

Ministry of Science and Higher Education of the Russian Federation
Ufa Federal Research Center of the Russian Academy of Sciences
Order of the Badge of Honor Institute of History, Language and Literature

Tatarstan Academy of Sciences
Institute of Applied Semiotics

Ministry of Education and Science of the Republic of Kazakhstan
Eurasian National University named after L.N. Gumilyov
“Artificial Intelligence” Scientific Research Institute

Technical University of Istanbul

PROGRAM

**VIII International Conference on Computer Processing
of Turkic Languages "TurkLang'2020"**

October 18-20, 2020

Ufa 2020

Program Committee:

1. Suleymanov Dzhavdet (Kazan, Republic of Tatarstan, Russia) – co-Chairman
2. Sharipbaev Altynbek (Nur-Sultan, Kazakhstan) – co-Chairman
3. Eshref Adali (Istanbul, Turkey) – co-Chairman
4. Psyanchin Aybulat (Ufa, Republic of Bashkortostan, Russia) – co-Chairman
5. Sirazitdinov Zinnur (Ufa, Republic of Bashkortostan, Russia) – Deputy Chairman
6. **Zhubanov Askar (Almaty, Kazakhstan)**
7. Abdurahmonova Nilufar (Tashkent, Uzbekistan)
8. Altynbek Gulila (Urumqi, China)
9. Gatiatullin Ajrat (Kazan, Republic of Tatarstan, Russia)
10. Dybo Anna (Moscow, Russia)
11. Zheltov Valerian (Cheboksary, Republic of Chuvashia, Russia)
12. Israilova Nella (Bishkek, Kyrgyzstan)
13. Kubedina Lenara (Simferopol, Republic of Crimea, Russia)
14. Mamedova Masuma (Baku, Azerbaijan)
15. Oflazer Kemal (Doha, Qatar)
16. Sadykov Tashpolot (Bishkek, Kyrgyzstan)
17. Salchak Aelita (Kyzyl, Republic of Tyva, Russia)
18. Sulajmanov Muhammad-ali (Simferopol, Republic of Crimea, Russia)
19. Tatevosov Sergej (Moscow, Russia)
20. Torotoev Gavril (Yakutsk, Republic of Sakha (Yakutia), Russia)
21. Tukeev Ualisher (Almaty, Kazakhstan)
22. Ergesh Banu (Nur-Sultan, Kazakhstan)

Organizing Committee

Chairman of the Organizing Committee:

Psyanchin A., Deputy Chairman of Ufa Federal Research Center of the RAS, the director of the Institute of History, Language and Literature

Members of the organizing Committee:

Hisamitdinova F. (Ufa, Republic of Bashkortostan, Russian Federation)

Sirazitdinov Z. (Ufa, Republic of Bashkortostan, Russian Federation)

Buskunbaeva L. (Ufa, Republic of Bashkortostan, Russian Federation)

Ishmukhametova A. (Ufa, Republic of Bashkortostan, Russian Federation)

Gatiyatullin A. (Kazan, Republic of Tatarstan, Russian Federation)

CONFERENCE RUNNING ORDER

Venue: Ufa, Prospekt Oktyabrya, 71

Ufa Federal Research Center of the Russian Academy of Sciences Order of the Badge of Honor Institute of History, Language and Literature

Conference schedule:

Greetings at the plenary session up to 20 minutes

Reports at the plenary session up to 20 minutes

Reports at breakout sessions up to 15 minutes

Conference schedule:

Time (GMT+3)	Name
October 18	
10:00 - 10:30	Conference opening
10:30 - 12:10	Plenary scientific reports
13:30 - 15:15	SEMINAR Computational Models in Turkic Language and Speech
15:15 - 16:15	SECTION 1 Electronic corpora of Turkic languages
16:15 - 17:00	SECTION 2 Machine translation systems and technologies
October 19	
10:00 - 11:15	SECTION 3 Morphological and syntactic text processing systems
11:15 - 12:45	SECTION 4 Formal models for Turkic languages
14:00 - 14:30	SECTION 5 National localization of computer systems and terminology
14:30 - 16:00	SECTION 6 Information technology in the conservation and study of Turkic languages
16:00 – 17:00	Closing of the conference

PLENARY SESSION

October 18, 10:00 - 13:00

Conference opening

October 18, 10:00 - 10:30

1. **Psyanchin Aybulat**, Doctor of Geography, Professor, Director of the Order of the Badge of Honor Institute of History, Language and Literature of the Ufa Federal research center of the Russian Academy of Sciences, co-chair of the conference.
2. **Suleymanov Dzhavdet**, Doctor of Engineering, academician of the Academy of Sciences of the Republic of the Republic of Tatarstan, scientific director of the Institute of Applied Semiotics of the Tatarstan Academy of Sciences, conference co-chair.
3. **Eshref Adali**, Professor, Director of the Department of computer engineering at Istanbul technical University (Istanbul, Turkey), co-chair of the conference.
4. **Sharipbaev Altynbek**, Doctor of technical Sciences, Director of the “Artificial Intelligence” Scientific Research Institute of the Eurasian National University named after L.N. Gumilyov (Nur-Sultan, Kazakhstan), co-chair of the conference.

