

Figure 2 – The dependence of photoresist removal rate on the value of microwave power in the resonator

The effectiveness of the combined discharge was confirmed by conducted experiments. Further research of processes occurring in plasma, depending on the process parameters, system configuration and power source characteristics is required. This average power microwave plasmatron provides a high level of material processing quality in operations of the photoresist layer removal, as well as in mono- and polycrystalline silicon etching.

## References:

1. Бордусов С.В. Плазменные СВЧ технологии в производстве изделий электронной техники: Монография / Под ред. А.П. Достанко. – Мн.: Бестпринт, 2002. – 452 с.

2. Lieberman M. A., Lichtenberg A. J. Principles of Plasma Discharges and Material Processing. New York: Wiley, 1994.

3. Мадвейко, С.И. Анализ условий возбуждения СВЧ разряда низкого вакуума в плазмотроне резонаторного типа / С.И. Мадвейко, С.В. Бордусов, М.С. Лушакова // Доклады БГУИР – 2015 – №8(94) – С. 44 - 50.

## SOCIAL NETWORKS: GOOD OR EVIL?

Belarusian State University of Informatics and Radioelectronics Minsk, Republic of Belarus

Matyushkina I.S.

Kushnerova S.E. – Lecturer

What is the Internet? This is the global system of interconnected computer networks that use the Internet protocol suite to link devices worldwide. It is a network of networks that consists of private, public, academic, business, and government networks of local to global scope, linked by a broad array of electronic, wireless, and optical networking technologies. But what does it really mean for people? It is a chance to see the whole world in one click. This is an opportunity to get acquainted with people from other countries and to understand their culture and traditions. This is a place where you can realize yourself. And for some people it is their life.

Social network site or SNS is an online platform that is used by people to build social networks with other people in the Internet. Users create their profiles on the SNS in which they write about their hobbies, views, family, friends and so on.

The most popular social networks are:

- Facebook
- Twitter
- Instagram
- Ask.fm
- VKontakte or VK
- Odnoklassniki

Social networks become an important part of our everyday life. People chat, maintain blogs, upload photos, read news. Do you know that the average user spends about 6 hours a day in the SNS? This is about 3 months a year! So why do people do that?

Social networks give us a possibility to communicate with colleagues, relatives and friends living in different cities and countries and also make new friends.

It can be used for self-development. You can watch educational films, listen to good music, read interesting books and learn foreign languages. There are groups of interests, where you can find information you need, such as a video with fitness classes or with guitar lessons.

Social networks can also help you in education. With the help of Social Media you can share lecture notes, assignments for laboratory works and find useful information.

It is the fastest way to find out what happened in the world and discuss the news with other users.

Social media - is a platform for business development. There you can advertise your online store, a web design studio or a rock school.

However, every medal has its reverse.

Because of the abundance of entertainment, superficial and often unnecessary data, time you spend in social networks increases significantly. This pastime can have a negative impact on your health.

One more negative fact is that a person loses the skill of real communication. Texting in social networks, people often don't follow the rules of grammar and punctuation, use the limited vocabulary, replace emotions with smileys; all of this has a harmful impact on communication in a real world.

Moreover, the most important disadvantage of using social networks is an addiction. Internet addiction is an excessive computer use which interferes with daily life. Nowadays psychologists compare it with alcohol or drug addiction. A person becomes unsociable, he doesn't care about a family or friends, his only friend is a computer. The main category of people who are tend to internet addiction are children and teenagers, as well as shy, anxious, weak, with low self-esteem and melancholic people.

No doubt, social networks affect humans. The main thing is to refer to everything with the mind: do not waste time, because time is the most valuable thing we have. You should properly use the opportunities given to us by the internet.

Therefore, the Internet communication should complement our life, and shouldn't be the basis of all our activities! Social networks can be very useful. But abuse of social networks can lead to horrible consequences. Social Media - is both good and evil. We should take only good things from it and filter out the bad ones!

References:

- 1. https://en.wikipedia.org/wiki/Social\_networking\_service
- 2. https://www.lifewire.com/popular-types-of-social-networking-sites-3486530
- 3. http://socialnetworking.lovetoknow.com/Advantages\_and\_Disadvantages\_of\_Social\_Networking
- 4. https://futureofworking.com/10-advantages-and-disadvantages-of-social-networking/
- 5. http://mediashow.ru/sites/default/files/books/2011/11/social.network.analysis.for\_.startups.1449306462.pdf

## THE RESEARCH OF THE INFLUENCE OF PROGRAMMING ON MODERN MUSICAL INSTRUMENTS

Belarusian State University of Informatics and Radioelectronics Minsk, Republic of Belarus

Bosov A.V.

Lazarenko A.M. - Senior Lecturer.

The purpose of this paper is to study the influence of programming on modern musical instruments, to make analysis of their development.

Currently, electronic musical instruments are widely used in modern musical directions. The development of ever newer and more sophisticated musical instruments is very active and is an interdisciplinary field of research.

The point of the research is to see the development among musical instruments by creating their digital and software analogs.

Among many electronic tools, there are:

1. Synthesizer - a tool that synthesizes sound with the help of one or more sound waves generators.

2. Vocoder - a speech synthesis device based on an arbitrary signal with a rich spectrum.

3. Dram machine is a device based on the principle of step-by-step programming for creating and editing repetitive musical percussion fragments.

We will perform a comparative analysis of analog, digital and software types of these instruments.

1) Synthesizer:

- Analog synthesizer .They implement additive and subtractive types of synthesis.Their main feature is that they use physical processes occurring in electrical circuits to generate sound.Their main problem is their unstable setting.

- Digital synthesizer. They also include virtual and interactive types. For sound processing, mathematical models of both real and abstract processes are used, for example, oscillation, filtering, modulation. In order to play a musical piece, the performer does not need to program the timbre or record the parts in the sequencer - just select the ready timbre for the melody and the style for the auto accompaniment.

Of course, the management of such synthesizers is much simpler than that of analog models and is often available even to a child.

2) Vocoder: