.org/10.1007/s13324-018-0265-1>
- 88 (SCI) Shakhmurov V.B., Nonlocal problems for Boussinesq equations, Nonlinear Analysis  
TMA, 142 (2016) 134-151. DOI <https://doi.org/10.1007/s13324-018-0265-1>
- 89 (SCI) Shakhmurov V.B.( with A. Sahmurova), Degenerate parabolic equations appearing in  
atmospheric dispersion of pollutants, Electronic Journal of Qualitative Theory of Differential  
Equations (EJQTDE), 119(2017), 1-16. □ DOI:[10.14232/ejqtde.2016.1.119](https://doi.org/10.14232/ejqtde.2016.1.119)
- 90 (SCI) Shakhmurov V.B. (with H. Musayev), Maximal regular convolution-differential  
equations in weighted Besov Spaces, Appl.Comput.Math.,v.16, N.2, 2017. MR3699485  
34G10 (45J05)
- 91 (SCI) Shakhmurov V.B.,( with A. Sahmurova), Mixed problems for degenerate abstract  
parabolic equations and applications, Carpathian Journal of Mathematics 34(2)(2018), 247-  
254.  
[arXiv:1707.01374](https://arxiv.org/abs/1707.01374)
- 92 (SCI) Shakhmurov V.B. (with H. Musayev) , Maximal regular convolution elliptic equations  
in weighted Besov Spaces, Ukr. Math. Journal, (2018) (69), 1607-1630. DOI  
<https://doi.org/10.1007/s11253-018-1458-3>
- 93 (SCI) Shakhmurov V.B.,Regularity properties of Schrödinger equations in vector-valued  
spaces and applications, Forum Mathematics, Forum Mathematicum 31 (1), 149-166  
DOI: <https://doi.org/10.1515/forum-2018-0083>.

- 94 (SCI) Shakhmurov V.B.,(with A. Ragusa), Embedding of vector-valued Morrey spaces and separable differential operators, Bulletin of Mathematical Sciences 2018, <https://doi.org/10.1007/s13373-018-0129>.
- 95 Shakhmurov V.B., Separability properties of singular degenerate abstract differential operators and applications, Rocky Mountain J. Math. Volume 49, Number 5 (2019), 1647-1666 DOI: [10.1216/RMJ-2019-49-5-1647](https://doi.org/10.1216/RMJ-2019-49-5-1647)
96. (SCI) Shakhmurov V.B. ( with R. Shahmurov), The Cauchy problem for Boussinesq equations with general elliptic part, Journal Analysis and Math. Physis, Analysis and Mathematical Physics (2019) 9:1689–1709. DOI <https://doi.org/10.1007/s13324-018-0265-1>
97. (SCI) Shakhmurov V.B., Nonlocal problems for abstract differential equations and applications, Moscow Mathematical Journal (20)1, 2020, 1-26.
- 98 (SCI) Shakhmurov V.B, Linear and nonlinear degenerate differential operators and applications, Nonlinear Analysis 191 (2020) 1116332019.
- 99 (SCI) Shakhmurov V. B., Fractional abstract elliptic equations Inequalities & Applications, 2(23) (2020), 521–538.
- 100 (SCI) Shakhmurov V.B., Hardy type unique continuation properties for abstract Schrödinger equations and applications, Electronic journal of qualitative theory of differential equations, *Electron. J. Qual. Theory Differ. Equ.* 2019, No. 97, 1-27. DOI: <https://doi.org/10.14232/ejqtde.2019.1.97>.
101. (SCI) Shakhmurov V.B., Nonlocal fractional differential equations and applications, Complex analysis and Operator theory, 14 (49) (2020).
102. (ESCI) Shakhmurov V.B ( with M. Bohner) Separable differential operators with parameters, Differential Equations and Dynamical Systems, 2020(36).
103. (SCI)Shakhmurov V.,Fractional abstract differential equations and applications, Bulletin of the Malaysian Mathematical Sciences Society, 2020, DOI: [10.1007/s40840-020-00977-w](https://doi.org/10.1007/s40840-020-00977-w).
104. (SCI) Shakhmurov V.B ( with R. Shahmurov, Operator valued multiplier and embedding in abstract Besov spaces with applications, RJM, accepted.
105. (SCI) Shakhmurov V.B, Regularity properties of nonlinear abstract Schrödinger equations and applications, International Journal of Mathematics, 2020, <https://doi.org/10.1142/S0129167X20501050>.