Plenary scientific reports

October 18, 10:30 - 12:10

Chair: **Psyanchin Aybulat**, Doctor of Geography

Secretary: **Sirazitdinov Zinnur**, PhD in Philological Sciences

10:30-10:50 Doctor, professor **Eshref Adali**, **Ainur Zhumadillieva** (Istanbul, Turkey).

Comparisons in languages.

10:50-11:10 Doctor of philology, corresponding member of RAS **Dybo Anna**, Doctor of philology **Krylov Sergey** (Institute of linguistics of RAS, Moscow, Russia). *On the possibilities of expanding the inventory of the universal metalanguage for grammatical glossing of texts in the Altai languages.*

11:10-11:30 PhD in Philological Sciences **Sirazitdinov Zinnur** (Institute of History, Language and Literature of the Ufa Federal Research Center of the Russian Academy of Sciences, Ufa, Russia). *About corpus projects and the national corpus of the Bashkir language.*

11:30-11:50 Doctor of Engineering, academician of the Academy of Sciences of the Republic of Tatarstan **Suleymanov Dzhavdet**, candidate of technical Sciences **Gatiatullin Ayrat**, **Prokopyev Nikolai** (Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *About the portal "Turkic morpheme".*

11:50-12:10 PhD in engineering **Khusainov Aidar**, PhD in engineering **Gatiatullin Ayrat**, academician of the Academy of Sciences of the Republic of Tatarstan **Suleymanov Dzhavdet**, PhD in Physico-mathematical sciences **Gilmullin Rinat** Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *Towards the Creation of Machine Translation Systems Between Russian and Turkic Languages "TurkLang-7"*.

12:10-13:30 **Dinner**

SEMINAR

«COMPUTATIONAL MODELS IN TURKIC LANGUAGE AND SPEECH»

October 18, 13:30 - 15:15

Chair: **Khusainov Aidar**

13:30-13:45 **Ubaleht Ivan** (Omsk State University). *The Creation of Speech Corpus of the Dialects of the Siberian Tatars*.

13:45-14:00 **Sirazitdinov Zinnur, Buskunbaeva Liliya, Shamsutdinova Gulgina** (Institute of History, Language and Literature of the Ufa Federal Research Center of the Russian Academy of Sciences, Ufa, Russian Federation). *Development of the audio corpus of the Eastern dialect of the Bashkir language: problems and prospects*.

14:00-14:15 **Navracsics Judit** (University of Pannonia, Hungary), **Darzhinova Liubov** (The Education University of Hong Kong). *The use of PsychToolbox-3 for tracking bilingual sentence processing and comprehension*.

14:15-14:30 **Kuchkarov Makhmudjon** (New York Department of Education, New-York, USA), **Kuchkarov Marufjon** (Ferghana Polytechnic Institute, Uzbekistan). *From the "Movement Language" to the Human Language*.

14:30-14:45 **Kozhirbaev Zhanibek, Yessenbayev Zhandos** (Nazarbayev University, Nur-Sultan, Kazakhstan). *Kazakh text normalization using machine translation approaches*.

14:45-15:00 **ZheltoV Valerian, ZheltoV Pavel** (Chuvash State University, Cheboksary, Russia). *Logic programming operation and their application for language analysis*.

15:00-15:15 **ZheltoV Valerian, ZheltoV Pavel** (Chuvash State University, Cheboksary, Russia). *Symbol solvers for morphologic and syntax analysis*.

Suleymanov Djavdet, Prokopiev Nikolay, Gatiatullin Ayrat (Institute of Applied Semiotics of the Academy of Sciences of the Russian Academy of Sciences, Kazan RF). *About the portal "Türkic morpheme"*. (Plenary lecture)

SECTION 1

Electronic corpora of Turkic languages

October 18, 15:15 - 16:15

Chair: **Buskunbaeva Liliya**

15:15-15:30 Khusainov Aidar (Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *Tool for distributed creation of annotated speech corpora.*

15:30-15:45 Khakimov Bulat, Shaekhov Marat (Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *To the question of building a parallel test case for the machine problem.*

15:45-16:00 Salchak Aelita, Hertek Arzhaana, Oorzhak Baylak, Ondar Vyacheslav, Dalaa Sergej (Tuvan State University, Kyzyl, Russia). *Electronic corpus of texts of the Tuvan language: possibilities of use in the educational process.*

16:00-16:15 Chemyshev Andrey (Mari Scientific Research Institute of Language, Literature and History named after V.M. Vasilyev). *Features of data representation in agglutinative language corpora.*

SECTION 2

Machine translation systems and technologies

October 18, 16:15 - 17:00

Chair: **Gilmullin Rinat**

16:15-16:30 Abdurahmonova Nilufar (Alisher Navo'i Tashkent State University of Uzbek Language and Literature, Tashkent, Uzbekistan), **Aripov Mirsaid** (National University of Uzbekistan named after Ulugbek, Tashkent, Uzbekistan), **Norov Abdusaid** (Karshi State University, Karshi, Uzbekistan). *Syntactic structures for ontological models (on the example of the Uzbek language).*

