

## CV

- 1. Name Surname** : Allaberen ASHYRALYEV
- 2. Date of Birth** : 01/08/1955
- 3. Title** : Prof. Dr.
- 4. University** : Bahcesehir University

Degree	Department	University	Year
BSc+MSc	Department of Mathematics	Turkmen State University (with an exceptional diploma)	1977
PhD	Department of Mathematics	Voronezh State University	1983
PhD (Doctor of Sciences)	Institute of Mathematics	Academy of Sciences of Ukraine	1992

### 5. Academic Titles

- Assist. Prof. Dr. : 1984-1987  
Assoc. Prof. Dr. : 1989-1995  
Prof. Dr. : 1995-present

### 6. Master Theses and PhD Theses

#### 6.1. Master Theses

1. Necmettin Ağgez, Difference schemes of nonlocal boundary value problems for hyperbolic equations, 2002.
2. Nejla Altay, Difference schemes of nonlocal boundary value problems for elliptic equations, 2004.
3. Yıldırım Özdemir, Difference schemes of nonlocal boundary value problems for hyperbolic-parabolic equations, 2005.
4. Mehmet Emir Köksal, An investigation of the difference schemes for hyperbolic equations, 2005.
5. Okan Gerçek, Nonlocal boundary value problems for parabolic-elliptic equations, 2006.
6. Abdulah S. Erdoğan, Numerical solutions of partial differential equation with variable space operator and its applications, 2007.
7. Özgür Yıldırım, Multipoint nonlocal boundary value problems for hyperbolic equations, 2007.

8. Elif Öztürk, Numerical solutions of the nonlocal boundary value problems for elliptic differential equations, 2008.
9. Fatma Songül Özesenli Tetikoğlu, Difference schemes for NBS problems, 2009.
10. Zehra Pınar, Difference schemes for fractional partial differential equations, 2009 (co-supervisor F. Dal).
11. Esat Gezgin, Positive operator's method for difference schemes, 2009.
12. Ayfer Dural, Numerical solution of the parabolic inverse problem, 2009.
13. Öznur Demirdağ, Numerical solutions of partial differential equations with parameter, 2010.
14. Betül Topçu, Difference schemes for fractional partial differential equations, 2010.
15. Neşe Nalbant, The structure of fractional spaces generated by positive operators and its applications, 2011.
16. Abdulgafur Taşkın, Numerical solutions of partial differential equations transport neutron, 2011.
17. Fatih Sabahattin Tetikoğlu, The structure of fractional spaces generated by positive operators with periodic conditions and its applications, 2012.
18. Hülya Uygun, Numerical solution of fractional parabolic inverse problem with an unknown source function, 2012 (co-supervisor A.S. Erdogan).
19. Fatih Hezenci, The boundary value problem for a third order partial differential equation, 2013 (co-supervisor N. Aggez).
20. Ali Uğur Sazaklıoğlu, Numerical solution of identification problems for parabolic equations arising in biomechanics, 2013 (co-supervisor A.S. Erdogan).
21. Emel Zusi, Numerical solutions for two dimensional elliptic-parabolic equations, 2013 (co-supervisor O. Gerçek).
22. Mesut Ürün, Determination of a control parameter for the Shrödinger's equation, 2013.
23. Sueda Nur Takalan, Numerical solution of problems for partial differential equations arising in lake pollution models, 2014 (co-supervisor A.S. Erdogan).
24. Sinem Nur Şimşek, Nonlocal boundary value problems for third order partial differential equations, 2014.
25. Fatma Çiçek, Source identification problem for a telegraph equation, 2015.
26. Burcu Ceylan, Zaman Gecikmeli Lineer Olmayan Parabolik Denklemlerin Sınırlı Çözümleri, 2016 (co-supervisor D. Agirseven).
27. Koray Türk, Zaman Gecikmeli Telegraph Denklemlerin Sınırlı Çözümleri, 2017 (co-supervisor

Deniz Agirseven).

28. Yasmina F. Omar Bader, Fractional Calculus and Its Applications to Fractional Differential Equations, 2018.
29. Haitham Ahmad Al Hazaimeh, Time-dependent source identification problems for telegraph equations, 2019.
30. Twana Abbas Hidayat, Schrödinger type involutory partial differential equations, 2019.
31. Ameera Masour Amer, Numerical solutions of the system of partial differential equations for observing epidemic models, 2019.
32. Çağın Arıkan, The space-dependent source identification problems for parabolic-elliptic equations, 2019.
33. Lawin Hayder, Methods of solutions of the system of Basset differential equations for observing epidemic models, 2019 (jointly with B. Kaymakanzade).
34. Amer Ahmad, Parabolic type involutory differential equations, 2019.
35. Barez Abdalmohammed, Hyperbolic type involutory differential equations, 2020.
36. Batyrova Ogulbabek, Telegraph type involutory partial differential equations (planned graduation in 2022).
37. Bishar Chato Haso, Time-dependent identification problem for delay hyperbolic equations (planned graduation in 2022).

## 6.2. PhD Theses

1. İbrahim Karatay, Well-posedness of difference schemes for nonlocal parabolic problems, 2004.
2. Yıldırım Özdemir, Nonlocal boundary value problems for parabolic-hyperbolic differential and difference equations, 2007 (co-supervisor T. Aliev).
3. Ali Sırma, Nonlocal boundary value problems for Schrodinger's equation, 2007 (co-supervisor C. Yakar)
4. Mehmet Emir Köksal, Two-step difference schemes for hyperbolic differential equations, 2009 (co-supervisor C. Yakar).
5. Abdullah S. Erdoğan, Numerical solution of parabolic inverse problem with an unknown source function, 2010 (co-supervisor A. Kara).
6. Okan Gerçek, Difference schemes of nonlocal boundary value problems for elliptic-parabolic differential equations, 2010 (co-supervisor Z. Soyucok).
7. Özgür Yıldırım, Stable difference schemes for hyperbolic problems subject to nonlocal conditions, 2011 (co-supervisor M. Cagliyan).