**Other international peer-reviewed journal publications:**

1. Shakhmurov V. B., Coercive solvability of boundary value problems for partial differential-operator equations of some class, Doklady Akademii Nauk Azerbaican SSR, (6), 1978, 3-7.
2. Shakhmurov V. B. (with Yakubov S. Y.), The embedding and trace theorems in the anisotropic space of vector-functions, Doklady Akademii Nauk Azerbaican SSR , (11), 1977, 15-18
3. Shakhmurov V. B., Coercive solvability of boundary value problems for elliptic differential-operator equations, (1905-79), BINITI, 1979.
4. Shakhmurov V. B., Coercive solvability of boundary value problems for differential-operator equations on R, Manuscript (1684-90 ), BINITI, 1980.
5. Shakhmurov V. B., The Fredholm properties of general boundary value problems for differential-operator equations in partial derivatives, Izvestya Akademii Nauk Azerbaican SSR, Mat. (2) 1981, 32-36.
6. Shakhmurov V. B., The completeness of the system of eigen and adjoin vectors of nonlocal boundary value problems for quasi elliptic differential-operator equations in partial derivatives, Proceeding of Theory operators in function spaces, Baku, 202-209, 1982.
7. Shakhmurov V. B., Theorems about an isomorphism general boundary value problems for differential-operator equations in Banach spaces, ( 3799-27 ), VINITI, 1982.
8. Shakhmurov V. B., The completeness of the systems of eigen and adjoint vectors of boundary value problems for elliptic differential operator equations in partial derivatives, Izvestya Akademii Nauk Azerbaican SSR, (1) 1983, 21-28.
9. Shakhmurov V. B., Fredholm properties of general boundary value problems of elliptic equations with nonselfadjoint operator coefficients, Doklady Akademii Nauk Azerbaican SSR, (7) 1983.
10. Shakhmurov V. B., Fredholm properties of general boundary value problems for quasi elliptic equations with operator coefficients depending on variables, Doklady Akademii Nauk Azerbaican SSR, (8) 1983, 7-10.
11. Shakhmurov V. B., Theorems of on nuclearity of embedding operators in abstract anisotropic spaces, Doklady Akademii Nauk Azerbaican SSR, (11), 1984.
12. Shakhmurov V. B., The coercive solvability of boundary value problems for degenerating differential-operator equations, Doklady Akademii Nauk Azerbaican SSR, (12), 1984.
13. Shakhmurov V. B. (with K. Kerimov), Coercive solvability of boundary value problems for differential-operator equations on R+, Manuscript (1685-90 ), BINITI, 1985.
14. Shakhmurov V. B., Coercive boundary problems for degenerated equations in the half space, Izvestiya Akademii Nauk Azerbaican SSR (6), 1985, 8-11.
15. Shakhmurov V. B., Coercive boundary value problems for degenerating equations in the half space, Akademii Nauk Azerbaican SSR, ( 3 ), 1987.

