



**Course:** Machine building

1. **Name of innovative development:** Manufacturing of a new generation of porporated mobility materials
2. **Purpose and scope:** Installations for water purification with porous penetrating materials are intended for purification of water from fats, petroleum products, suspensions, technical liquids and other pollutants in the drains. Water purification by these filters is carried out by the multi-stage method, which allows to receive high-purity raw material. These porous materials can be recommended for use in aggressive environments.
3. **The main characteristics, the essence of development:** Porous penetrating materials are devices that are characterized by a fairly high level of performance and optimal cleaning power. Aggregates with such materials can well hold different types of suspended matter, perform water purification from impurities of petroleum products, machine lubricants, technical liquids. The effectiveness of the new filtering PPM compared with similar traditional PPM is 82%. The filter materials obtained by our technology have a penetration rate of 3, and the resource and dirt capacity are 1.5 times higher than the existing filter materials, with a 20% reduction in the weight of the filter.
4. **Comparison with the world analogues, the main advantages of development:** The cost of developing and manufacturing such porous filtering material is 25-35 UAH, which is 3-4 times lower than the existing world analogues.
5. **The State of Intellectual property protection:** 4 patents for the utility model and 1 patent for the invention were obtained.
6. **Demand on the market:** These filtering materials increase the uniformity of cleaning liquids through their pore distribution by 20-30% and increase the permeability by 15-20% compared with similar existing filter cartridges in the world.
7. **Condition of development readiness:** A pilot batch of filter cartridges for the purification of technical water and lubricants, which is used in industrial enterprises of Volyn region, is manufactured.
8. **Color illustrations, photo development:**



9. **Coordinators for communication:**  
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