

**REPORT OF “MATHEMATICAL ANALYSIS” DEPARTMENT
OF IMM ANAS FOR THE YEAR OF 2015**

SCIENTIFIC PART.

I. ELMI HISSƏ

The following research works were carried out:

Theme: Theory of function spaces and operators. Modern problems of analysis.

The following works were executed:

Work 1: Boundedness of K -linear operators in Morrey type spaces.

Executor: Corr. member of ANAS, professor, head of department V.S.Guliyev, j.r.a. A.F.Ismayilova.

Boundedness of multilinear singular integral operators and fractional integral operators in local and generalized weighted Morrey space was studied.

On this work the paper by V.S. Guliyev, I. Ekincioglu, Sh.A. Nazirova, *The $L_{p_1, r_1} \times L_{p_2, r_2} \times \dots \times L_{p_k, r_k}$ boundedness of rough multilinear fractional integral operators in the Lorentz spaces*, Journal of Inequalities and Applications (2015), 2015:71 (impact factor 0.770) was published.

1. V.S. Guliyev, Stefan Samko, Maximal operator in variable exponent generalized Morrey spaces on quasi-metric measure space, **Mediterranina Journal of Mathematics**, (2015), 1-20. (Impact factor 0.653)
2. V.S. Guliyev, L. Softova, Generalized Morrey estimates for the gradient of divergence form parabolic operators with discontinuous coefficients, **Journal of Differential Equations**, 259 (6) (2015), 2368-2387. (impact factor 1.680)
3. V.S. Guliyev, L. Softova, *Generalized Morrey regularity for parabolic equations with discontinuity data*. **Proceedings of the Edinburgh Mathematical Society**, 58 (1) (2015), 199-218. (impact factor 0.543)
4. V.S. Guliyev, M.N. Omarova, *Multilinear singular and fractional integral operators on generalized weighted Morrey spaces*. **Azerbaijan Journal of Mathematics**, 5 (1) (2015), 104-132. (impact factor 0.290)

5. V.S. Guliyev, I. Ekinoglu, Sh.A. Nazirova, *The $L_{p_1, r_1} \times L_{p_2, r_2} \times \dots \times L_{p_k, r_k}$ boundedness of rough multilinear fractional integral operators in the Lorentz spaces.* **Journal of Inequalities and Applications**, (2015), 2015:71. DOI 10.1186/s13660-015-0584-9 (impact factor 0.770).
6. V.S. Guliyev, M.N. Omarova, Y. Sawano, *Boundedness of intrinsic square functions and their commutators on generalized weighted Orlicz-Morrey spaces.* **Banach Journal of Mathematical Analysis**, 9 (2), (2015), 44-62. (impact factor 0.967)
7. V. Guliyev, A.S. Balakishiyev, *Parabolic fractional maximal and integral operators with rough kernels in parabolic generalized Morrey spaces.* **Journal of Mathematical Inequalities**, 9 (1) 2015, 257-276. (impact factor 0.704)
8. V.S. Guliyev, A.F. Ismayilova, A. Kucukaslan, A. Serbetci, *Generalized fractional integral operators on generalized local Morrey spaces.* **Journal of Function Spaces**, (2015), Article ID 594323, 8 pages (impact factor 0.656)
9. V.S. Guliyev, F. Deringoz, *Boundedness of Fractional Maximal Operator and its Commutators on Generalized Orlicz–Morrey Spaces*, **Complex Anal. Oper. Theory**, (2015) 9:1249–1267 (impact factor 0.545)
10. V.S. Guliyev, Stefan Samko, F. Deringoz, *Boundedness of the maximal operator and its commutators on vanishing generalized orlicz–morrey spaces*, **Annales Academiæ Scientiarum Fennicæ Mathematica**, 40 (2), (2015), 535–549 (impact factor 0.656)
11. A.S. Balakishiyev, V.S. Guliyev, F. Gurbuz and A. Serbetci, *Sublinear operators with rough kernel generated by Calderyn-Zygmund operators and their commutators on generalized local Morrey spaces*, **Journal of Inequalities and Applications**, (2015) 2015:61. (impact factor 0.770)
12. V.S. Guliyev, *"Necessary and sufficient conditions for the boundedness of the fractional integral operators in the local Morrey-type spaces on Carnot groups"*, International Conference "Function spaces and the theory of approximation of functions" dedicated to the 110-th anniversary of academician S.M. Nikolskii, 25-29 May, 2015, p. 27-28.