16. Shakhmurov V. B., The embedding theorems for class of vector -functions, Doklady Akademii Nauk Azerbaican SSR, (4), 1987.
17. Shakhmurov V. B., Embedding theorems for class vector-valued functions, Doklady Akademii Nauk Azerbaican SSR, (3), 6-9, 1987.
18. Shakhmurov V. B. (with Lizorkin P. I.), Boundedness of embedding operators in Sobolev weighted abstract functions spaces and their applications to differential equations, Proceed. University of P. Lmumba, Moscow, 1992.
19. Shakhmurov V. B., Coercive problems for quasi elliptic partial differential-operator equations, Manuscript no ( 2579-93 ), VINITI, 1993.
20. Shakhmurov V. B., The embedding theorems in weight abstract anisotropic spaces, Theory linear and non linear operator equations, Proceed. Inst. Doklady Akademii Nauk SSR, 1994.
21. Shakhmurov V. B., Embedding theorems in abstract B-spaces and their applications, Proceeding of Azerbaijan Math. Society, 1994, 103-106.
22. Shakhmurov V. B. (with H. Akcha, G. Arslan.), Differential-operator equations with bounded delay, Non linear Times and Digest ( 2 ), 1995, 179-190.
23. Shakhmurov V. B., Embedding theorems in Banach valued Liuvill-Sobolev spaces and their applications, Journal of Electrical and Electronics, ( 2 ), 2002, 575-591.
  
24. Shakhmurov V. B. ( with A. Zayed), Fractional Wigner and Ambiguity functions, Fractional calculus and applied analysis, 6(4), 2003, 473-490.
25. Shakhmurov V. B., Fractional Weyl-Heisenberg frames and applications, Sampling theory in signal and image Processing, 3 ( 3 ), 2004, 227-257.
26. Shakhmurov V. B. (with., Jebrailov M. S.), About compactness of an embedding B-spaces, Doklady Akademii Nauk Azerbijcan, SSR, (3 ), 1990.
27. Shakhmurov V. B., Boundary value problems for differential-operator equations with parameter, Archive of inequalities and applications, (1) 2004, 159-162.
28. Shakhmurov V. B., Regular and singular degenerate boundary value problems in Banach-valued function spaces, Proceeding of the conference Differential & Difference equations and Applications, Hindavi Publishing Corporation, USA, 2006, 1-10.
29. Shakhmurov V. B., Coercive boundary value problems for regular degenerate equations, Proceedings of Dynamical Systems and applications ( 4 ) 2004, 452-458.
30. Shakhmurov V. B., Singular perturbations for abstract elliptic operators and applications, TWMS, Journal of Applied Mathematics, V. 2, no 1, 2012, p. 19-34
  
31. Shakhmurov V.B. ( with A. Sahmurova), Degenerate abstract parabolic equations and applications, Communications in Mathematical Analysis, (2015) 18 (2), 15–35.

32. Shakhmurov V. B.(with H. Demir), A rectangular time-frequency lattice of Gabor Expansion, Journal Of Electrical and Electronics (2),2002, 541-545.

**Recently submitted papers:**

Shakhmurov V.B,

1) <a href="#">1709.09547</a>	math.AP	<a href="#"><u>Multipoint Cauchy problem for nonlinear wave equations in vector-valued spaces</u></a>	 Y
2) <a href="#">1707.04492</a>	math.AP	<a href="#"><u>Nonlocal Cauchy problems for wave equations and applications</u></a>	 Y
3) <a href="#">1707.01771</a>	math.AP	<a href="#"><u>Regularity properties of singular degenerate abstract differential equations and applications</u></a>	 Y
4) <a href="#">1707.01376</a>	math.AP	<a href="#"><u>Singular degenerate problems and applications</u></a>	 Y
5) <a href="#">1707.01374</a>	math.AP	<a href="#"><u>Mixed problems for degenerate abstract parabolic equations and applications</u></a>	 Y
6) <a href="#">1706.07226</a>	math.AP	<a href="#"><u>Regularity properties of nonlinear Schrödinger equations in vector-valued spaces</u></a>	 Y
7) <a href="#">1706.00814</a>	math.AP	<a href="#"><u>Free boundary value problems for abstract elliptic equations and applications</u></a>	 Y
8) <a href="#">1706.00813</a>	math.AP	<a href="#"><u>The Cauchy problem for operator-Boussinesq equations</u></a>	 Y
9) <a href="#">1706.00812</a>	math.AP	<a href="#"><u>Operator-valued multipliers in vector-valued weighted Besov spaces and applications</u></a>	 Y
10) <a href="#">1706.00811</a>	math.AP	<a href="#"><u>Differential operators in exterior domain and application</u></a>	 Y

