

R.Seilbekova- researcher

**Key words:** Karakalpakstan, science, new methods.

On the threshold of the XXI century which is going to be a century of Information technologies in the sphere of science and technology one of actual problems is the study of the history of science and technology in the Republic of Karakalpakstan, the establishment of the achievements of the scientific technological progress, which became the real impulse of the development of society in the XX century.

Science is a fairly popular concept in the modern world. The rapid development of scientific processes, the modernization of science as a concept in general, the ability to predict and analyze events that open the door to scientific research. But, unfortunately, many have not yet fully realized the "beauty" of such opportunities. In modern conditions of scientific development, special attention should be paid to scientific research. Thanks to research, new methods of cognition and analysis are being developed, as well as those that already exist are being improved. Scientists do not deny that at such a pace, the further development of science will directly depend on the development of scientific research, not vice versa. In addition, further socio-economic, political, and cultural development is probably impossible without the active introduction of scientific research. The development of scientific research creates prerequisites for the training, first of all, of highly qualified specialists capable of creative work, constructive thinking, forecasting the further development of science, etc. So, scientific research is of great importance in the formation of knowledge, skills and abilities of human research activities in the modern world. The relevance of this topic lies in the fact that scientific research is interesting because it makes it possible to comprehensively, objectively and thoroughly study phenomena, processes, as well as to obtain results that are useful for human activity. Science is a special form of cognition carried out by special groups of people using special means, it is also believed that science is social in its origin, development and use [1]. Any scientific discovery is necessarily the common work of not one person, but, as a rule, two or more. Interestingly, in every period of time, science has been and is an expression of human success in understanding the world. Systematizing scientific knowledge, first of all, two large groups are distinguished: the sciences of society and the sciences of nature. In the first group - philosophy, political science, history, psychology, etc., in the second - physics, chemistry, technical sciences, etc.

As you know, research and development work has been combined into one common name - "scientific research". "Scientific research" is a very broad concept that covers all processes regardless of their scale — from the origin of an idea to its implementation in the form of new theoretical positions, the creation of new technologies, etc. [2]. Usually, scientific research is a special kind of human activity, which is aimed at obtaining deeper, accurate, new knowledge, which, as a rule, serve practical purposes for creating new or improving old knowledge acquired by a person during his life. Scientists interpret the concept of "scientific research" in different ways, so here are some of them. According to scientists, scientific research should be understood as a process:

- which is systematic and aimed at studying certain objects;
- in which the means and methods of science are used;

— the purpose is to form knowledge about the object under study, as well as to establish patterns of its occurrence, development and transformation in the interests of rational use in people's practical activities.

In modern conditions, the nature of scientific research and the approach to the study of natural phenomena have changed dramatically. Integration processes are one of the characteristic features of the modern stage of development of scientific research and science, it can even be argued that scientific research is also changing now, because, as we know, integration processes do not stand still, thereby changing and developing almost everything. As you know, not every study can be considered scientific. Scientific research is fundamentally different from other studies in that it reveals the natural connections of reality through abstract concepts, diagrams, tables that a person usually creates himself in the process of researching a phenomenon or process. Based on the above, it is possible to identify features inherent only in scientific research: novelty and uniqueness, creative character; interrelation of theory and practice; original approaches and technologies; connection with other sciences; independence. In the course of scientific research, everything is important. Focusing on the main or key issues of the topic, it is impossible not to pay attention to side facts that at first glance seem insignificant. But it is precisely such facts that can hide the beginning of important discoveries. That is, it is not enough for a researcher to establish a new fact, it is important to explain it from the standpoint of modern science, to reveal its general cognitive, theoretical or practical significance. The accumulation of scientific facts in the process of research is a creative process, which is always based on the scientist's idea, his idea. It's no secret that scientific research is a very time-consuming and complex process that requires constant attention, high tension, and hard work, but the main key is inspiration. It is equated to a feat and requires the maximum energy of a person, his thinking and actions. Consequently, scientific research in the modern world is moving forward at a fairly rapid pace. It is encouraging that more and more young people express a desire to conduct their own research, experiments, analyze and summarize information, creating their own creation of scientific research. The accumulation of scientific facts in the process of research is a creative process, which is always based on the idea of a scientist, his idea.

## **Literature:**

1. Стёпин, В.С., Кузнецова Л.Ф. Научная картина мира в структуре техногенной цивилизации. — М., 1994.
2. Пуанкаре, А. О науке. 2-е изд., стереотип. — М., 1990.