Dear Students, phd-students

and young scientists!

Rectorate and Council for Student Research work of Kazan National Research Technical University named after A.N.Tupolev-KAI (KNRTU-KAI) invites to take part in the International Youth Scientific Conference “**XXIV Tupolev’s Readings (A School of Young Scientists)**”, devoted to the 130th anniversary of an aircraft designer Mr. Igor Sikorsky. The Conference will be held on **November 7-8, 2019**.

**Participants**: students, PhD-students, young scientists. **Form of participation**: on-site participation, virtual participation. Participation is free of charge.

At the Conference will be considered and discussed topical issues of development within Aerospace Technologies, Mechanical Engineering, Energy Engineering, Instrumentation, Informational, Infocommunication, Radioelectronic Technologies, as well as socio-economical dimensions in creation of Aerospace Structures.

**ADDITIONAL EVENTS**

* Competitive selection of innovative projects for participation in the Program «U.M.N.I.K.» **(**[**www.fasie.ru**](http://www.fasie.ru)**)**.
* Master-classes in areas.
* Sightseeing tour on Kazan.
* Visiting a Museum and Competence Centers of KNRTU-KAI (by agreement).

**SECTIONS**

1. **Aeromechanics, Design and Strength of Aeronautical Structures (for manned and unmanned flying vehicles)**
	1. *Aerodynamics and Design of Flying Vehicles*
	2. *Strength of Flying Vehicles*
2. **Perspective Materials and Structure-Forming Technologies**
	1. *Modern Materials and Progressive Technologies*
	2. *Aircraft Technology and Composite Manufacturing*
	3. *Plasma and Additive Technologies*
	4. *Nanotechnology и Nanomaterials*
	5. *Modern Technologies of Digital Manufacturing in Mechanical Engineering*
3. **Heat Engineering, Heat Engines and Power Installations**
4. *Thermophysical Processes in Power Installations and Transportation Systems*
5. *Working Processes in Rocket Engines*
6. **Shipbuilding and Devices for Ocean Studies**
7. **Instrumentation, Electrical Equipment and Control Systems**
8. *Instrumentation*
9. *Control in Engineering Systems*
10. *Electro-Optical Instruments and Systems*
11. *Standardization, Metrology and Quality Management in Aircraft and Mechanical Engineering*
12. *Electrical Engineering and Electrical Equipment for Transport Means*
13. *Technosphere Safety Issues in Aircraft Engineering*
14. *Engineering Protection of Environment*
15. **Information Systems and Technologies**
16. *CAD Systems*
17. *Applied Mathematics and Informatics*
18. *Intelligent Information Systems*
19. *Information Security Systems*
20. *High Performance Computing, Computer Networks and Modeling*
21. *Processes’ Dynamics and Intelligent Systems*
22. *Applied Mechanics, Theory of Mechanisms and Ma-chines, Mechatronics and Robotics*
23. *Mathematical methods and models in applied research*
24. **Radioelectronic and Photonic Infocommunication and Instrumentation Systems**
25. *Radioelectronic and Telecommunication Devices and Systems*
26. *Optoelectronic, Microwave and Radio-Photonic Devices and Systems*
27. *Automated Systems in Measure, Control and Diagnostics*
28. *Electronic, Micro- and Nanosystem Equipment and Technologies*
29. *Design and Manufacturing Technologies of Radioelectronic Means*
30. **Human and Socio-Economic Dimensions in Knowledge-Based Engineering**
31. *Philosophical, Historical and Methodological Issues in Development of Engineering*
32. *Aerospace Area: History, and Communication Support*
33. *Economic Fundamentals in Competitive Development of Knowledge-Based Engineering*
34. *Economics and Management in Production*
35. *Social Relations and Potential of Youth in Industrial and Post-Industrial Society*
36. *Foreign Language in the Area of Professional Communication*

Based on the results of the conference it is planned to publish *a collection of conference reports* in electronic form. The Collection will be assigned codes: ISBN, UDK, BBK. Conference’s Reports will be registered in the system of **Russian Science Citation Index** **(RSCI)** of Scientific Electronic Library.

On the Conference should be presented the results of original research and solutions of problematic issues. It is obligatory to enclose a result with verification on originality of the conference’s report. A percent of originality must be more than 65%. The Organizing Committee reserves the right to double-check the results.

The Organizing Committee reserves the right to reject materials that do not correspond to the topics of the conference and / or formatted in violation of these requirements, as well as those submitted after the deadline for the receipt of materials (without notifying the authors).

**ATTENTION!** Materials will be published in the Conference’s collection in the author's edition.

**Number of reports** for one author (incl. coauthorship) – *not more than two***.**

**Number of authors** for a single report – *not more than three****.***

**Length of reports:** each report should be from 2 to 6 pages, excluding information about the authors and abstracts in Russian and English.

**TERMS OF PARTICIPATION**

**AND PROVISION OF MATERIALS**

To take part in the Conference it is necessary before **June 16th, 2019** to pass e-registration on the web-site of the Conference attaching the text of the report and the result with verification on its originality as well as accompanying papers. More information, templates for accompanying papers, and requirements for reports formatting are presented on the web-site of the event <https://t4.kai.ru>.

***ATTENTION!*** *An original of the expert evaluation on the possibility of publication in the open press with a seal and approving signature is necessarily provided to the organizing committee upon arrival or sent by post. Also, it is necessary to provide contract(s) filled out with the consent(s) to publish the report(s) in the RSCI with the signature(s) of the Conference’s participant(s).*

**Address of the Organizing Committee:**

10, K.Marx Str., 420111, Kazan, RUSSIA

KNRTU-KAI, Department of Academic and Research Work of Students, Office No. 207.

Executive Secretary: Ms. Yulia O. Silnitskaya,

Secretaries: Ms. Alena O. Antonova, Ms. Evgenia A. Evdokimova.

Tel. / Fax: +7-843-231-0186, +7-843-238-1962.

E-mail: nirs.kai.t4@gmail.com,

Web-site: [http://t4.kai.ru](http://t4.kai.ru/)

MINISTRY OF SCIENCE AND HIGHER EDUCATION

OF THE RUSSIAN FEDERATION

KAZAN NATIONAL RESEARCH TECHNICAL UNIVERSITY NAMED AFTER A.N.TUPOLEV-KAI (KNRTU-KAI)





**International Youth**

**Scientific Conference**

**“XXIV Tupolev’s Readings
(A School of Young Scientists)”**

devoted to the 130th anniversary
of an aircraft designer Mr. Igor Sikorsky

November 7-8, 2019

KAZAN