			Science WISE	
11)	<a href="https://arxiv.org/abs/1706.00810">1706.00810</a> math.AP	<a href="https://arxiv.org/abs/1706.00810">Singular perturbation for abstract elliptic equations and application</a>		Y
	<a href="https://arxiv.org/abs/1706.00809">1706.00809</a>	<a href="https://arxiv.org/abs/1706.00809">1706.00809</a>		
	<a href="https://arxiv.org/abs/1706.00809">1706.00809</a>	<a href="https://arxiv.org/abs/1706.00809">1706.00809</a>		Y
13)	<a href="https://arxiv.org/abs/1706.00808">1706.00808</a> math.FA	<a href="https://arxiv.org/abs/1706.00808">Multipliers and embedding operators with application to abstract differential equat{ i }ons</a>		Y
14)	<a href="https://arxiv.org/abs/1706.00807">1706.00807</a> math.AP	<a href="https://arxiv.org/abs/1706.00807">Hardy's uncertainty principle and unique continuation properties for abstract Schr\"odinger equations</a>		Y
15)	<a href="https://arxiv.org/abs/1706.00806">1706.00806</a> math.AP	<a href="https://arxiv.org/abs/1706.00806">Morgan type uncertainty principle and unique continuation properties for abstract Schr\"odinger equations</a>		Y
16)	<a href="https://arxiv.org/abs/1706.00805">1706.00805</a> math.AP	<a href="https://arxiv.org/abs/1706.00805">Separability properties of singular degenerate abstract differential operators and applications</a>		Y
17)	<a href="https://arxiv.org/abs/1706.00803">1706.00803</a> math.AP	<a href="https://arxiv.org/abs/1706.00803">Pseudo-differential operators in vector-valued spaces and applications</a>		Y
18)	<a href="https://arxiv.org/abs/1706.00802">1706.00802</a> math.AP	<a href="https://arxiv.org/abs/1706.00802">Navier-Stokes problems in half space with parameters</a>		Y
19)	<a href="https://arxiv.org/abs/1705.09091">1705.09091</a> math.FA	<a href="https://arxiv.org/abs/1705.09091">Embedding operators in Sobolev-Lions spaces and applications</a>		
20)	<a href="https://arxiv.org/abs/2126388">https://arxiv.org/submit/2126388</a>	On the dynamics of a cancer tumor growth model with multiphase structure.		
21.	<a href="https://arxiv.org/abs/2241790">https://arxiv.org/submit/2241790</a> ,	Multipoint Cauchy problem for Schrödinger type equations with general elliptic part;		
22.	<a href="https://arxiv.org/abs/2241796">https://arxiv.org/submit/2241796</a> ,	Multipoint Cauchy problem for abstract Schrödinger equations and applications.		
22.	<a href="https://arxiv.org/abs/2535547">https://arxiv.org/submit/2535547</a> ,	The integral Cauchy problem for generalized Boussinesq equations with general leading parts		