13. V.S. Guliyev, *"Boundedness of the integral operators of harmonic analysis in local and global Morrey-type spaces on Carnot groups"*, 7-th International Conference on "Mathematical Analysis, Differential Equation & Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 58.
14. V.S. Guliyev, A. Ismayilova, *"Multi-sublinear fractional maximal function and multilinear fractional integrals on generalized Morrey spaces"*, 7-th International Conference on "Mathematical Analysis, Differential Equation & Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 59
15. V.S. Guliyev, F. Deringoz, *"Riesz potential and its commutator on generalized Orlicz-Morrey spaces"*, 7-th International Conference on "Mathematical Analysis, Differential Equation & Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 45.
16. V.S. Guliyev, M.N.Omarova, *"On the global regularity in generalized weighted morrey spaces of solutions to nondivergence elliptic equations"*, VII International Scientific Conference "Functional-Differential Equations and their Applications" devoted to 80 years of prof. Magomedov G.A. Republic of Dagestan, Mahachkala, September 21-24, 2015.
17. V.S. Guliyev, Sh.A. Muradova, M.N.Omarova, *"On the gradient estimates for parabolic equations in generalized weighted Morrey spaces"*, VII International Scientific Conference "Functional-Differential Equations and their Applications" devoted to 80 years of prof. Magomedov G.A. Republic of Dagestan, Mahachkala, September 21-24, 2015.

Work 2: Boundedness of singular operators with generalized shift in generalized weighted Holder spaces and applications II.

Executor: doct. ph.m.s., prof. S.K.Abdullayev.

In the paper the boundedness of many-dimensional singular integral operators generated by Laplace-Bessel differential operator in generalized weighted Holder spaces was considered. The case when the kernel's characteristics in independent on the pole was considered.

1. S.K.Abdullayev, E.A. Məmmədov, L.M. Mirzəyeva, "Boundedness of a singular and weakly singular integral operators in variable order Morrey spaces", Republican Scientific Conference "Actual problems of mathematics and mechanics" devoted to 92 years of the national leader Heydar Aliyev, may 20-21, 2015.
2. S.K.Abdullayev, E.A. Məmmədov, L.M. Mirzəyeva, "Some estimations for generalized fractional maximal funksitions", Republican Scientific Conference "Actual problems of mathematics and mechanics" devoted to 92 years of the national leader Heydar Aliyev, may 20-21, 2015.
3. S. K. Abdullaev, E. A. Mammadov, On a class of subadditive operators with generalized shift, 7-th International Conference on "Mathematical Analysis, Differential Equation and Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 5.

Work 3: Investigation of commutators of potential-type integral and singular operators in variable exponent generalized Morrey spaces.

Executor: cand. ph. m. s. lead. r. a. J.J. Hasanov, res.ass. Y.Y. Guliyev, j.r.a. A.N. Mammadova.

Application of commutators of potential-type integral and singular operators in variable order generalized Morrey spaces was considered.

1. J.J. Hasanov, X.A. Badalov, A.E. Fleydanli, *Necessary and sufficient conditions for the boundedness of B-Riesz potential in modified B-Morrey spaces*, Journal of Contemporary Applied Mathematics, vol 4, No 2 (2014) ,
2. J.J. Hasanov, A.E. Fleydanli, *"Necessary and sufficient conditions for the boundedness of B-Riesz potential in modified B-Morrey spaces"*, 7-th International Conference on "Mathematical Analysis, Differential Equation and Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 65.

Work 4: Boundedness of many-dimensional Hardy operator in Banach function spaces.

Executor: cand. ph. m. s. lead. r. a. R.A.Bandaliyev, res.ass. A.E. Abdullayeva.

1. R. A. Bandaliyev, "On a two-weight boundedness of multidimensional Hardy operator in p -convex Banach function spaces and some application", Ukrainian Math. J. 4(2015), no.3, 323-334 (impact factor 0.230).
2. R. A. Bandaliyev, A. E. Abdullayeva, A. N. Mamedova, "On the denseness of $C_0^\infty(\Omega)$ in $L_{p(x)}(\Omega)$ for $0 < p(x) < 1$ ", 7-th Inter. Conf. on "Math. Analysis, Dif. Equations and Their applications", p.49.
3. R. A. Bandaliyev, S.G. Hasanov, On density of the set $C_0^\infty(\Omega)$ in $L_{p(x)}(\Omega)$ for $0 < p(x) < 1$, Intern. Conf. Functio spaces and theory of approximation of functions" devoted to 110 years of lead S.M. Nikolskii, Moscow 2015.