8. Necmettin Ağgez, Nonlocal boundary value problems with integral conditions for hyperbolic equations, 2011.
9. Mehmet Emin San, An approximation of semigroups method for stochastic parabolic equations, 2012 (co-supervisor M. Caglar).
10. Fatma Somgül Özeseñli Tetikođlu, Nonlocal boundary value problems for elliptic differential and difference equations, 2012.
11. Serhat Yılmaz, Ultra parabolic differential and difference equations, 2013.
12. Elif Öztürk, Nonlocal boundary value problems for elliptic differential and difference equations, 2013 (co-supervisor S. Hizliyel).
13. Sema Kaplan, The structure of fractional spaces generated by positive operators with nonlocal conditions and its applications, 2014 (co-supervisor Y. Sozen).
14. A.N. Urmatova, Mathematical modeling of the dynamic characteristics of gas-droplet distribution in a multi-channel mix mass-transfer apparatus, 2014 (co-supervisor B. Ismailov).
15. Betül Topçu, Difference schemes for fractional Schrödinger equations, 2015 (co-supervisor T. Aliev).
16. Mahmut Modanlı, Nonlocal boundary value problems for telegraph differential and difference equations, 2015.
17. Mutlu Dedetürk. Finite difference method for the determination of the right-hand side in an elliptic equation, 2015 (co-supervisor C. Ashyralyyev).
18. Fatih Sabahattin Tetikođlu, Fractional spaces generated by positive differential and difference operators with periodic conditions and their applications, 2015.
19. Abdulgafur Taşkın, Fractional spaces generated by positive differential and difference neutron transport operators, 2016.
20. Neşer Nalbant, The structure of fractional spaces generated by positive operators with the nonlocal condition and their applications, 2016 (co-supervisor Yaşar Sozen).
21. Bahriye Karaca, Dirichlet problem for partial differential equations with complex variables, 2017 (co-supervisor K.I. Ikeda).
22. Asker Hanalyev, Coercive solvability of the Cauchy problem and nonlocal boundary value problems for parabolic equations, 2017 (co-supervisor L.E. Rossovsky).
23. Belakroum Kheireddine, Well-posedness of a third order partial differential equation, 2018 (co-supervisor A. Guezane-Lakoud).
24. Fathi Emharab, Source identification problems for hyperbolic differential and difference equations, 2019.

25. Ayman Hamad, Fractional spaces generated by positive operators with the nonlocal condition and their applications, 2019.
26. Abdisalam Sarsenbi, Well-posedness of mixed problems for differential equations of parabolic type with involution, 2019 (co-supervisor B. Turmetov).
27. Suleyman Ibrahim, Stability of the third order partial differential and difference equations with time delay, 2020 (co-supervisor E. Hincal).
28. Indira Omarova, The formation of design and research activities of future mathematicians in the process of studying the theory of limits, 2020 (co-supervisor B.T. Kalimbetov).
29. Ahmad Al-Hammouri, The source identification problem for telegraph-elliptic differential equations, 2020.
30. Mesut Urun, The time-dependent source identification problem for the Schrodinger equation (planned graduation in 2022).
31. Haitham Ahmad Al Hazaimh, Time-dependent source identification problems for telegraph equations (planned graduation in 2023).
32. Ulker Okur, Single step difference schemes for the stochastic parabolic equation with the dependent operator coefficient (planned graduation in 2023).
33. Ibrahim M. Ibrahim Kalash, Taylor's decomposition on five points and its applications to fourth order differential equations (planned graduation in 2023).
34. Sa'adu Bello Mu'azu, Bounded solutions of semilinear delay parabolic equations (planned graduation in 2023).

## 7. Publications

### 7.1. Papers published in internationally refereed journals (SCI, SSCI, Arts and Humanities)

1. Ashyralyev A., Sobolevskii P.E. 1984. Theory of the interpolation of the linear operators and the stability of the difference schemes. Doklady Akademii Nauk SSSR, Vol. 275, No. 6, pp. 1289-1291.
2. Ashyralyev A., Sobolevskii P.E. 1988. Difference schemes of the high order accuracy for parabolic equations with the variable coefficients. Doklady Akademii Nauk Ukrainian SSR, Ser. A Fiz.-Math. and Tech. Sciences, No. 6, pp. 3-7.
3. Ashyralyev A. 1989. On uniform difference schemes of a high order of approximation for evolution equations with a small parameter. Numerical Functional Analysis & Optimization, Vol. 10, No. 5-6, pp. 593-406.
4. Ashyralyev A. 1990. On uniform difference schemes of a higher order of approximation for elliptical equations with a small parameter. Applicable Analysis, Vol. 36, pp. 211-220.

5. Ashyralyev A., Fattorini H.O. 1992. On uniform difference schemes for second order singular perturbation problems in Banach spaces. *SIAM Journal on Mathematical Analysis*, Vol. 23, No. 1, pp. 29-54.
6. Ashyralyev A. 1992. Stable solvability of Pade difference schemes for parabolic equations in Holder spaces. *Ukrainian Mathematical Journal*, Vol. 44, No. 11, pp. 1349-1358.
7. Ashyralyev A., Sobolevskii P.E. 1995. Well-posed solvability of the Cauchy problem for difference equations of parabolic type. *Nonlinear Analysis: Theory, Methods & Applications*, Vol. 24, No. 2, pp. 257-264.
8. Ashyralyev A. 1995. Well-posed solvability of the boundary value problem for difference equations of elliptic type. *Nonlinear Analysis: Theory, Methods & Applications*, Vol. 24, No. 2, pp. 251-256.
9. Ashyralyev A., Akca H. 2001. Stability estimates of difference schemes for neutral delay differential equations. *Nonlinear Analysis: Theory, Methods & Applications*, Vol.44, No. 4, pp. 443-452.
10. Ashyralyev A., Yurtsever A. 2001. On a nonlocal boundary value problem for semilinear hyperbolic-parabolic equations. *Nonlinear Analysis: Theory, Methods & Applications*, Vol. 47, No. 5, pp. 3585-3592.
11. Ashyralyev A., Hanalyev A., Sobolevskii P.E. 2001. Coercive solvability of the nonlocal boundary value problem for parabolic differential equations. *Abstract & Applied Analysis*, Vol. 6, Article ID 436047, 9 pages.
12. Ashyralyev A., Sobolevskii P.E. 2001. A note on the difference schemes for hyperbolic equations. *Abstract & Applied Analysis*, Vol. 6, Article ID 694534, 8 pages.
13. Ashyralyev A., Sobolevskii P.E. 2001. On the stability of the linear delay differential and difference equations. *Abstract & Applied Analysis*, Vol. 6, Article ID 535262, 31 pages.
14. Ashyralyev A., Piskarev S., Weis L. 2002. On well-posedness of difference schemes for abstract parabolic equations in  $L_p([0,1], E)$  spaces. *Numerical Functional Analysis & Optimization*, Vol. 23, No. 7-8, pp. 669-693.
15. Ashyralyev A. 2003. On well-posedness of the nonlocal boundary value problem for elliptic equations. *Numerical Functional Analysis & Optimization*, Vol. 24, No. 1-2, pp. 1-15.
16. Ashyralyev A., Karatay I., Sobolevskii P.E. 2004. On well-posedness of the nonlocal boundary value problem for parabolic difference equations. *Discrete Dynamics in Nature & Society*, Vol. 2004, No. 2, pp. 273-286.
17. Ashyralyev A., Aggez N. 2004. A note on the difference schemes of the nonlocal boundary value problems for hyperbolic equations. *Numerical Functional Analysis & Optimization*, Vol. 25, No. 5-6, pp. 439-462.
18. Ashyralyev A., Yurtsever A. 2005. A note on the second order of accuracy difference schemes for hyperbolic-parabolic equations. *Applied Mathematics & Computation*, Vol. 165, No. 3, pp. 517-537.