23. <https://arxiv.org/submit/2218667>, The dynamics of a cancer tumor growth with multiphase structure and chemotherapy treatment model.
- 24) <https://arxiv.org/submit/2241814> The dynamics of a cancer tumor growth with multiphase structure and chemotherapy treatment model,
- 25) <https://arxiv.org/submit/2420307> Multipoint Cauchy problem for Schrödinger type equations with general elliptic part
26. <https://arxiv.org/submit/2526862> Integral type Cauchy problems for wave equations
27. <https://arxiv.org/submit/2526850> Nonlocal Cauchy problems for abstract wave equations and applications.
28. <https://arxiv.org/submit/2589522>, The local and global dynamics of a general cancer tumor growth model with multiphase structure.
29. <https://arxiv.org/submit/2596266>, Existence local and global solution of multipoint Cauchy problem for nonlocal nonlinear equations.
30. <https://arxiv.org/submit/2599285>, Multipoint Cauchy problem for nonlocal nonlinear equations.
31. <https://arxiv.org/submit/2632202>, The existence and uniqueness for Cauchy problem for nonlocal abstract wave equations.
32. <http://arxiv.org/abs/1906.00085>, Unique continuation properties for Schroedinger operators in Hilbert spaces.
33. <http://arxiv.org/abs/1906.00083> Unique continuation properties for abstract Schroedinger equations and applications.
34. <https://arxiv.org/submit/2811326>, The Cauchy problem for nonlocal abstract Schrodinger equations.
35. <https://arxiv.org/submit/2811513>, The regularity properties of nonlocal abstract wave equations
36. <https://arxiv.org/submit/2872135>, Paley-Wiener type unique continuation properties for abstract Schrodinger equations and applications
37. <https://arxiv.org/submit/2891432> Abstract elliptic and parabolic equations in Morrey spaces and applications.
38. <https://arxiv.org/submit/2896205>, High order Navier-Stokes type problems with parameters in half space and applications.
39. <https://arxiv.org/submit/2923682>, Fractional abstract differential equations and applications

40. Separability properties of fractional abstract differential equations and applications ,  
<https://arxiv.org/submit/2948792>.
41. The boundary controllability for abstract wave equations and its applications  
<https://arxiv.org/submit/2981905>.
42. Nonlocal fractional differential equations and applications, <https://arxiv.org/submit/2983660>.
43. (with M. Kurulay) Nonlocal fractional elliptic equations and applications,  
<https://arxiv.org/submit/2987299/view>.
44. Regularity properties of nonlocal fractional differential equations in Besov spaces and applications, <https://arxiv.org/submit/3048287>.
45. Michaelis-Menten dynamics of a cancer tumor growth model with a drug term,  
<https://arxiv.org/submit/3069317>.
46. <https://arxiv.org/submit/2218667>, The dynamics of a cancer tumor growth with multiphase structure and chemotherapy treatment model.
- 47 <https://arxiv.org/submit/2241814> The dynamics of a cancer tumor growth with multiphase structure and chemotherapy treatment model,
48. <https://arxiv.org/submit/3271567> The regularity properties and blow-up for convolution wave equations and applications.
49. (with R. Shahmurov) The regularity and blow-up properties for abstract wave equations and applications.

## **10. International Conference Presentations & Proceedings:**

- 1 Isomorphism theorems for boundary value problems in  $L^p$  Mater.1. Resp. Science Conf. Azerb. Baku,1978
- 2 Normal solvability of general boundary value problems Mater.Inter.Confer. "Theor.Operator.in Function spaces, Minsk,1978