On the papers has received positive reference and in inder processing. The revised paper is:

1. R. A. Bandaliyev. *On connection of two nonlinear differential equations with two-dimensional Hardy operator in weighted Lebesgue spaces with mixed norm.* Miskolc Mathematical Notes (in revision).

Work 5: Investigation of inclusion theorems in Sobolev-Liouville spaces generated by Laplace-Bessel differential operator.

Executor: cand. ph. m. s. lead. r. a., Z.V. Safarov, res.ass. F.A. Isayev.

On the report period an inclusion theorem in Sobolev-Liouville spaces generated by Laplace-Bessel operator.

1. E.V. Guliyev, A.A. Hasanov, Z.V. Safarov, *Boundedness of the multilinear fractional integral operators with rough kernel on Morrey spaces*, **Proceedings of the Institute of Mathematics and Mechanics**, 41 (1) (2015), p. 44-55.
2. A. Akbulut, V.H. Hamzayev, Z.V. Safarov, *Boundedness of rough fractional multilinear integral operators on generalized Morrey spaces*, **Journal of Inequalities and Applications**, (2015) 2015: 234 (impact factor 0.770)
3. A.A. Hasanov, Z.V. Safarov, "Multilinear fractional integrals with rough kernels on morrey spaces", 7-th International Conference on "Mathematical Analysis, Differential Equation and Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 64.

Work 6: Approximation of Gegenbauer harmonic analysis and functions on a semi-axis.

Executor: c. ph. m. s. doc. lead. r. a. E. Y. Ibrahimov

1. E.J. Ibrahimov, *Jacobi transform method in approximation theory*. **Proc. A. Razmadze Math. Inst.**, (2015), (accepted).

Work 7: Boundedness of Riesz potentials in group structure spaces in Morrey spaces.

Executor: cand. ph. m. s. sen. res. ass. M. G. Hajibayov, j. r. ass. L. Aliyeva.

The obtained results were published in the form of 4 papers and 1 abstract.

1. M.G. Hajibayov, *Boundedness in Lebesgue spaces of Riesz potentials on commutative hypergroups*. *Global Journal of Mathematical Analysis*, 3(1), (2015), 18-25,
2. M.G. Hajibayov, *Limit at infinity of potential type integrals on abstract spaces*, *Journal of Contemporary Applied Mathematics*, v. 5, no. 1, 2015, 13-21.,
3. M.G. Hajibayov, *Boundedness of Generalized Riesz Potentials on Commutative Hypergroups*, *International Mathematical Forum*, vol. 10, 2015, no. 7, 333-338.
4. M.G. Hajibayov, *Generalized Potentials on Commutative Hypergroups*, *Azerbaijan Journal of Mathematics* vol. 5, no 2, 2015, 37-46.
5. M.G. Hajibayov, *"Limit at infinity of potential type integrals on abstract spaces"*, 7-th International Conference on "Mathematical Analysis, Differential Equation and Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 60.

Work 8: Boundedness of intrinsic square function, and their commutators in generalized weighted Orlicz-Morrey spaces .

Executor: corr.mem. of ANAS, prof. V.S. Guliyev, phd in math. res. ass. M.N. Omarova.

The obtained results were published in paper 1) V.S. Guliyev, M.N. Omarova, Y. Sawano, *Boundedness of intrinsic square functions and their commutators on generalized weighted Orlicz-Morrey spaces*. *Banach Journal of Mathematical Analysis*, vol. 9, issue 2, 2015, 44-62. (impact factor 0.967).

1. V.S. Guliyev, M.N. Omarova, *Multilinear singular and fractional integral operators on generalized weighted Morrey spaces*. **Azerbaijan Journal of Mathematics**, 5 (1) (2015), 104-132. (impact factor 0.290)
2. V.S. Guliyev, M.N. Omarova, Y. Sawano, *Boundedness of intrinsic square functions and their commutators on generalized weighted Orlicz-Morrey spaces*. **Banach Journal of Mathematical Analysis**, 9 (2), (2015), 44-62. (impact factor 0.967)
3. M.N. Omarova, “ (L_p, L_q) boundedness of the fractional maximal operator on the dual of Laguerre hypergroup”, **Trans. of NAS of Azerbaijan Mathematics**, 35 (1) (2015), 66-75.
4. M.N. Omarova, “ (L_p, L_q) boundedness of the fractional integral operator on the dual of Laguerre hypergroup”, **Trans. of NAS of Azerbaijan Mathematics**, 35 (2) (2015), 1-20.
5. V.S. Guliyev, M.N. Omarova, “On the global regularity in generalized weighted morrey spaces of solutions to nondivergence elliptic equations”, VII International Scientific Conference "Functional-Differential Equations and their Applications" devoted to 80 years of prof. Magomedov G.A. Republic of Dagestan, Mahachkala, September 21-24, 2015.
6. V.S. Guliyev, Sh.A. Muradova, M.N. Omarova, “On the gradient estimates for parabolic equations in generalized weighted Morrey spaces”, VII International Scientific Conference "Functional-Differential Equations and their Applications" devoted to 80 years of prof. Magomedov G.A. Republic of Dagestan, Mahachkala, September 21-24, 2015.
7. M.N. Omarova, “Multilinear singular and fractional integral operators on generalized weighted Morrey spaces”, 7-th International Conference on

"Mathematical Analysis, Differential Equation and Their Applications MADEA-7", September 08-13, 2015, Baku - Azerbaijan, pp. 129.

II. Scientific-organizational activity

- On the report the works were executed according to scientific-organizational plan. The collaborators of the department have participated and given talks at the institute seminars.

- On the report year the collaborators of the department, corr. member of ANAS, prof. V.S. Guliyev, ass. prof. J.J. Hasanov, ass. prof. R.A. Bandaliyev, ass. prof. E.I. Ibrahimov, ass. prof. M.G. Hajibeyov, PhD in math. M.N. Omarova, Y.Y. Guliyev, A.E. Abdullayeva, A.N. Mammadova have given talks at institute seminars.

- The department seminar under the guidance of corr. member of ANAS, prof. V.S. Guliyev "Actual problems of harmonic analysis" is held each Friday of the week. Corr. member of ANAS, prof. V.S. Guliyev, s.r.a., prof. S.K. Abdullayev, s.r.a., prof. N. Süleymanov, l.r.a., ass. prof. R.Ə. Bəndəliyev, l.r.a., ass. prof. J.J. Hasanov, l.r.a., ass. prof. E.C. İbrahimov, ass. prof. R. Aliyev, r.a. A.E. Abdullayeva, r.a. A.N. Mammadova, r.a. F.A. İsayev have taken part in these seminars.

- The department consists of 17 collaborators (5 of them work part-time) 3 of them are professor, 4 docent, 8 junior research associate, 2 senior laboratory assistant.

- The department collaborators execute research works on 8 themes.

- In 2015 (2014) the collaborators of the department have published 21 (38) papers, 11 (35) papers are in print. 14 (16) of them were published in index journals, 3 (6) papers in authoritative foreign journals, 4 (15) in Republican journals, 16 (15) abstracts in the proceedings of Republican and International conferences. In 2015, 5 papers of the collaborators were accepted to be published in authoritative foreign journals.

- The main a priori direction of the department are modern problems of harmonic analysis.

- The project represented by corr. member of ANAS prof. Vagif Guliyev "Contemporary problems and applications of harmonic analysis in local Morrey-type

spaces" get started on Scientific-Research Programs announced by ANAS (2015-2017, biennial, 250000 man.) The project under the guidance of corr. member of ANAS, prof. V.S. Guliyev "Boundedness and applications of integral operators of real analysis in some function spaces" was a winner of the competition of Science Development Foundation (annual, 55000 man.). These projects has get started from march and fevral of 2015.

- Corr. member of ANAS prof. Vagif Guliyev in a member of Higher Atestation Commission at the President of the republic of Azerbaijan from 2015.

- Prof. V.S. Guliyev was on a professional trip at Ankara University and Ahi Evran University on 23.02.2015-05.03.2015 do conduct joint scientific research at mathematics department of Ankara University (Ankara, Turkey) together with prof. of Anakara University Ayhan Sherbetchi, at mathematics department of Ahi Evran University (Kirsheher, Turkey with an.prof. of Ahi Evran University Ali Akbulut and cand. for phill. degree Fatih Deringoz.

- On 16.03. 2015-26.03. 2015 prof. V.S. Guliyev was on a professional trip at mathematics department of Ankara University (Ankara, Turkey) to conduct scientific research with prof. of Ankara University Ayhan Sherbetchi.

