

# HISTORY OF TECHNOLOGY

UDC 629.7 (092)

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## **RESEARCH-DESIGN SCHOOL OF V. M. KOVTUNENKO: COMPONENTS, UNITS, ACTIVITIES**

*To the 95th anniversary of the birth of V. M. Kovtunenکو*

### **Abstract**

The genesis, formation and activities of V. M. Kovtunenکو's scientific and design school in the field of rocket and space technology in Dnepropetrovsk and its further development outside of Ukraine are considered by the author in a generalized form.

The new rocket-building subjects in Dnepropetrovsk State University gave impulse to the research development in various areas. In the mid-fifties of the 20th century new scientific schools began to emerge at the university.

In the article the concepts of the scientific-technical and scientific-design schools are explored, the structure of the VM Kovtunenکو' school in the field of aerodynamics and design of spacecrafts and systems is defined.

The first component of the school was established in Dnepropetrovsk, where V. M. Kovtunenکو worked from 1953 to 1977. It includes:

- Educational and research link (Honchar's DNU);
- Scientific and production link (State Design Office «Yuzhnoye»);
- Research (academic) link (ITM NASU and NSAU).

The second component of the school was formed in the NPO Lavochkin (Khimki, Moscow Region), where Vyacheslav Mikhailovich worked from 1977 to 1995. There, V. M. Kovtunenکو not only gave a new impuls to the development of the scientific and design school of the NPO Lavochkin, laid down by S. A. Lavochkin and G. N. Babakin. He also defined a new area in domestic unmanned cosmonautics, and created a school of the system design of orbital space astrophysical observatories and high-precision Earth remote sensing systems of high resolution and efficiency receiving and processing information.

The complex of these structural components of such school allowed with greater certainty to relate the school of V. M. Kovtunenکو to scientific and design one.

First a list of VM Kovtunenکو's disciples and followers the author revealed. The main activity's areas of these scientists are described.

Conclusions are drawn by author that the school of V. M. Kovtunenکو, established in Dnepropetrovsk and continuing its activities both in Dnepropetrovsk and the NPO Lavochkin, is developing at the present time. Definition and analysis of the

components of the scientific and design school of V. M. Kovtunenکو for the first time led to the study of the «genealogical tree» of the research and design school.

Without a doubt, the scientific and design school of V. M. Kovtunenکو is one of the largest schools in the field of rocket and space technology in the XX century, and not only in Ukraine.

**Keywords:**

scientific and design school, scientific leader, V. M. Kovtunenکو, State Design Office «Yuzhnoye», ITM NAS Ukraine, Honchar's DNU, NPO Lavochkin, students and colleagues.

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*Received in the editorial board 28.12.2016*

