удовлетворяют. Все усилия на подготовку кадров будут затрачены не в полной мере, если процесс приобретения знаний и практических навыков не станет для них жизненной необходимостью, если их деятельность творческая активность трудовая поддерживаться соответствующими моральными и материальными стимулами. Конечно, нельзя готовить кадры без соответствующей материально-технической базы. К сожалению и здесь есть проблемы, требующие решений. Это касается всего спектра, сопровождающего передачи И усвоения знаний, проведения исследовательской работы, организации практического обучения. Все большее значение приобретают информационные технологии в процессе обучения, знание иностранных языков. Умение владеть компьютерными технологиями при сборе информации, обработке документов, экономическом анализе, перспективном проектировании приобретает важное значение для современного специалиста. Это должно быть заложено в обучающие программы при подготовке кадров. Но самым главным из всего этого арсенала средств и методов, приемов и способов подготовки кадров следует считать личностный аспект, предусматривающий в конечном итоге образовательного процесса формирование творческой личности на основании широкого прежде всего. использования. активных форм вырабатывающих у будущего специалиста готовность и постоянное стремление к самообразованию на протяжении всей его трудовой деятельности.

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SCIENTIFIC-RESEARCH WORK OF STUDENTS IN SYSTEM OF EDUCATING MODERN ENGINEER

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Summary. In article the problems of organization of scientific-research work of students engineering specialities are considered. Her methodological side and effectiveness are exposed. It is shown, that the educational process, complemented by scientific-research work of students, is basis of preparation of modern engineer.

Key words: scientific-research work, students, organization, experience.

НАУЧНО-ИССЛЕДОВАТЕЛЬСКАЯ РАБОТА СТУДЕНТОВ В СИСТЕМЕ ПОДГОТОВКИ СОВРЕМЕННОГО ИНЖЕНЕРА Г.Н. Била¹, Н.М. Антрапцева², И.С. Новак²

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Аннотация. В статье обсуждаются вопросы организации научноисследовательской работы студентов инженерных специальностей. Раскрывается ее методологическая сторона и результативность. Показано, что учебный процесс, дополненный научноисследовательской работой студентов, составляет основу подготовки современного инженера.

Ключевые слова: научно-исследовательская работа, студенты, организация, опыт.

Scientific-research work at the present stage of development of higher education should play a leading role in the development of intellectual and creative abilities of students. Educational process supplemented by methodically well-organized scientific-research work of studentstransformed into real professional activities, which is the basis of the process of becoming the future of the modern engineer.

There are two main types of scientific-research work of students (SRWS) in practice:

- 1. SRWS provided curricula. To this type can be attributed abstracts, reports, messages, course papers and diploma papers. The student makes first advances to independent scientific creation during implementation of the transferred works. He studies to work with scientific literature and sources, acquires skills of critical selection and analysis of necessary information. The gradually increase of level of requirements to the course paper is instrumental in development of student as a researcher. The implementation of diploma work is directed on fixing and spread of the theoretical knowledge acquired during training in high school.
- 2. Extracurricular SRWS. It form of scientific creation is acknowledged most effective for development of research and scientific abilities for students [1,2].

The forms of extracurricular SRWS for the younger students is to participate in scientific circles, speech presentations at scientific

conferences, seminars, participation in contests and competitions. The main objective is personalization of the learning process, creating the preconditions for continuing education in the magistracy. For senior students it is a scientific professionalization under the direction of teachers and researchers, that is, specialization and preparation for postgraduate.

On the Department of General Chemistryof National University of Life and Environmental Sciences of Ukraine science-research activity of students it is primarily a system aimed at the implementation of three interrelated aspects:

- teaching students the elements of creativity and give them the skills of research activities;
 - scientific researches students to give concrete results;
- training creative active and highly professional person for future specialist-practice and scientist.

The different forms of SRWS are used to that end. It is work in scientific circles, problem groups, laboratories; attracting students as coauthors the initiative of scientific topics, participation in scientific conferences, exhibitions, science-research projects, contests for the best student scientific work, for nominal scholarships student publication.

The choice of concrete form SRWS is determined by the level of preparedness of students to perform assigned research tasks. Experience has shown that most of students studying chemistry on the 1 - 2 course, perceptions of the research work, as well as skills perform even the simplest chemical experiments are practically absent.

Our observations showed that up to 75-80 % of students have a low level of readiness for science-research work. It is characterized by the inability to see the problem, to highlight the contradiction, the inability to create the logic of their own research. Up to 20 % of students have an average level, which is characterized by a superficial view of the science-research activities. Students 1 - 2 courses with a high level of readiness for SRWS, which is characterized by the interest to study the discipline, research activities and understanding of its significance, it is found, unfortunately, extremely rare.

The most difficult at the initial stage of organization of SRWS students is the awakening of interest in scientific activities. For this purpose ona Department conducted round tables and scientific seminars. On themthe undergraduates, graduate students and teachers are partakenwith freshmenby the scientific achievements, resultsof experimental researches. The leaders of the student scientific circles talk about their thematic orientation, the prospects and performance. This approach allows at the beginning of the first semester to form the basic contingent of the scientific student circles.

The main type of scientific activity of students-freshmenis abstract the work. Sheallows to the students to purchase skills of the independent use literature, bibliographic pointers and catalogues.

Students, who successfully passed the stage of an abstract work and have attained a higher level of fitness, continue experimental work. Themes can be the basis of the thesis or even dissertation.

In the current academic year 82 students participated in the work of 9 student scientific circles operating at the Department of General chemistry. They did 74 of the report at Ukrainian and University science conferences. According to the results of experimental work published 38 abstracts. Three students participated in the Ukrainian competition on the best student scientific work.

Increase the practical relevance of student work, providing the opportunity to publish research results in scientific journals and books, the selection of the most capable students for experimental scientific activities and the moral stimulation of students in recent years has led to a significant intensification of the scientific-research work of students in the department.

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РОЛЬ ЦИКЛОВОЙ КОМИССИИ ЭКОНОМИЧЕСКИХ ДИСЦИПЛИН В ПОВЫШЕНИИ КАЧЕСТВА ПОДГОТОВКИ СПЕЦИАЛИСТОВ В КОЛЛЕДЖЕ

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Аннотация. В статье рассмотрена роль цикловой комиссии экономических дисциплин в повышении качества подготовки специалистов.

Ключевые слова: повышение качества знаний учащихся.