- 3 About one nonelliptic boundary value problems Mater. Resp. Konf. Inst. Math. Azerb. Baku1981, p.395-397
- 4 Embedding theorems in abstract spaces and applications, Proceed. Forth. Math. Conference, 1983, p. 261-264
- 5 Embedding theorems in Banach-valued function spaces and applications, International conference Function spaces, Differential operators, Nonlinear analysis, Slovak, 24.06-29.06.1988, Czechoslovak Republie, Prague
6. Separable differential opearators in anisotropic functional spaces, Embedding of differentiable functions and linear and nonlinear Differential operators, 1989, Baku, Bilgeh
- 7 Embedding theorems in Banach-valued Liouville- Sobolev Spaces and their applications, International conference Function spaces, Differential operator devoted 90 yearth of S M .Nikolskii 1995, Moscow
- 8 Embedding theorems in abstract B- spaces and their applications, Proceed. Resp. Math. Conference, 1993
- 9 Theorems on compactness of embedding operators in abstract anisotropic spaces, 1994
- 10 Coercive boundary value problems for strongly degenerate differential-operator equations in Banach-valued function spaces, Proceed. Resp. Math. Conference, 1997
- 11 Embedding theorems and applications International conference of function spaces, Differential operators, devoted 75 yearth birthday of L.D. Kuderyavtsev, 1998, Moscow
- 12 A fractional discrete lattice of Gabor expansion IEE Signal processing and applications, SIU-2000 SF-611-616
- 13 A fractional discrete Gabor transformations !EEE, the 26-th Conf.an Acoustic ICASSP-2001, Salt.Lake.City, Utah. 2001
- 14 Embedding theorems in Banach-valued function spaces and their applications to coercive boundary value problems InternationalConference Function spaces, Differential operators, Nonlinear analysis Devoted 65 yearth birthday of H.Triebel, Germany, Göttingen, 2001
- 15 Coercive boundary value problems for regular degenerate equations 4-th International Conference Dynamical systems and applications, Atlanta, Georgia, 2003,USA, 21-24
- 16 Embedding operators and maximal regularity for differential-Operator equations in Banach-valued function spaces, International Workshop on Sampling Theory and Applications, Stroble, Salzburg, Austria, 26.5.2003-3.06.2003
- 17 Maximal regular boundary value problems in Banach-valued Weighed spaces International workshop on differential equations and Its applications, 15-17 09.2004, Istanbul
- 18 Embedding operators in Banach-valued function spaces and applications International conference Function spaces, Differential operators, Nonlinear analysis, Svartka, 27.05-2.06.2004, Czech Republie, Prague

- 19 Embedding operators in Banach-valued Besov spaces and optimal B-regular boundary value problems, International Conference SampTa05 ( Sampling theory and applications), 10-15. 07. 2005, Samsun, Turkey
- 20 Regular and Singular degenerate boundary value problems, International conference Differential and Difference Equations, 1-5. 08. 2005, Florida, Melbourne, USA
- 22 Separable degenerate differential operators with parameters, International conference Operator theory, Analysis and Mathematical Physics ( OTAMP-2006), 15-22 06 2006, Lund, Sweden
- 23 Embedding theorems in weighted vector-valued spaces and applications, International conference Function spaces, Differential operators, Nonlinear analysis, Baky, 1988
- 24 Maximal regular elliptic-convolution equations, Conference on Boundary Value Problems. Mathematical Models in Engineering, Biology and Medicine.  
September 16-19, 2008, Santiago de Compostela, Spain
- 25 NONLINEAR PARABOLIC BOUNDARY VALUE PROBLEMS MODELLING ATMOSPHERIC DISPERSION OF POLLUTANTS, 6th European Conference on Elliptic and Parabolic Problems Serapo, Gaeta, Italy., 25-30 0.5.2009
- 26 SEPARABLE ABSTRACT ELLIPTIC EQUATIONS WITH PARAMETERS AND APPLICATIONS, 6th European Conference on Elliptic and Parabolic Problems, Serapo, Gaeta, Italy., 25-30 0.5.2009
- 28 SOME SPECTRAL PROPERSTIES OF LINEAR OPERATORS IN UMD SPACES AND APPLICATIONS, International conference of Mathematical Sciences 4-10 .8. 2009, Istanbul Maltepe ECTRAL PROPERSTIES OF LINEAR OPERATORS IN UMD SPACES AND
- 29 ANISOTROPIC ELLIPTIC EQUATIONS WITH VMO COEFFICIENTS AND APPLICATIONS, International Congress in Honour of Professor H. M. Srivastava on his 70th Birth Anniversary” between August 18-21, 2010.
- 30 ANISOTROPIC ELLIPTIC EQUATIONS WITH VMO COEFFICIENTS AND APPLICATIONS, International Congress in Honour of Professor H. M. Srivastava on his 70th Birth Anniversary” between August 18-21, Bursa, 2010.
- 31 PARABOLIIC PROBLEMS WITH PARAMETERS ARISING IN EVOLUTION MODEL FOR PHYTOREMEDIATION, 8th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2010), Island of Rhodes, Greece the Hotel Rodos Palace, 19-25 September 2010
- 32 OPTIMAL REGULAR DIFFERENTIAL OPERATORS WITH VMO COEFFICIENTS AND APPLICATIONS, 8th International Conference of Numerical Analysis and Applied Mathematics (ICNAAM 2010), Island of Rhodes, Greece the Hotel Rodos Palace, 19-25 September 2010.
- 33 SINCULAR DEGENERATE SEPARABLE DIFFERENTIAL OPERATORS AND APPLICATIONS, Operators in Morrey-Type spaces and Applications, (OMTSA-2011) dedicated to 70th Birthday of professor Victor I. Burenkov, 20-27 may 2011, Kirshehir, Turkey.