19. Ashyralyev A., Sobolevskii P.E. 2005. Two new approaches for construction of the high order of accuracy difference schemes for hyperbolic differential equations. *Discrete Dynamics in Nature & Society*, Vol. 2005, No. 2, pp. 183-213.
20. Ashyralyev A., Ozdemir Y. 2005. Stability of difference schemes for hyperbolic-parabolic equations. *Computers & Mathematics with Applications*, Vol. 50, No. 8-9, pp. 1443-1476.
21. Ashyralyev A., Koksals M.E. 2005. On the second order of accuracy difference scheme for hyperbolic equations in a Hilbert space. *Numerical Functional Analysis & Optimization*, Vol. 26, No. 7-8, pp. 739-772.
22. Ashyralyev A., Judakova G., Sobolevskii P.E. 2006. A note on the difference schemes for hyperbolic-elliptic equations, *Abstract & Applied Analysis*, Vol. 2006, Article ID 14816.
23. Ashyralyev A., Sobolevskii P.E. 2006. Well-posedness of the difference schemes of the high order of accuracy for elliptic equations. *Discrete Dynamics in Nature & Society*, Vol. 2006, Article ID 75153.
24. Ashyralyev A., Altay N. 2006. A note on the nonlocal boundary value problem for elliptic difference equations. *Applied Mathematics & Computation*, Vol. 175, No. 1, pp. 49-60.
25. Ashyralyev A. 2006. Nonlocal boundary value problems for abstract parabolic equations: well-posedness in Bochner spaces. *Journal of Evolution Equations*, Vol.6, No.1, pp. 1-28.
26. Ashyralyev A., Yurtsever A. 2006. On the stability of the second order of accuracy difference schemes for hyperbolic-parabolic equations. *Computers & Mathematics with Applications*, Vol. 52, No. 3-4, pp. 259-268.
27. Ashyralyev A. 2007. Well-posedness of the modified Crank-Nicholson difference schemes in Bochner spaces. *Discrete & Continuous Dynamical Systems - Series B*, Vol. 7, No. 1, pp. 29-51.
28. Ashyralyev A. 2007. Well-posedness of the boundary value problem for parabolic equations in difference analogues of spaces of smooth functions. *Mathematical Problems in Engineering*, Vol. 2007, Article ID 90815.
29. Ashyralyev A., Sozen Y., Sobolevskii P.E. 2007. A note on the parabolic differential and difference equations. *Abstract & Applied Analysis*, Vol. 2007, Article ID 61659.
30. Ashyralyev A., Arjmand D. 2007. A note on the Taylor's decomposition on four points for a third-order differential equation. *Applied Mathematics & Computation*, Vol. 188, No. 2, pp. 1483-1490.
31. Ashyralyev A., Erdogan A.S., Arslan N. 2007. On the numerical solution of the diffusion equation with variable space operator. *Applied Mathematics & Computation*, Vol. 189, No. 1, pp. 682-689.
32. Ashyralyev A., Ozdemir Y. 2007. On nonlocal boundary value problems for hyperbolic-parabolic equations. *Taiwanese Journal of Mathematics*, Vol. 11, No. 4, pp. 1075-1089.
33. Ashyralyev A., Koksals M.E. 2007. Stability of a second order of accuracy difference scheme for hyperbolic equations in a Hilbert space. *Discrete Dynamics in Nature & Society*, Vol. 2007, Article ID 57491.
34. Ashyralyev A., Sirma A. 2008. Nonlocal boundary value problems for the Schrodinger equation. *Computers & Mathematics with Applications*, Vol. 55, No. 3, pp. 392-407.

35. Ashyralyev A., Cuevas C., Piskarev S. 2008. On well-posedness of difference schemes for abstract elliptic problems in  $L_p([0,1], E)$  spaces. *Numerical Functional Analysis & Optimization*, Vol. 29, No. 1-2, pp. 43-65.
36. Ashyralyev A. 2008. On modified Crank-Nicholson difference schemes for stochastic parabolic equation. *Numerical Functional Analysis & Optimization*, Vol. 29, No. 3-4, pp. 268-282.
37. Ashyralyev A. 2008. A note on the Bitsadze-Samarskii type nonlocal boundary value problem in a Banach space. *Journal of Mathematical Analysis & Applications*, Vol. 344, No. 1, pp. 557-573.
38. Arslan N., Erdogan A.S., Ashyralyev A. 2008. Computational fluid flow solution over endothelial cells inside the capillary vascular system. *International Journal for Numerical Methods in Engineering*, Vol. 74, No. 11, pp. 1679-1689.
39. Ashyralyev A., Koksals M.E. 2008. A numerical solution of wave equation arising in non-homogeneous cylindrical shells. *Turkish Journal of Mathematics*, Vol. 32, No. 4, pp. 409-427.
40. Ashyralyev A., Gercek O. 2008. Nonlocal boundary value problems for elliptic-parabolic differential and difference equations. *Discrete Dynamics in Nature & Society*, Vol. 2008, Article ID 904824.
41. Ashyralyev A. 2009. Well-posedness of the difference schemes for elliptic equations in  $C_\tau^{\beta,\gamma}(E)$  spaces. *Applied Mathematics Letters*, Vol. 22, No. 3, pp. 390-395.
42. Ashyralyev A. 2009. A note on fractional derivatives and fractional powers of operators. *Journal of Mathematical Analysis & Applications*, Vol. 357, No. 1, pp. 232-236.
43. Ashyralyev A., Koksals M.E. 2009. On the numerical solution of hyperbolic PDEs with variable space operators. *Numerical Methods for Partial Differential Equations*, Vol. 25, No. 5, pp. 1086-1099.
44. Ashyralyev A., Ozdemir Y. 2009. On stable implicit difference scheme for hyperbolic-parabolic equations in a Hilbert space. *Numerical Methods for Partial Differential Equations*, Vol. 25, No. 5, pp. 1100-1118.
45. Ashyralyev A., Sirma A. 2009. Modified Crank-Nicholson difference schemes for nonlocal boundary value problem for the Schrödinger equation. *Discrete Dynamics in Nature & Society*, Vol. 2009, Article ID 584718.
46. Ashyralyev A., Arjmand D., Koksals M. 2009. Taylor's decomposition on four points for solving third-order linear time-varying systems. *Journal of the Franklin Institute Engineering & Applied Mathematics*, Vol. 346, No. 7, pp. 651-662.
47. Ashyralyev A., Dal F., Pinar Z. 2009. On the numerical solution of fractional hyperbolic partial differential equations. *Mathematical Problems in Engineering*, Vol. 2009, Article ID 730465.
48. Ashyralyev A., Sirma A. 2009. A note on the numerical solution of the semilinear Schrödinger equation. *Nonlinear Analysis: Theory, Methods & Applications*, Vol. 71, No. 12, pp. e2507-e2516.
49. Ashyralyev A., Yildirim O. 2010. On multipoint nonlocal boundary value problems for hyperbolic differential and difference equations. *Taiwanese Journal of Mathematics*, Vol. 14, No. 1, pp. 165-194.