16:30-16:45 Zheltov Valerian, Zheltov Pavel (Chuvash State University, Cheboksary, Russia). *Development of a machine translation system from Chuvash to Russian.*

16:45-17:00 Sabina Mammadzadeh (Institute of Information Technology of ANAS, Baku, Azerbaijan). *The development of the National Transliteration System of Azerbaijan.*

SECTION 3

Morphological and syntactic text processing systems

October 19, 10:00 - 11:15

Chair: **Gatiatullin Ayrat**

10:00-10:15 Dubrovina Margarita (St. Petersburg State University). *On the importance of the synchronic approach in the analysis of Turkic morphological forms.*

10:15-10:30 Abzhalova Manzura (Tashkent State University of Uzbek Language and Literature named after Alisher Navoi, Tashkent, Uzbekistan). *The role of language analysis of phraseological units in linguistic sentences.*

10:30-10:45 Ajupov Madehur (Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *Automatic database population for the Turkic morpheme portal using software processing of bilingual dictionaries.*

10:45-11:00 Jonathan North Washington (Swarthmore College, USA), **Francis Tyers** (Indiana University). *Why categorising Turkic non-finite verb forms correctly matters for NLP.*

11:00-11:15 Tokmashev Denis (Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia). *Morphological variability in the Teleut language based on corpus data: problem statement.*

SECTION 4

Formal models for Turkic languages

October 19, 11:15 - 12:45

Chair: **Shaekhov Marat**

11:15-11:30 Mengliev Bahtier, Hamroeva Shahlo (Tashkent State University of Uzbek Language and Literature named after Alisher Navoi, Tashkent, Uzbekistan). *Modeling of affixes for the morphological analyzer of the Uzbek language.*

11:30-11:45 Hamroeva Shahlo (Tashkent State University of Uzbek Language and Literature named after Alisher Navoi, Tashkent, Uzbekistan). *Arrangement of morphemes for the database of the morphological analyzer of the Uzbek language.*

11:45-12:00 Hakimov Muftah (National University of Uzbekistan named after Mirzo Ulugbek, Tashkent, Uzbekistan), **Kadirov B.** (Karshi branch of Tashkent University of Information Technologies named after Muhammad ibn Musa al-Khwarizmi, Tashkent, Uzbekistan). *Algorithms for texts analyzing formed using an extensible input language.*

12:00-12:15 Pankov Pavel, Bayashorova Batygul (Institute of Mathematics of NAS of KR, Bishkek, Kyrgyzstan), **Karabayeva Sonunbubu** (Kyrgyz State University of

Construction, Transport and Architecture named after N. Isanov, Bishkek, Kyrgyzstan).
Mathematical models of human management, classification and application.

12:15-12:30 Mongush Choduraa (Tuvan State University, Kyzyl, Russia). *Methods of analysis of formal concepts to identify the style of the author of works of Tuvan folklore.*

12:30-14:00 Dinner

SECTION 5

National localization of computer systems and terminology

October 19, 14:00 - 14:30

Chair: **Sirazitdinov Zinnur**

14:00-14:15 Khakimov Bulat (Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *Using the Tatar language in Yandex search queries: some observations.*

14:15-14:30 Ergesh Banu (Eurasian National University named after L.N. Gumilyov, Nur-Sultan, Kazakhstan). *Analysis of the tone of comments in social networks based on the rules.*

SECTION 6

Information technology in the conservation and study of Turkic languages

October 19, 14:30 - 16:00

Chair: **Khakimov Bulat**

14:30-14:45 Muzafarova Alina (Kazan Federal University, Kazan, Russia), **Minullin Dmitry** (Kazan Federal University, Kazan, Russia), **Gafarova Vilusa** (Institute of Applied Semiotics of the Tatarstan Academy of Sciences, Kazan, Russia). *Cluster analysis of the texts of the lesson planning system "Electronic education of the Republic of Tatarstan".*

14:45-15:00 Kyzlasova Inga (Khakass State University named after N.F. Katanov, Abakan, Russia). *Teaching the Khakass language in a multicultural educational and communication space.*

15:00-15:15 Güllü Karanfil (Comrat state University, Comrat, Moldova). *On the role of information technologies in the popularization of the Gagauz language.*

15:15-15:30 Tukeyev Ualsher (Al-Farabi Kazakh National University, Almaty, Kazakhstan). *Kazakh Latin alphabet with full English alphabet.*

15:30-15:45 Gubanov Alexey (Chuvash State University, Cheboksary, Russia). *The problem of extracting knowledge based on Proverbs as precedents.*

15:45-16:00 Ochirova Nina (Southern Scientific Center of RAS, Rostov-on-Don, Russia). *Application of computer technologies in the study and preservation of the Kalmyk language.*

CONFERENCE CLOSING

Discussion of reports and adoption of a resolution

October 19, 16:00 - 17:00