- 34 Carleman estimates and unique continuation properties for abstract elliptic operators, The 24.th international Conference of Jangjeon Mathematical Society, july 20-23, 2011 Konya, Turkey.
- 35 ( with Aida Sahmurova) Abstract anisotropic parabolic problems with parametyers and applications, The 24.th international Conference of Jangjeon Mathematical Society, july 20-23, 2011 Konya, Turkey.
- 36 SEPARABLE DIFFERENTIAL OPERATORS IN BANACH SPACES AND APPLICATIONS, IWOTA 2011 3-9. 08. 2011, Universite of Sevilla
- 37 SINGULAR DEGENERATE PROBLEMS OCCURRING IN ATMOSPHERIC DISPERSION OF POLLUTANTS, IWOTA 2011 3-9. 08. 2011, Universite of Sevilla
- 38 Carleman estimates and unique continuation for abstract elliptic equations, 9th International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2011, Halidiki, Greece, 19-25 September.
- 39 Degenerate anisotropic parabolic problems occurring atmospheric dispersion of pollutants, 9th International Conference of Numerical Analysis and Applied Mathematics, ICNAAM 2011, Halidiki, Greece, 19-25 September.
- 40 Linear and nonlinear abstract elliptic equations with VMO coefficients and applications, , International Conference on applied analysis and algebra (ICAAA2012), Yıldız Technical University, Putra University of Malaysia, and Fatih University will be held on 20-24 June Istanbul, Turkey.
- 41 Parameter dependent Navier-Stokes like problem, ICNAAM 2012, 19-25.09.2012 Greece, Kos.
- 42 Parabolic Problems with Parameter Occuring in Environmental Engineering, ICNAAM 2012, 19-25.09. 2012 Greece, Kos.
- 43 Optimal regular operators with variable coefficients and applications, International Congress in Honour of Professor Hari M. Srivastava, 23-26 08. 2012 in the Auditorium at the campus of Uludag University, Bursa-TURKEY.
- 44 Singular degenerate problems occuring biosorption prossess, International Congress in Honour of Professor Hari M. Srivastava, 23-26 08. 2012 in the Auditorium at the campus of Uludag University, Bursa-TURKEY.
- 45 Linear and nonlinear degenerate problems in Banach spaces, International conference on theory, method and applications of nonlinear equations, 17-21.12.2012, Kingsville, Texas, USA.
- 46 (with Aida Sahmurova) Nonlocal Novier-Stokes problems with small parameters, International conference on theory, method and applications of nonlinear equations, 17-21.12.2012 , Kingsville, Texas, USA.
- 47 Stokes operators with variable coefficients and applications, International Conference on applied analysis and algebra (ICAAA2013), Yıldız Technical University, Putra University of Malaysia, and Fatih University will be held on 2-5 June Istanbul, Turkey.
- 48 Abstract elliptic operators appering in atmospheric dispersion of pollutants (with Aida Sahmurova) International Conference on applied analysis and algebra (ICAAA2013), Yıldız

Technical University, Putra University of Malaysia, and Fatih University will be held on 2-5 June Istanbul.