50. Ashyralyev A., Erdogan A.S., Arslan N. 2010. On the modified Crank-Nicholson difference schemes for parabolic equation with non-smooth data arising in biomechanics. *International Journal for Numerical Methods in Biomedical Engineering*, Vol. 26, No. 5, pp. 501-510.
51. Ashyralyev A., Koksal E.M., Agarwal R. 2010. A difference scheme for Cauchy problem for hyperbolic equation with self-adjoint operator. *Mathematical & Computer Modelling*, Vol. 52, pp. 409-424.
52. Ashyralyev A., Sozen Y. 2010. Well-posedness of parabolic differential and difference equations. *Computers and Mathematics with Applications*, Vol. 60, pp. 792-802.
53. Ashyralyev A., Gercek O. 2010. On second order of accuracy difference scheme of the approximate solution of nonlocal elliptic-parabolic problems. *Abstract & Applied Analysis*, Vol. 2010, Article ID 705172.
54. Ashyralyev A., Misirli E., Mogol O. 2010. A note on the integral inequalities with two dependent limits. *Journal of Inequalities & Applications*, Vol. 2010, Article ID 430512.
55. Ashyralyev A., Gercek O. 2010. Finite difference method for multipoint nonlocal elliptic-parabolic problems. *Computers & Mathematics with Applications*, Vol. 60, No. 7, pp. 2043-2052.
56. Ashyralyev A. 2011. On a problem of determining the parameter of a parabolic equation. *Ukrainian Mathematical Journal*, Vol. 62, No. 9, pp. 1397-1408.
57. Ashyralyev A., Dal F., Pinar Z. 2011. A note on the fractional hyperbolic differential and difference equations. *Applied Mathematics & Computation*, Vol. 217, No. 9, pp. 4654-4664.
58. Ashyralyev A. 2011. On the well-posedness of the nonlocal boundary value problem for elliptic-parabolic equations. *Electronic Journal of Qualitative Theory of Differential Equations*, Issue 49, pp. 1-16.
59. Ashyralyev A., Aggez N. 2011. Finite difference method for hyperbolic equations with the nonlocal integral condition. *Discrete Dynamics in Nature and Society*, Vol. 2011, Article ID 562385.
60. Ashyralyev A., Hicdurmaz B. 2011. A note on the fractional Schrödinger differential and difference equations. *Kybernetes*, Vol. 40, No. 5, pp. 736-750.
61. Ashyralyev A. 2011. Well-posedness of the Basset problem in spaces of smooth functions. *Applied Mathematics Letters*, Vol. 24, No. 7, pp. 1176-1180.
62. Ashyralyev A., Koksal M.E., Agarwal R.P. 2011. An operator-difference scheme for abstract Cauchy problems. *Computers & Mathematics with Applications*, Vol. 61, No. 7, pp. 1855-1872.
63. Ashyralyev A., Yildirim O. 2011. Stable difference schemes for the hyperbolic problems subject to nonlocal boundary conditions with self-adjoint operator. *Applied Mathematics & Computation*, Vol. 218, No. 3, pp. 1124-1131.
64. Ashyralyev A., Sözen Y. 2011. A note on the parabolic equation with an arbitrary parameter at the derivative, *Mathematical & Computer Modelling*, Vol. 54, No. 11-12, pp. 2565-2572.

65. Ashyralyev A., Dal F. 2012. Finite Difference and Iteration Methods for Fractional Hyperbolic Partial Differential Equations with the Neumann Condition. *Discrete Dynamics in Nature and Society*, Vol. 2012, Article ID 434976.
66. Ashyralyev A. 2012. Well-Posedness of the Modified Crank-Nicholson Difference Schemes in  $C_{\tau}^{\beta,\gamma}(E)$  spaces. *Applied Mathematics & Information Sciences*, Vol. 6, No. 3, pp. 543-554.
67. Ashyralyev A., Yilmaz S. 2012. An Approximation of Ultra Parabolic Equations, *Abstract & Applied Analysis*, Vol. 2012, Article ID 840621.
68. Ashyralyev A., Gercek O. 2012. On the second order of accuracy implicit difference scheme for elliptic-parabolic equations. *Abstract & Applied Analysis*, Vol. 2012, Article ID 230190.
69. Amanov D., Ashyralyev A. 2012. Initial-Boundary Value Problem for Fractional Partial Differential Equations of Higher Order. *Abstract & Applied Analysis*, Vol. 2012, Article ID 973102.
70. Ashyralyev A., Sharifov Y.A. 2012. Existence and Uniqueness of Solutions of the System of Nonlinear Fractional Differential Equations with Nonlocal and Integral Boundary Conditions. *Abstract & Applied Analysis*, Vol. 2012, Article ID 594802.
71. Ashyralyev A., Hicdurmaz B. 2012. On the numerical solution of fractional Schrödinger differential equations with the Dirichlet condition. *International Journal of Computer Mathematics*, Vol. 89, No. 13-14, pp. 1927-1936.
72. Ashyralyev A., Gercek O. 2012. On a difference scheme of the second order of accuracy for elliptic-parabolic equations. *Boundary Value Problems*, Vol. 2012, Article No. 80.
73. Ashyralyev A., Ozturk E. 2012. The Numerical Solution of Bitsadze-Samarskii Nonlocal Boundary Value Problems with the Dirichlet-Neumann Condition, *Abstract & Applied Analysis*, Vol. 2012, Article ID 730804.
74. Ashyralyev A., Çakir Z. 2012. On the Numerical Solution of Fractional Parabolic Partial Differential Equations with the Dirichlet Condition. *Discrete Dynamics in Nature and Society*, Vol. 2012, Article ID 696179.
75. Ashyralyev A., Ozesenli Tetikoglu F.S. 2012. FDM for Elliptic Equations with Bitsadze-Samarskii-Dirichlet Conditions. *Abstract & Applied Analysis*, Vol. 2012, Article ID 454831.
76. Ashyralyev A., Yıldırım O. 2012. A Note on the Second Order of Accuracy Stable Difference Schemes for the Nonlocal Boundary Value Hyperbolic Problem, *Abstract & Applied Analysis*, Vol. 2012, Article ID 846582.
77. Ashyralyev A., Öztürk E. 2012. On Bitsadze-Samarskii Type Nonlocal Boundary Value Problems for Elliptic Differential and Difference Equations: Well-Posedness. *Applied Mathematics & Computation*, Vol. 219, No. 3, pp. 1093-1107.
78. Ashyralyev A., Erdogan A.S., Demirdag O. 2012. On the determination of the right-hand side in a parabolic equation. *Applied Numerical Mathematics*, Vol. 62, No. 11, pp. 1672-1683.
79. Ashyralyev A., Yilmaz S. 2012. Modified Crank-Nicholson difference schemes for ultra-parabolic equations, *Computers & Mathematics with Applications*, Vol. 64, No. 8, pp. 2756-2764.

