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## PROFESSIONAL STATUS OF SPECIALISTS IN POLYMER PRODUCTION

**Introduction.** In the 21<sup>st</sup> century we are surrounded by different types of things or structures that are made by different types of polymer products such as plastic, molded material, synthetic fibers, rubbers etc. The use of all these polymer products is increasing day by day. The requirement of eco-friendly recyclable plastic and proper management of the polymer products is also rising at the same time. This job is done by Polymer Engineers. They use the principles of plant design, process design, thermodynamics, and transport phenomena to develop new products.

**Objectives.** The basic objectives of this research are:

- to highlight the importance of chemical specialists and plastics industry nowadays;
  - to determine main prospects of future polimer engineers;
  - to observe possible disadvantages of this profession;
- to describe main requirements and personal characteristics for chemist-technologist specialists.

**Presenting main material.** The importance of Chemical Engineering or Polymer Engineering as aviable career option has increased many times [1].

The plastics industry is a collection of niche interests and sectors – ranging from the production of food packaging and single-use goods right up to the specialist materials applications such as the engineering polymers that find their way into NASA's space programme.

There are a lot of ways to manufacture plastics materials – the raw polymers – and even more ways in which to process these polymers into products. The leading

markets for plastic products include packaging, automotive, building, and medical/healthcare. The main manufacturing processes include injection molding, thermoforming, film blowing, blow molding and others.

A broad knowledge of all processes and polymers is of help when starting a career. It is perhaps wise not to become a specialist too early on – but to have a focus on adding new expertise and experiences – of processes, materials and markets – to a developing career [2].

The chemist-technologist is engaged in research and chemical examinations, development of chemical compositions of various products, is responsible for the technological process of its production. Such a specialist is in demand at any enterprise: producing household chemicals, petroleum products, pharmaceuticals, food, cosmetics, perfumes, and so on. He can both control the production of products using existing technologies, and develop new products and methods for their manufacture.

The prospects of the specialty are significant: an interesting profession (with a penchant for chemistry) in which you can regularly discover for yourself something new, create something new; the ability to work in almost any industry; the opportunity to be engaged in research or management activities; the ability to bring real benefits to people, economics, ecology; decent salary (with successful employment).

Possible cons may include: sometimes working in unhealthy conditions; the need to cope with a large volume of tasks and various types of work; very high personal responsibility.

Conclusions. So, the chemist-technologist must be neat, accurate, be able to concentrate his attention on the task (and maintain this concentration for a long time), be a responsible and patient person. In addition, keen eyesight and a good sense of smell, as well as a logical mindset, the ability to process and systematize large amounts of information are important to him. The income of such specialists

depends, first of all, on the place of their work. Experience and professionalism, as well as the availability of additional knowledge and skills (for example, managerial, legal, medical, economic, as well as knowledge of a foreign language) are also important [3].

## **REFERENCES**

- 1. Tanmoy Ray. Careers in Polymer Engineering: Career Path, Top Colleges, Jobs, Salaries, and Scopes in Renewable Energy & Sustainability [Електронний ресурс] / Tanmoy Ray // Stoodnt Helping Student Dreams. 2018. Режим доступу до ресурсу: https://www.stoodnt.com/blog/careers-in-polymer-engineering/
- 2. BPF. Jobs and Careers in the Plastics Industry [Електронний ресурс] / BPF // CareerZone Режим доступу до ресурсу: https://www.bpf.co.uk/polymerzone/career-zone/home.aspx.
- 3. Профгид. Профессия химика-технолога подойдет любителям химии с математическим складом ума. Она требует усердия, точности и ответственности, а также обязательного высшего образования. [Електронний ресурс] / Профгид // Профгид. 2020. Режим доступу до ресурсу: https://www.profguide.io/professions/himik\_technolog.html.