- Prof. V.S. Guliyev was on a professional trip at Ankara University and Ahi Evran University on 04.04.2015-09.04.2015 and 20.04.2015-23.04.2015 do conduct joint scientific research at mathematics department of Ankara University (Ankara, Turkey) together with prof. of Anakara University Ayhan Sherbetchi, at mathematics department of Ahi Evran University (Kirsheher, Turkey with an.prof. of Ahi Evran University Ali Akbulut and cand. for phill. degree Fatih Deringoz.

- For conducting investigations within scientific-research program "Contemporary problems and applications of harmonic analysis in local Morrey-type spaces" recommended by the Presidium of ANAS (2015-2017) prof. Vagif Guliyev on 25.05.2015-30.05.2015 was invited to participate at the international Conference "Function spaces and theory of approximation of functions" devoted to 110 years of S.M. Nikolsky to be held at Steklov mathematics Institute of the Russian Federation (Moscow) and he gave a talk "necessary and sufficient condition for boundedness of

fractional integral operators determined in Carnot groups in local Morrey-type spaces". On 07.05.15-14.05.15, 06.06.15-13.06.15, 30.10.2015-05.11.2015 he has been on professional trip at Ahi-Evran University (Kirshehir), on 27.06.15-11.07.15, 06.07.15-20.07.15 at Ankara University (Ankara), on 22.08.15-30.08.15 at Yıldız Teknik University of Turkey (İstanbul). The lead res.ass. prof. R.A. Bandaliyev will participate at the workshop to be held at "Warsawa Tecnological University" in Warsawa city of Poland. Dos. Həsənov Cavanşir 06.07.2015-20.07.2015 tarixlərində Türkiyənin Ankara Universitetində (Ankara şəh.) elmi ezamiyyətdə olmuşlar.

- On 06.06. 2015-19.06.2015 prof. V.S. Guliyev was on a professional trip at Mathematics Department of Ahi Evran University to participate at defence of dissertations of students. During the trip the following phil.doc. stud. supervised by prof. V.S. Guliyev defended their dissertations: 1) **Serab Guner**, *The singular integral operators related to generalized shift operator in Beppo-Levi spaces*, Dumlupinar University, 11 june 2015, 2) **Cansu Keskin**, *The singular integral operators related to generalized shift operator in Beppo-Levi spaces*, Dumlupinar University, 11 iyun 2015, 3) **Fatih Deringoz**, *Boundedness of integral operators of Harmonic Analysis on generalized Orlicz-Morrey spaces*, at Ahi Evran University, on June 09, 2015 **Koray Şantaş**, defended the dissertation work "*Boundedness of integral operators of harmonic analysis in Orlicz spaces*".

- On 28.09.2015-08.10.2015 for conducting research works on the project "Boundedness and applications of integral operators in some function spaces", prof. V.S. Guliyev was on a professional trip in Ankara University, Mathematics department (Ankara city, Turkey).

- Corr. member of ANAS prof. Vagif Guliyev was an opponent of PhD dissertations of Müjdat Ağcayazi (Kirikkala University) "Commutators of maximum functions and some applications" and Tuğçe Ünver University PhD dissertation "Inclusion theorems in local Morrey-type spaces".

- Lead res.ass. prof. J.J. Hasanov, lead res. ass. prof. R.A. Bandaliyev, lead res. ass. prof. Z.V. Safarov were awarded by the director of IMM for their successful work.

- Corr. member of ANAS prof. Vagif Guliyev, baş.e.i., prof. S.K. Abdullayev, lead res.ass. C.C. Həsənov, lead res.ass. R.Ə. Bəndəliyev, lead res.ass. Z.V. Səfərov, sen. res. ass. M.Q. Hacıbəyov, r.a. M.N. Öməröva, r.a. F.A. İsayev, r.a. A.N. Məmmədova, r.a. A.E. Abdullayeva, r.a. A.F. İsmayılova have given talks at the VII International Conference MADEA-7. For their active participation at the work of the Conference 6 collaborators of the department, ass. prof. Rovshan Bandaliyev, ass. prof. Cavanshir Hasanov, ass. prof. Zaman Safarov, PhD in math. Mehriban Omarova, r.a. Fətai İsayev, r.a. Afaq İsmayılova were rewarded with “Certificate of merit”.

- In this conference head of the department, Corr. member of ANAS prof. Vagif Guliyev as an invited lecturer gave the talk "*Boundedness of the integral operators of harmonic analysis in local and global Morrey-type spaces on Carnot groups*".

- Candidate for a degree Yagub Yagub oglu Mammadov has defended doctor's degree dissertation “Integral operators connected with Dunkle operator and in Heisenberg group in function spaces” by the speciality 1202.01- Analysis and functional analysis.