80. Ashyralyev A., San M.E. 2012. An approximation of semigroups method for stochastic parabolic equations. *Abstract & Applied Analysis*, Vol. 2012, Article ID 684248.
81. Ashyralyev A., Öztürk E. 2013. On a difference scheme of fourth order of accuracy for the Bitsadze-Samarskii type nonlocal boundary value problem. *Mathematical Methods in the Applied Sciences*, Vol. 36, No. 8, pp. 936-955.
82. Ashyralyev A. 2013. Well-posedness of fractional parabolic equations. *Boundary Value Problems*, Vol. 2013, Article No. 31.
83. Ashyralyev A., Yildirim O. 2013. On the numerical solution of hyperbolic IBVP with high-order stable finite difference schemes. *Boundary Value Problems*, Vol. 2013, Article No. 29.
84. Ashyralyev A., Sharifov Y.A. 2013. Optimal control problem for impulsive systems with integral boundary conditions. *Electronic Journal of Differential Equations*, Vol. 2013, Article No. 80.
85. Ashyralyev A., Batyrov A. 2013. On stability of difference schemes in fractional spaces. *Mathematical & Computer Modelling*, Vol. 57, pp. 900–908.
86. Ashyralyev A., Çakir Z. 2013. FDM for Fractional Parabolic Equations with the Neumann Condition. *Advances in Difference Equations*, Vol. 2013, Article No. 120.
87. Ashyralyev A., Akat M. 2013. An approximation of stochastic hyperbolic equations: case with Wiener process. *Mathematical Methods in the Applied Sciences*, Vol 36, No. 9, pp. 1095-1106.
88. Ashyralyev A., Ozesenli Tetikoglu F.S. 2013. A third order of accuracy difference scheme for the Bitsadze-Samarskii type nonlocal boundary value problem. *Numerical Functional Analysis & Optimization*, Vol. 34, No. 9, pp. 939–975.
89. Ashyralyev A., Sharifov Y.A. 2013. Existence and uniqueness of solutions for nonlinear impulsive differential equations with two-point and integral boundary conditions. *Advances in Difference Equations*, Vol. 2013, Article No. 173.
90. Ashyralyev A., Yildirim O. 2013. On stability of a third order of accuracy difference scheme for nonlocal BVPs with self-adjoint operator. *Abstract & Applied Analysis*, Vol. 2013, Article ID 959216.
91. Ashyralyev A., Agirseven D. 2013. On Convergence of Difference Schemes for Delay Parabolic Equations. *Computers & Mathematics with Applications*, Vol. 66, No. 7, pp. 1232-1244.
92. Ashyralyev A., Urun M. 2013. Determination of a control parameter for the difference Schrödinger equation. *Abstract & Applied Analysis*, Vol. 2013, Article ID 548201.
93. Ashyralyev A., Agirseven D. 2014. Stability of Parabolic Equations with Unbounded Operators Acting on Delay Terms. *Electronic Journal of Differential Equations*, Vol. 2014, Article No. 160.
94. Ashyralyev A., Ashyralyev C. 2014. On the problem of determining the parameter of an elliptic equation in a Banach space. *Nonlinear Analysis: Modelling and Control*, Vol. 19, No. 3, pp. 350-366.
95. Ashyralyev A., Özger F. 2014. The hyperbolic-elliptic equations with the nonlocal condition. *Mathematical Methods in the Applied Sciences*, Vol. 37, No. 4, pp. 524-545.

96. Ashyralyev A., Erdogan A.S. 2014. On the second order implicit difference schemes for a right hand side identification problem. *Applied Mathematics & Computation*, Vol. 226, pp. 212–228.
97. Ashyralyev A., Hanalyev A. 2014. Well-Posedness of Nonlocal Parabolic Differential Problems with Dependent Operators. *The Scientific World Journal*, Vol. 2014, Article ID 519814.
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5. Edited by Ashyralyev A., Malkowsky E. 2014. "Second International Conference on Analysis and Applied Mathematics" (ICAAM 2014). AIP Conf. Proc., Vol. 1611, 430 pages.
6. Edited by Ashyralyev A., Malkowsky E., Lukashov A., Başar F. 2015. "Advancements in Mathematical Sciences: Proceedings of the International Conference on Advancements in Mathematical Sciences", Antalya, Turkey. ISBN: 978-0-7354-1323-8, Vol. 1676, 645 pages.
7. Edited by Ashyralyev A., Lukashov A. 2016. "Third International Conference on Analysis and Applied Mathematics" (ICAAM 2016). AIP Conference Proceedings, Vol. 1759, 768 pages.

8. Edited by Ashyralyev A., Lukashov A., Sadybekov M. 2018. "Fourth International Conference on Analysis and Applied Mathematics" (ICAAM 2018). AIP Conference Proceedings, Vol. 1997.

### 7.5. Articles published in nationally-respected journals

1. Ashyralyev A., Sobolevskii P.E. 1981. Correct solvability of the Crank-Nicolson difference scheme for parabolic equations. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 6, pp. 10-16.
2. Ashyralyev A., Sobolevskii P.E. 1982. Coercive stability of a Crank-Nicolson difference scheme in spaces  $C_0^\alpha$ . In: *Approximate methods for investigations of differential equations and their applications*, Kuybishev, pp. 16-24.
3. Ashyralyev A., Sobolevskii P.E. 1982. The Crank-Nicolson difference scheme for differential equations in a Banach space with the time-dependent operator. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 3, pp. 3-9.
4. Ashyralyev A. 1983. Some difference schemes for parabolic equations with the nonsmooth initial data. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 6, pp. 70-72.
5. Ashyralyev A., Sobolevskii P.E. 1985. Stability of the difference schemes for parabolic equations in interpolation spaces. In: *Applied methods of the functional analysis*, Voronezh, pp. 9-17.
6. Ashyralyev A., Sobolevskii P.E. 1985. Coercive stability of the difference schemes of the first and second orders of the approximation with the coefficients independent of the time. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 6, pp. 3-11.
7. Ashyralyev A. 1985. An error estimation of the solution of the purely implicit difference schemes for parabolic equations with the nonsmooth data. In: *Applied Mathematics and Computer Software*, Moscow, pp. 26-28.
8. Ashyralyev A., Sobolevskii P.E. 1986. Stability in a Holder norms of the difference schemes for parabolic equations. In: *Numerical Methods for Solving the Transport Equations*, Tartu, pp.20-23.
9. Ashyralyev A., Sobolevskii P.E. 1987. Coercive stability of the multidimensional difference elliptic equations of the  $2m$ -th order with the variable coefficients. In: *Investigations on the theory of the differential equations*, Ashgabat, pp. 31-43.
10. Ashyralyev A. 1987. A purely implicit difference scheme of the second order of the approximation for parabolic equations. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 4, pp. 3-13.
11. Ashyralyev A. 1988. Coercive stability of a difference scheme of the second order of approximation for differential equations with a time-dependent operator in a Banach space. In: *Measure and Integral*, Kuybishev, KSU, pp. 27-36.
12. Ashyralyev A. 1989. On the difference schemes of a high order of the accuracy for evolution equations of the second order. In: *Functional Differential Equations*, Perm, pp. 145-150.
13. Ashyralyev A. 1989. Estimation of the convergence for the solution of the modification Crank-Nicolson difference schemes for parabolic equations with the nonsmooth initial data. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 1, pp. 3-8.
14. Ashyralyev A. 1989. Coercive solvability of the parabolic equations in the spaces of the smooth functions. *Izv. Akad. Nauk Turkmen. SSR Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 3, pp. 3-13.
15. Ashyralyev A. 1989. On difference schemes of a higher order of accuracy for elliptic equations. In: *Applications of the Methods of the Functional Analysis to the Some Nonclassical Equations of the Mathematical Physics*, Novosibirsk, pp. 3-14.
16. Ashyralyev A. 1989. Coercive solvability of the elliptic equations in the spaces of the smooth functions. In: *Boundary Value Problem for the Nonclassical Equations of the Mathematical Physics*, Novosibirsk, No. 2, Section 2, pp. 82-86.



17. Ashyralyev A. 1990. On difference schemes of a higher order of the accuracy for semilinear evolution differential equations in a Banach space. In: Computer Science and System Analysis, Ashgabat, pp. 66-75.
18. Ashyralyev A., Sobolevskii P.E. 1990. On a class three-step difference schemes of a higher order of the accuracy for elliptic equations in a Hilbert space. In: Numerical Methods for the Solutions of the Transport Equations, Akad. Nauk Estonsk SSR, Tartu, pp. 18-22.
19. Ashyralyev A. 1991. Estimation of the convergence of the modified difference schemes of the Pades class for elliptic equations. In: Investigation of the Theory and Approximation Methods for Differential Equations, Ashgabat, pp. 71-79.
20. Ashyralyev A., Fattorini H.O. 1991. On difference schemes of a high order accuracy for the singular perturbation elliptic equations. In: Investigation of the theory and approximation methods for differential equations, Ashgabat, pp. 80-83.
21. Ashyralyev A., Soltanov H. 1994. On the stability of the difference scheme for parabolic-elliptic equations in a Hilbert Space. In: Works of the IMM of AS of Turkmenistan, Ashgabat, pp. 53-57.
22. Ashyralyev A. 1994. Correct solvability of the Rote difference scheme in difference spaces of the smooth functions. In: Works of the IMM of AS of Turkmenistan, Ashgabat, pp. 112-118.
23. Ashyralyev A., Muradov I. 1995. On one difference scheme of a second order of accuracy for hyperbolic equations. In: Works of the IMM of AS of Turkmenistan, Ashgabat, No. 3, pp. 58-63.
24. Ashyralyev A., Soltanov H. 1995. On coercive stability of difference scheme for parabolic-elliptic equations. In: Works of the IMM of AS of Turkmenistan, Ashgabat, No. 3, pp. 63-66.
25. Ashyralyev A., Samovik I.E. 1995. Coercive solvability one nonlocal boundary value problem for elliptic equations. In: Works of the IMM of AS of Turkmenistan, Ashgabat, No. 3, pp. 67-75.
26. Ashyralyev A., Amanov K. 1995. On coercive solvability of elliptic equations in Holder spaces with weight. In: Works of the IMM and CS of AS of Turkmenistan, Ashgabat, No. 4, pp. 15-19.
27. Ashyralyev A., Soltanov H. 1995. On elliptic-parabolic equations in a Hilbert space. In: Works of the IMM and CS of AS of Turkmenistan, Ashgabat, No. 4, pp. 101-104.
28. Ashyralyev A., Amanov K. 1996. On coercive estimation in Holder norms with weight. *Izv. Akad. Nauk Turkmenistan Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 2, pp. 3-10.
29. Ashyralyev A., Muradov I. 1996. On stability estimation of difference scheme of a first order of accuracy for hyperbolic-parabolic equations. *Izv. Akad. Nauk Turkmenistan Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 2, pp. 1-6.
30. Ashyralyev A., Hanalyev A. 1996. Coercive stability of nlocal boundary value problem for parabolic equations in spaces smooth functions. *Izv. Akad. Nauk Turkmenistan Ser. Fiz.-Tekhn. Khim. Geol. Nauk*, No. 3, pp. 1-8.
31. Ashyralyev A., Muradov I. 1998. On difference schemes second order accuracy for hyperbolic-parabolic equations. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilym, pp. 127-138.
32. Ashyralyev A., Prenov R. 1998. On estimation of stability solution of difference schemes for system differential equations of the first order. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilym, pp. 138-146.
33. Ashyralyev A., Soltanov H. 1998. On one difference schemes for abstract nonlocal problem generating in investigation of the motion of gas on the homogenous space. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilym, pp. 147-154.
34. Ashyralyev A., Hanaliyev A. 1998. Coercive estimate in Holder norms for parabolic equations with dependent operator. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilim, pp. 154-162.
35. Ashyralyev A., Yakubov A. 1998. Structure of fractional spaces generating by the transport operator. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilym, pp. 162-172.

36. Ashyralyev A., et al. 1998. Numerical model of stabilization in the plast of filtration of oil. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilym, pp. 32-40.
37. Ashyralyev A., et al. 1998. Investigation algorithms solutions of backward problem of filtration in the non-homogeneous collectors. In: Modeling the Processes in Exploration of Gas Deposits and Applied Problems of Theoretical Gas Hydrodynamics, Ashgabat, Ilym, pp. 40-45.
38. Ashyralyev A., Judakova G. 1999. On equations mixed type in Hilbert space. Proceeding of the Conference TSU "Actual Problems of Applied Mathematics, Physics and Engineering", Ashgabat, pp. 21-24.
39. Ashyralyev A., Orazov M.B. 1999. Theory of operators and the methods of solutions of boundary value problems for equations of mathematical physics. In: 8 years Turkmenistan's Independence, Ashgabat, Ilym, pp. 222-228.
40. Ashyralyev A. 2011. Sums and their computation, Potential, Vol. 7, No. 2, pp. 15-20.

