

For the approximation of the distribution, function of the Voronoi areas of figures is also used the classical theory of moments [3].

As parameters modeling the distribution function of the take area and the size of the Voronoi shapes. Selected figures, corresponding to the maximum value of the distribution function in their area, as well as the Voronoi shape with maximum area and minimum size.

Decontamination of the soil assume conduct of two ways. In the first case, decontamination conduct on plots with an area corresponding to the maximum of the distribution function, in the second case – to carry out decontamination at sites corresponding to Voronoi shapes with maximum area and minimum size. Thus, input coefficients taking into account the terrain profile and the rate of decrease of radioactive contaminants. Coefficients, taking into account the speed, decrease the concentration of radioactive substances depends the diffusion of radionuclides on the soil surface. The method of decontamination (foam, gel, processing, decontamination solution, etc.) in both cases is the same and is selected according to the type of pollution.

Comparative evaluation show preference for other methods of decontamination for their efficacy and efficiency, that suggests the possibility of fragmented decontamination of radioactive objects.

1. Voronoi, G., *Reine Angew J. Math.*, 1908, no. 134, pp. 198.

2. Gerasymov, O. I., Somov N., *Stereology analysis of the local structure of granular materials (Voronoi Method)*, *Bulletin of the OSECU*, 2011, vol. 12. – pp. 215–219

3. Gerasymov, O. I., Kodintsev, N. M., *Constructing the Voronoi and the classical theory of moments as applied to the parameterization of the structure of granular materials*, *Bulletin of the OSECU*, p. 170 to 174, 2015, No. 19

Poplavsky I., Prybysh P., Karpei A.

*International Sakharov Environmental Institute of Belarusian State University,
Minsk, Republic of Belarus*

AUTOMATION OF ACCOUNTING TRAININGS OF EMERGENCIES

Nuclear energy is widely used in most industries. Therefore, it requires complex science-based measures for the avoidance, prevention of emergencies and for the protection of humans, the general population and of the environment from the harmful effects of ionizing radiation.

The number of accidents related to nuclear energy, nuclear power plants, significantly less than in other areas of human activity. However, a few years ago was an accident in Chernobyl and it forces to reconsider our attitude towards nuclear power plant safety organization of work and protection from uncontrolled development of

nuclear reaction. It is necessary to further reduce the probability of accidents, although it is likely completely avoid them never succeed.

An effective emergency response system to various accidents and emergencies is one of the basic requirements of safe development of nuclear industry. Conducting of trainings improvement of qualification and maintenance of a high class of emergency personnel are required to achieve high efficiency of the emergency response.

The paper describes the development of an automated system of accounting training (ASAT) in dealing with emergencies in the nuclear industry. The system is based on the use of web-technologies and consists of server and client parts.

The server side consists of database and application, where all business-logic and objective model of data are realized. As an application works with the personal data of enterprises, their employees and training, the two-tier system of safety and complete audit of actions of users are realized.

Client part contains the web-interface and presents from itself one-page application for co-operating with the registration system: input and reflection of data (work both with ordinary data and with files), conduct of calendar of training, reflection of training on a map with the use of GIS-technologies. Because this web-application, access to him it maybe to get from any device, having a modern browser and access in the internet.

ASAT intended for the organization trainings and evaluation of the achieved level of effectiveness of emergency response capability after the passage of these trainings.

Automation of trainings simplify the work of planning and analysis of trainings effectiveness, as well reduce the risk of errors and duplication of information in trainings account.

The ASAT system is implemented by means of modern technologies. The developed system affects positively on the work of the users by increasing the speed of working with information about trainings, conditions of personnel and equipment of rescue units, reducing the time of formation and analysis reports.

Rogovsky V.

*International Sakharov Environmental Institute of Belarusian State University,
Minsk, Republic of Belarus*

INVENTORY OF FLORA OBJECTS OF JSC "KERAMIN"

Inventory of flora objects is carrying out in the preparation of the making of ecological passport of the company, during the selling or corporatization of company.

The main legal act that determines carrying out of the inventory of flora objects in the Republic of Belarus is the Law of the Republic of Belarus of June 14, 2003 № 205-Z "About Flora". During the inventory of flora objects on the territory of the