- 49 (with Aida Sahmurova) Linear and nonlinear degenerate equations appearing in atmospheric dispersion of pollutants, International Conference , Anatolian Communications in Nonlinear Analysis 2013, 3-6.08.2013, Bolu.
- 50 Abstract Novier-Stokes problems and applications, International Conference , Anatolian Communications in Nonlinear Analysis 2013, 3-6.08.2013, Bolu.
- 51 (with Asuman Mert Ozer) Maximal regularity properties of Agranovich-Vishik type abstract elliptic operators on half plane, International Conference , Anatolian Communications in Nonlinear Analysis 2013, 3-6.08.2013, Bolu.
- 52 Maksimal regularity properties of degenerate abstract evolution equations and applications, Conference “Resent trends in nonlinear evolution equations”, 3-8 april, 2016 , Marseille, France.
- 53 Unique continuation properties for abstract Schrödinger equations and applications, 3rd International Conference on Pure and Applied Science, Dubai, 3-6.02. 2017
- 54 The dynamics of a tumor growth model with multiphase structure,22nd World Multiconference on Systemics, Cybernetics and Informatics (WMSCI 2018), to be held in Orlando, USA, on July 8-11, 2018.  
*55 Nonlocal abstract Bossinesq equations, The 7th International Conference on Control and Optimization with Industrial Applications 26-28 August 2020, Baku, Azerbaijan*
- 56 Veli Shakhmurov (with Aida Sahmurova), Local and global dynamics of a cancer tumor growth model with multipoint structure, ICFAS2020, 5-5 oktamber 2020.*
- 57. Veli Shakhmurov (with Muhammad Kurulay, Aida Sahmurova), A DYNAMIC MODEL DESCRIBING OF INTERACTION OF CORONO VIRUS IN CANCER, ICFAS2020, 5-5 oktamber 2020.*
- 58. Veli Shakhmurov, Degenerate differential operators and applications , ICFAS2020, 5-5 oktamber 2020.

## 11. Book's / Book Chapter's

1. Linear Algebra 1999, İstanbul, Papatya
2. Applications of Linear Algebra 2000, İstanbul, Papatya.

3. Linear Algebra and Applications 2009, Istanbul Okan University.
4. Modern Linear Algebra and Applications, 2014, Istanbul Okan University
5. Linear Algbera and application, Lambert Academic Publishing 2012 USA.

## **12. Projects**

Projects in Istanbul University:

1.	Multi wavelets transformations and applications	BYP-55/23012003
2	Boundary value problems for regular degenerate differential Operator equations	BYP-537/24112004
3	Embedding theorems in Banach-valued function spaces	UDP-227/18022004
4	Regular and singular degenerate Boundary value problems in Banach- valued spaces.	UDP-543/17062005
5	Embedding operators and Maximal regular differential operators.	BYP-7941710022005
6	Separable anisotropic differential operators with parameters and applications	UDP-748/11052006
7	Maximal B-regular boundary value problems with parameters	BYP-39/30102006
8.	Separable anisotropic differential operators and applications	BYP-1133/2.05.2007
9	Embedding and maximal regular differential operators in Sobolev-Lions spaces	BYP-1134/2.05.2007
10	Nonlinear abstract boundary value problems in vector-valued function spaces and applications	BYP-1135/2.05.2007

## **14. Memberships in Scientific and Professional Organizations:**

Editor of the following journals:

1. Boundary Value Problems, USA, Springer (2008-2020).
2. Journal of abstract differential equations and applications, USA, Math. Research. Publ.
3. Mathematics and statistics, USA, Horizon Research Publishing;
4. Applied Mathematics, TWMS

## **15. Awards:**

- 1) 2012 Science prize of Okan University
- 2) Several awards from Istanbul University

3) Okan University and TUBITAK prizes for papers which are published in SCI journals, from 1997 to 2020.

**16. Undergraduate and graduate level classes which I have taught in the last two years:**

Academic Year	Semester	Class	Weekly Hour		Number of Students
			Theoretical	Applied	
2018	Autumn	Fund., Math. Temel Mat. Mat.113			250
	Spring	Mat.114, Math.114 Mat.216			270
2019	Autumn	Fund., Math. Temel Mat. Mat.113			240
	Spring	Mat.114, Math.114 Mat.216			260