#### **7.6. Papers in national conference proceedings**

1. Ashyralyev A., Ashyrov S. 1978. Approximate methods of the solution of the Cauchy problem for half-implicit integro-differential equations of a Volterra's types. In: Proceedings of a republican symposium on the differential equations, Ashgabat, 3 pages.
2. Ashyralyev A., Sobolevskii P.E. 1980. Correct solvability of the Crank-Nicolson difference scheme in Hilbert norms. In: Proceedings of the conference "Theoretical and Applied problems of mathematics", Tartu, pp. 179-180.
3. Ashyralyev A. 1993. Single-step difference schemes replaced by Taylor's decomposition in the two points. Proceedings of the Scientific-Practical Conference on Differential Equations and Their Applications, Ashgabat, pp. 79-81.

#### **7.7. Other publications**

1. Ashyralyev A., Ashyrov S. 1980. Some approximate methods for the solution of the Cauchy problem for system of half-implicit integro-differential equations of a Volterra's type, Voronezh State University, 17 pages. Deposited in VINITI 6.24.1980, No. 2564-80.
2. Ashyralyev A., Sobolevskii P.E. 1981. On Crank-Nicolson difference scheme for parabolic equations with the variable coefficients. Proceedings of a conference "Numerical solutions of boundary value problems and Integral equations", Tartu, pp. 4-16. Deposited in VINITI 12.4.1981, No. 5535-81, Voronezh, 16 pages.
3. Ashyralyev A., Sobolevskii P.E. 1982. The theory of interpolation of linear operators and stability of the difference schemes. Deposited in VINITI 10.19.1982, No. 5199-82, Voronezh, 58 pages.
4. Ashyralyev A. 1982. On Crank-Nicolson difference scheme. In: An informative-operative material (computing on mathematics). Preprint VS, N 2 Sib. B AS USSR, Krasnoyarsk, pp. 9-10.
5. Ashyralyev A. 1983. Investigations of the difference schemes for the parabolic equations in the spaces of smooth functions, Voronezh State University.
6. Ashyralyev A. 1983. On the coercive stability of the Crank-Nicolson difference schemes for regularly singular parabolic equations. Deposited in VINITI 5.23.1983, No. 2745-83, 16 pages.
7. Ashyralyev A., Sobolevskii P.E. 1983. Investigation of the stability of the difference schemes in Holder spaces. Deposited in VINITI 4.12.1983, No. 2745, Voronezh, 63 pages.
8. Ashyralyev A. 1983. On the coercive stability of the Crank-Nicolson difference schemes for regularly singular parabolic equations in difference weighted Holder spaces. In: Investigations on the theory of differential equations. Ashgabat, pp. 52-64.
9. Ashyralyev A., Sobolevskii P.E. 1983. On the coercive stability of the difference schemes for parabolic equations with variable operator coefficients in interpolation spaces. In: Investigations on the theory of differential equations, Ashgabat, 1983, pp. 65-77.

10. Ashyralyev A., Sobolevskii P.E. 1984. Positive operators and the fractional spaces. The methodical instructions for the students of engineering groups, Offset laboratory VSU, Voronezh.
11. Ashyralyev A., Ashirov O.A., Geldiev H., Durdyev N., Imamberdiev B., Hudaykulyev G. 1990. Tests and methodical instructions for the laboratory works for functional analysis and integral equations. TSU Printing Office, Ashgabat, 53 pages.
12. Ashyralyev A. 1992. Method of the positive operators of the investigation of the difference schemes of the high order of accuracy for parabolic and elliptic equations. Institute of Mathematics, Academic Sciences, Kiev, Ukraine.
13. Ashyralyev A., Ashirov A. 1996. Problems and methodical instructions for the laboratory works for the Difference schemes for differential equations. A printing house of the TSU, Ashgabat.
14. Ashyralyev A., Amanov K. 1995. On coercive solvability of second boundary value problem for elliptic equations. TSNU Printers, Ashgabat, 50 pages.
15. Edited by Ashyralyev A., Yurtsever A. 2000. Some Problems of Applied Mathematics, Istanbul, Turkey, 220 pages.
16. Ashyralyev A., Cancu F. 2010. Mathematical Olympiads - Questions and Answers, Ugur Dershanaları, Istanbul, Turkey, 149 pages.
17. Edited by Ashyralyev A. 2016. "Third International Conference on Analysis and Applied Mathematics (ICAAM 2016)", The Abstract Book, 317 pages. 07-10 September 2016. Institute of Mathematics and Mathematical Modeling, 050010, Almaty, Kazakhstan.

## 8. Projects

1. Investigation of algorithms for the solutions of problem of filtration in the non-homogeneous collectors, Project of the Higher Scientific Committee of Turkmenistan, Ashgabat, Turkmenistan, 1996-1997.
2. Differential equations in a Banach space, TÜBİTAK Project, Toprag, Antalya, Akdeniz University, 1997 (jointly with H. Akca).
3. Modeling the processes in exploration of gas deposits and applied problems of theoretical gas hydrodynamics, Project of the Higher Scientific Committee of Turkmenistan, Ashgabat, Turkmenistan, 1999.
4. Theory of operators and the stability of difference schemes of approximate solutions of the nonlocal boundary value problems for partial differential equations, University Scientific Research Project, Istanbul, Turkey, 2001-2002.
5. Stability of the delay neutral differential equations and equations of the mixed types. NATO Science Fellowship, Greece, 2002 (jointly with M.K. Grammatikopoulos).
6. Difference schemes for delay differential equations, University Scientific Research Project, Edirne, Turkey, 2010-2012 (jointly with D. Agirseven).
7. Investigation of nonlocal boundary value problems for elliptic-parabolic differential equations, University Scientific Research Project, 2012-2014 (jointly with O. Gerçek).
8. Investigation of nonlocal boundary value problems for hyperbolic differential equations, University Scientific Research Project, 2012-2014 (jointly with N. Aggez).
9. Computational analysis of fluid flow of unknown to the pressure, University Scientific Research Project, 2012-2014 (jointly with A.S. Erdogan).
10. Identification problems for delay differential equations, University Scientific Research Project, 2014-2016 (jointly with D. Agirseven)

11. Investigation of fractional nonlocal boundary value problems (Kesirli lokal olmayan sınır değer problemlerinin araştırılması), Tübitak 2221 - Konuk veya Akademik İzinli Bilim İnsanı Destekleme Programı, September 2013 (jointly with A. Guezane-Lakoud)
12. The differential equations in partial derivative with involution. Well-posedness of problems with initial data. Supported by the Committee of Science of Ministry of Education and Science of the Republic of Kazakhstan, 01.01.2015-31.12.2017 (jointly with A. Sarsenbi).
13. Gürültü İçeren Parabolik Ters Problemlerinin Sayısal Çözümü İçin Regülerizasyon Teknikleri. Üniversite Araştırma Proje Fonu, 01.09.2015 – 01.09.2016 (jointly with A.S. Erdogan).
14. Research Project “RUDN University Program 5-100”, 01.04.2017 - present.
15. Research Project funded by the Science Committee of the Ministry of Education and Science of the Republic of Kazakhstan (Grant No. AP05131225), 15.05.2015 – present.

