

This fact may indicate the hypothetical ability of these sorbents for sorption activity in relation to the anionic nature pollutants in the aqueous medium. It should be noted that the addition of WS<sub>2</sub> in the amount of only 1% increases the presence of Bronsted acid centers (pK = 2.1, pK = 5.25) to the level corresponding to the sample of saponite modified by magnetite in the amount of 7% (MCC).

#### REFERENCES

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#### THE USAGE OF COMPOSITE ARMATURE IN CONSTRUCTION

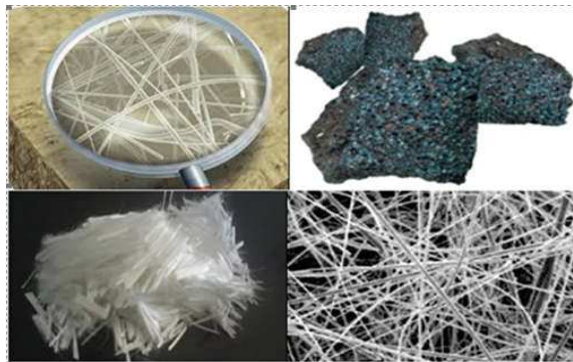
**Annotation.** This article presents the advantages and disadvantages of using composite reinforcement in construction in comparison with traditional steel reinforcement.

Today, it is impossible to imagine the construction without concrete and reinforced concrete structures, with steel armatures. Many parts of the world are being replaced by non-ferrous, composite armatures in some of the steel welding fixtures used in the construction industry. The non-metallic composite armatures in our country will greatly reduce the demand for steel welding in the construction sector. This can lead to the economy of our country.

A number of enterprises for the production of composites have been launched. Another important step in this area was the creation of a new enterprise based on the Decree of the President of the Republic of Uzbekistan of December 26, 2016 “On measures to continue implementation of promising projects of localization of production of finished products, components and materials for 2017-2019”. Particular examples of this are the production

of composite armatures with basalt fiber at the enterprise “Mega Invest industrial” LLC, jointly with UK “Liegh Barreir LLP” in Jizzakh region in the Republic of Uzbekistan.

Composite fixtures can be considered as the most advanced discoveries of recent years, as they are a modern building material that can replace steel fixtures and be widely used in construction. Various tests of the composite armature in laboratory conditions, constructions, assembly designs and improvement of its technological processes lead to a sharp reduction in the demand for steel in the construction industry in our country.



1-picture. Basalt fiber

The composite armature is a non-metallic material that is produced by thermal treatment of glass and basalt fibers. The composite armature is made up of 80% glass or 20% basal fiber-linking material. Basalt fiber is made from rocks and is used as a foam concrete, polystyrene concrete, an effective and booster additive for standardized concrete.

Basalt fibers have high chemical resistance and resistance to fibrous materials, resistance to friction, resistance to cold effects, reduces corrosion and reduces spots on water. This material can be widely used in hydraulic structures, highway roads, bridges, atomic power stations, pouring stoves, and other places as it is made of natural stone.

Composite armatures are one of the widely used materials in the modern world, the main reasons for which are many. The composite armatures, in turn, are replacing steel fittings, because they have a good strength and can be gradually used for reinforced concrete structures.

Advantages of using composite armatures in construction:

the steel armatures start to rust through air and this process continues unabated, which ultimately reduces the basic properties of the armature. Composite fixtures can not be dampened by moisture, do not moist and can be exposed to moisture;

the composite armature does not change its temperature from  $-70\text{ }^{\circ}\text{C}$  to  $1000\text{ }^{\circ}\text{C}$  and compared to steel armatures with the same strength, the mass of composite armatures reduces costs by up to 9 times the light and transport costs;

composite armatures can sharply reduce the cost of fittings in the designs used due to the high reliability of the steel armatures;

the findings of the research have shown that long-term experiments have been proven by the fact that the length period of the composite armatures than the steel armatures is three times more.

Failure to Use Composite Armature in Construction:

when the temperature of the composite armature exceeds 6000 °C, the internal fibers break out and, as a result, these fixtures lose their strength;

composite armatures can not be welded by means of a simple electric welding machine, such as steel fittings, which in turn indicates that it needs to do specific work.

the use of composite armature deformation in flexible elements should be proven by experiments;

Composite armatures are a modern building material in modern times. It can be used for the construction of low-rise buildings, but the use of such fixtures in the construction of multi-storey buildings implies long-term experiments and requires design indicators. It is not advisable to use composite fixtures in multi-storey buildings, as these fixtures are deformative and are considered to be relatively safe for use in multi-storey buildings.

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## **“GREEN” SYNTHESIS OF SnO<sub>2</sub> NANOPARTICLES**

Recently one of important research field was nanoscience which contains emerging technologies with interdisciplinary fields like physics, chemistry, biology, material science, and medicine. There was major need for eliminating harmful reagents and to provide efficient green synthesis of nanoparticles was mostly used. Bio-directed synthesis of nanoparticles shows valuable interest to various research fields such has biologists, chemists, materials scientists and also to find greener methods of inorganic material synthesis. Transition metal nanoparticles were gaining importance due to their phyto-synthesizing property which resulted in biocompatibility, low toxicity, green approach and environmental friendly nature. SnO<sub>2</sub> nanoparticles has a direct optical band gap of 2.5–3.4 eV energy due to it can act has a p-type semiconductor metal. The SnO<sub>2</sub> NPs were applied in the area of solid state gas sensor, solar cells, rechargeable Li batteries and optical electronic de-