- Leading research associate, ass. prof. R.A. Bandaliyev is the Scientific Secretary of doctor's degree dissertation Council, lead. res. ass. prof. Javanshir Hasanov in the secretary of scientific at the doctor's dissertation council at IMM and institute seminar.

- Fatai Isayev was allowed to defend PhD degree dissertation.

- In 2015, corr. member of ANAS prof. Vagif Guliyev was a member of the editorial board of the International Journal “Fractional Differential Calculus”.

- Corr the scientific results of corr. member of NASA, prof. V.S.Guliyev were reflected in were than 150 papers published in impact factor and other authoratine international journals. The member of references in **MathSciNet Mathematical reviews** in **368 (270)**, in **Google Scholar 1416 (1134)**;

- The scientific result of doc. J.J.Hasanov were reflected in the papers published in more than 10 impact factor and other authoritative international journals. The member of references to his papaers in **86 (60)**, in **Google Scholar 195 (155)**;

- Doc R.A. Bandaliyev result were reflected in more than 10 impact factor and other autherative international journals. The member of references in **MathSciNet Mathematical reviews** in **15 (11)**, in **Google Scholar** da **70 (65)**;

- The references to the papers of the department collaborators oher 400.

The revies written to the papers sent by foreign and republican journals.

1. Corr. member of NASA, prof. V.S.Guliyev: 1 papers from **Journal of Mathematical Inequalities** (Impact Factor – 0.770); 1 paper from **Integral Transforms And Special Functions** (Impact Factor – 0.814); 1 paper from **Palestine Journal of Mathematics** (Impact Factor –); 2 paper from **Journal of Function Spaces** (Impact Factor – 0.656); 1 paper from **Communications in Mathematical Analysis** (Impact Factor –); 1 paper from **Complex Variables and Elliptic Equations** (Impact Factor – 0.650); 1 paper from **Journal of İnequalities and Applications** (Impact Factor –); 2 paper from **Collectanea Mathematica**; 2 paper from **Fractional Differential Calculus**; 1 paper from **Bulletin of the Korean Mathematical Journals**; 1 məqalə **Bulletin of the Malaysian Sciences Society**; 1 paper from **Journal of Fourier Analisys and Applications**; 1 paper from **FİLOMAT**; 1 məqalə **Turkish Journal of Mathematics**; 1 paper from **Facta Universitatis (NIS) Ser. Math. Inform**;
2. Doc R.A. Bandaliyev: 1 papers from **Complex variables and Elliptic Equations**, 1 papers from **Turkish Journal of Mathematics**, 1 papers from **Transactions of Mathematics of National Academy of Sciences of Azerbaijan**, 1 papers from **Proceeding of IMM of NAS of Azerbaijan**, 1 papers from **Journal of Mathematics Research**.
3. Doc. J.J. Hasanov: 1 papers from **Journal of Mathematics and System Science**, 1 papers from **The Scientific World**, **Journal of Inequalities and Applications**, 1 papers from **Journal of Modern Education Review Academic Star Publishing Company**, **Asian Journal of Mathematics and Computer**

Research, 1 papers from **International Journal of Latest Research in Science and Technology** (IJLRST), 1 papers from **Trans. of Nat. Acad. of Sci. of Azerb.**;

- Corr. member of NASA, prof. V.S.Guliyev is the member of expert council of Higher Certificate Commission at the President of the Republic of Azerbaijan.

- Corr. member of NASA, prof. V.S.Guliyev is the member of the international journal "Eurasian Mathematical Journals", of the republican journal "Proceedings of Institute of Mathematics and Mechanics of NAS of Azerbaijan". "Caspian journal of applied mathematics, ecology and economics" jurnalının baş redaktorlarından biridir.

- Corr. member of NASA, prof. V.S.Guliyev is the editor-in-chief of the journal "Transactions of ANAS" (Issue mathematics and mechanics Series of physical-technical and mathematics science). The first issue of this journal was published in June 2015, the next issue will be published to the end of 2015.

- Ass. prof. R.A. Bandaliyev is a member of editorial board of the international "Journal of Mathematics Research" published in Canada.

- Ass. prof. J.H. Hassnov is the scientific secretary of the journal "Transactions of ANAS" (Issue mathematics and mechanics Series of physical-technical and mathematics science).

Head of the department
"Mathematical Analysis"

Corr. member
of NASA, prof.V.S.GULIYEV