## 9. Administrative Affairs

- Head of Department of Mathematics Education at the Atatürk Education Faculty of Near East University, Turkey (2018-2021).

## 10. Membership in Scientific and Administrative Organizations

- Member of International Society of Difference Equations (2006-present).
- Member of Turkish-American Scientists and Scholars Association (2005-present).
- Member of American Mathematical Society (2005-present).
- Member of Turkmenistan State Committee of International Muhammet Al Khorezmi Awards in Fields of Sciences and Technology (1993-2004).
- Member of Institute of Applied Mathematics METU, Ankara, Turkey (2007-2012).
- Fellow of the Islamic World Academy of Sciences IAS (2012-present).
- Member of the International Council of Scientists of the Latvian Academy of Sciences (2012-present).
- Member of the advisory board of ICPAM of Trakya University, Edirne, Turkey (2012-2016).
- Organizer of Mathematical Olympiads, Buyukcekmece, Turkey (2008-2013).
- Chair or co-chair International Conference on Analysis and Applied Mathematics: ICAAM 2012 (Gumushane, Turkey), ICAAM2014 (Chimkent, Kazakhstan), ICAAM2016 (Almaty, Kazakhstan), ICAAM2018 (North Cyprus, Turkey), ICAAM2020 (North Cyprus, Turkey).
- Guest editor of 6 volumes of special issues of international SCI journals: Boundary Value Problems, AAA, Journal of Applied Mathematics, Filomat (2012-present).
- Co-editor of 9 volume of AIP Conference Proceedings (2012, 2014, 2015, 2016, 2018, 2019, 2020, 2021).
- Editorial Board Member of “Iranian Journal of Optimization” (2009-present).
- Editorial Board Member of “Journal of Contemporary Mathematics” (2009-present).

- Editorial Board Member of “Global Journal of Mathematics and Mathematical Sciences” (2005-present).
- Editorial Board Member of “International Journal of Pure and Applied Mathematical Sciences” (2005-present).
- Editorial Advisory Board Member of “Journal of Advances in Mathematics” (2014-present).
- Editorial Advisory Board Member of “Journal of Applied Mathematics” (2014-2016).
- Editorial Board Member of Vestnik ONU “Researches in Mathematics and Mechanics” (2009-present).
- Member of Associate Editor of journal “New Trends in Mathematical Sciences” (2013-2015).
- Member of Editorial Board of journal “Applied Mathematics and Information Sciences” (2012-2014).
- Member of Editorial Board of “Journal of Nonlinear Science and Applications” (2013-2015).
- Member of Editorial Board of “TWMS Journal of Applied and Engineering Mathematics” (2010-present).
- Editor-in-Chief of journal “Contemporary Analysis and Applied Mathematics” (2012-2016).
- Editor-in-Chief of "e-Journal of Analysis and Applied Mathematics” (2018-present).
- Member of Editorial Advisory Board of "Pure and Applied Mathematics Letters" (2014-present).
- Member of Editorial Advisory Board of “Journal of Computer Science and Applied Mathematics” (2014-present).
- Member of International Editorial Advisory Board of "Proceedings of the Institute of Mathematics and Mechanics, NAS of Azerbaijan" (2015-present).
- Member of the Editorial Advisory Board of “Fractional Differential Calculus” (2015-present).
- Member of Editorial Advisory Board of journal "Enlightenment of Pure and Applied Mathematics" (2015-present).
- Member of Editorial Board of “TWMS Journal of Pure and Applied Mathematics” (2015-present).
- Member of Editorial Board of “Journal of Advances in Applied Mathematics” (2015-present).
- Member of Editorial Board of journal of Belgorod State University "Scientific Bulletin Mathematics & Physics" (2017-present).
- Member of Editorial Board of “International Journal of Applied Mathematics” (2020-present).
- Member of Editorial Board of “Advanced Mathematical Models & Applications” (2021-present).
- Member of Editorial Board of “Bulletin of the Karaganda University-Mathematics” (2021-present).

## 11. Awards

- Gold Medal for Excellence among Secondary Schools. Ministry of Education of Turkmenistan, 1972.
- Lenin's Grant for Students. Turkmen State University, 1974-1977.
- Prize for PhD Thesis. Voronezh State University, Russia, 1983.
- Soros's Prize for Scientists, USA, 1994.
- Master Teacher of Turkmenistan, Ministry of Education of Turkmenistan, 1996.
- Selected as Thomson-Reuters Science Leader in the World Science Researchers from the Central Asian Region in 2015.
- Selected as successful national scientist of Turkmenistan in last 30 years, from list of MyNetResearch Empowering Collaboration Search (which is based on the papers published in journals appearing in Web of Science).
- A diploma for a significant contribution to the development of mathematical science by the Turkic World Mathematical Society in 2017.
- Near East University Science Honors Award for 2017.
- Selected as a winner of the Scopus Award Kazakhstan-2019 of International Scopus Award.

## 12. Graduate and Undergraduate Courses Given in the Past Two Years.

Academic Year	Term	Course Code	Hours/Weekly		Number of Students
			Theoretical	Practical	
2019-2020	Fall	MTH784 Delay Dif. Equations	3	0	4
		MTH584 Delay Dif. Equations	3	0	2
		MTH791 Analysis	3	0	4
		MTH591 Analysis	3	0	2
		MTH405 Applied Mathematics 1	3	0	2
	Spring	MTH723 Adv. Dif. Equations	3	0	2
		MTH523 Adv. Dif. Equations	3	0	6
		MTH704 Pos. Oper. in Banach Spaces	3	0	2
		MTH504 Pos. Oper. in Banach Spaces	3	0	1
		MTH406 Applied Mathematics 2	3	0	2
		MTH402 Funcional Analysis	3	0	2
2020-2021	Fall	MTH784 Delay Dif. Equations	3	0	3
		MTH584. Delay Dif. Equations	3	0	5
		MTH791 Analysis	3	0	1
		MTH591 Analysis	3	0	2
		MTH405 Applied Mathematics 1	3	0	1
	Spring	MTH723 Adv. Dif. Equations	3	0	1
		MTH523 Adv. Dif. Equations	3	0	6
		MTH704 Pos. Oper. in Banach Spaces	3	0	1
		MTH504 Pos. Oper. in Banach Spaces	3	0	1

		MTH406 Applied Mathematics 2	3	0	1
		MTH402 Funcional Analysis	3	0	1