

DEPARTMENT OF NON-HARMONIC ANALYSIS
Institute of Mathematics and Mechanics
National Academy of Sciences of Azerbaijan

BRIEF REPORT ON RESEARCH ACTIVITIES FOR YEAR 2014

18 research works have been done in the field of basis theory by the employees of the Department of Non-Harmonic Analysis (DNHA) in the report period of 2014.

There are 26 employees in DNHA, including 4 Doctors of Sciences (3 of them being part-timers), 14 PhD's (6 of them being part-timers), 3 researchers, and 5 laboratory assistants. Most of the employees of DNHA are engaged in education works in various higher education institutions.

Every Wednesday at 11.30 a.m. DNHA holds a weekly seminar.

33 research works by the employees of DNHA have been published in top mathematical journals worldwide during 2014 (15 of them abroad and 8 in journals with higher impact factors). Short summaries of 35 research works by the employees of DNHA have been included in proceedings of various national and international scientific conferences.

Two new issues of *Azerbaijan Journal of Mathematics* and one issue of *Caspian Journal of Applied Mathematics, Ecology and Economics* have been published during 2014.

Since May 2014, our coworker Vafa Mamedova is a participant in the project entitled Some Problems of Removable Singularity for Parabolic and Elliptic Type Partial Differential Equations that has won 9.000 AZN grant from the Science Development Foundation under the President of Azerbaijan Republic (EIF/GAM-2013-2(8)) in 2013.

Our coworker Sabina Sadigova continued her participation in the project entitled Faber Polynomials as Bases for Weighted Smirnov Classes that has won 5.000 AZN grant from the Science Development Foundation under the President of Azerbaijan Republic (EIF/GAM-2013-2(8)) in 2013.

Our coworker Telman Kasumov continued managing the project entitled Mathematical Modelling and Software for Regional Ecological Monitoring System that has won 60.000 AZN grant from the Science Development Foundation under the President of Azerbaijan Republic in 2013. Our coworkers Fuad Khudaverdiyev, Terlan Garayev, Zakir Zabidov, Arzu Sadigova, Zahira Mamedova and Hafiza Sultanova are the participants in this project.

Two employees of DNHA, Togrul Muradov and Sabina Sadigova, were among the winners of the 2.500 AZN grant competition organized by the Presidium of NAS of Azerbaijan in 2014.

Besides, many employees of DNHA have participated in various international conferences. Below is the list of those conferences.

- 1) International Conference on the Applications of Mathematics and IT. Ganja, Azerbaijan, 2014

- 2) Young Researchers' Scientific Conference on the Actual Problems of Mathematics and Mechanics dedicated to the 91th Anniversary of Heydar Aliyev. Baku, Azerbaijan, May 12-13, 2014
- 3) International conference on the Actual Problems of Mathematics and Mechanics dedicated to the 55th Anniversary of the Institute of Mathematics and Mechanics of the National Academy of Sciences of Azerbaijan. Baku, Azerbaijan, May 15-16, 2014
- 4) Caucasian Mathematics Conference CMC I. Tbilisi, Georgia, September 5-6, 2014
- 5) Second International Conference on Analysis and Applied Mathematics (ICAAM 2014). Shymkent, Kazakstan, September 11-13, 2014
- 6) International conference on Recent Advances in Pure and Applied Mathematics (ICRAPAM14). Antalya, Turkey, November 6-9, 2014