КАФЕДРЕ ТЕХНОЛОГИИ СТРОИТЕЛЬНЫХ МАТЕРИАЛОВ И ИЗДЕЛИЙ
25 ЛЕТ

Подготовка специалистов в области производства строительных материалов и изделий в Оренбургском государственном университете ведется с 1970 года. Этот период ознаменован бурным ростом строительной индустрии в Оренбурге и области.

Первый выпуск инженеров по специальности 290600 (ранее 1207) "Производство строительных материалов, изделий и конструкций" осуществлен в 1975 году, всего подготовлено уже более 900 инженеров-строителей-технологов. В 1976 году приказом ректора №71 от 13 мая в составе строительного факультета создается кафедра "Проектирование и производство строительных конструкций" (ППСК) во главе с первым заведующим профессором В.Т Прожогой.

С 1980 заведующим кафедры избран доцент Турчанинов В.И. В 1983 году из состава кафедры выделилась кафедра "Строительные конструкции" , а кафедра ППСК была переименована в 1986 году и стала называться ТеСМИ – "Технология строительных материалов и изделий".С 1987г. до настоящего времени заведующей кафедрой является доцент Рубцова В.Н.

Сейчас на кафедре работают доценты Турчанинов В.И., Гурьева В.А., Кравцов А.И., Макаева А.А., Солдатенко Л.В., старшие преподаватели Редько Л.Т. и Шевцова Т.И., зав. лабораторией Митаревская Т.И., учебный мастер , инженеры , аспиранты очного обучения.

Основным научным направлением кафедры является исследование сырьевой базы Оренбуржья и попутных продуктов промышленности с целью вовлечения их в производство строительных материалов и изделий. Исследования проводятся по следующим направлениям: пено- и газобетоны; шлаковые и зольные вяжущие ; сухие строительные смеси; отделочная и стеновая керамика; тяжелые бетоны и утилизация железобетонных изделий; серобетоны.

Результаты исследований подтверждены авторскими свидетельствами, публикациями в журналах, докладами на российских, международных конференциях и внедрены в производство. К участию в научной работе активно привлекаются студенты, которые традиционно занимают призовые места на региональных конференциях, выставках, олимпиадах, конкурсах.

Многие выпускники кафедры работают на предприятиях стройиндустрии города и области в том числе и на руководящих должностях, что служит показателем хорошей подготовки и востребованности наших специалистов.

Кафедра поздравляет своих выпускников с юбилеем и благодарит за достойное представление в науке и промышленности страны.

Abstracts

A.S. Gayazov DEMOCRATIC VALUES, PRINCIPLES AND UPBRINGING OF CITIZEN
In the article there are represented the main principles of educational process. The personality is represented as the element that set up a system in history of education.

A.D. Potemkin PROFESSIONAL INTEREST AS A PEDAGOGICAL PROBLEM
This article dwels upon the influence of students' innovative activities on professional interest development. Professional interest acts as a factor of personal features development that affects the perfection of higher education quality.

T.V. Bendas GENDER AND CULTURAL DIFFERENCIES IN THE ESTIMATE OF THE STUDENT LEADERS AND THE SOCIAL STUDIES INSTRUCTORS PROGRESS
The problem of the estimate of the student leaders and the social studies instructors" activity is considered in this article. Results of the scientific researches are compared with the author"s ones. The differencies between men and women, the russian and the Kazakh, are analysed by success, leader"s style and the motivation of activity. From these facts the necessary to create some estimate criterions of the leader"s success and the possibility to use the exceeded results for it.

L.V. Moiseeva THE PEDAGOGICAL ASPECT OF LOW AXEOLOGY
The article is devoted to the pedagogical aspect of low axeology and its influence on the personal features development. The valuable-axeology approach uses as a basis.

A.N. Ksenofontova PEDAGOGICAL PROJECTS EXPERTISE
The article reflects the experience of the specialists' activity in the sphere of expertise analysis. Expertise organization conditions, the criteria and the methods are explained and analyzed.

S.D. Yakusheva FORMATION OF AESTHETIC CULTURE OF COLLEGE STUDENTS
In the article there are represented the stages of forting aesthetic culture of college students. Each stage reveals the aesthetic direction of the person.

T.P. Krasnova ORIENTATION FORMING OF THE PUPILS OF SENIOR FORMS TO THE RUSSIAN CULTURE VALUES
The article depicts the essence of orientation process of the pupils of senior forms to the Russian culture values, performed during creative activities.

N.E. Bannowa THE MARKET IS UNIVERSAL PRINCIPLE OF SELF-ORGANIZATION IN EVOLUTION OF COMPLEX SYSTEMS
In the article author is proving the hypothesis about universality market principle of self-organization in evolution of social system in context of critical analysis of conceptions about provisory nature of market.

A.R. Abdrashitova ORENBURG CHURCH MAGOMETANIC ASSEMBLY AS MUSLIM RULING BODY
The article is devoted to the evolutionary research in Povolzhea and Ural. The description of the stages of historical development and peculiarities of the State Islamic relations are given in the article.

Y.T. Dolin ABOUT THE GRAMMATICAL STRUCTURE OF ONE-MEMBER SENTENCES IN THE RUSSIAN LANGUAGE
The article deals with the arguments advanced by those linguists who try to introduce the notion of the syntactical zero in the theory of one-member sentence and as a result to quality all one-member sentences in the Russian language as two-member syntactical structures. The author gives arguments to prove his idea about different types of one-member sentences and about syntactical opposition: two-member sentence / one-member sentence.

E.Z. Genisher LISTENING COMPREHENSION FOR FOREIGN LANGUAGE TEACHING
This article is devoted to the problem of listening comprehension. It touches upon the significance of listening comprehension, systematic character of teaching students and a complex of exercises. The author singles out the necessity of forming listening comprehension skills without which a foreign language communication is hardly possible.

T.V. Minakova OVERCOMING OF DIFFICULTIES IN A FOREIGN LANGUAGE LEARNING AS A REQUIREMENT OF STUDENTS' COGNITIVE INDEPENDENCE DEVELOPMENT
The analysis of the difficulties encountered by students and ways of overcoming them are viewed as a requirement of students cognitive independence development in a foreign language learning at the university.
The author's classification of difficulties is presented, the reasons of their emergence and ways of getting through are analysed.

V.P. Erunov , I.I. Morkovin A QUESTION OF THE OPTIMIZATION OF THE EXPENDITURES OF TEACHERS TEACH-TIME IN TRAINING SPECIALISTS
The methodology of distribution and calculation of teach-work in cirriculum is considered in article. A dependence of the valume of teach-work had to one student from number of students in group, number of groups and floods is adduced. The dependencies of teach-work had to one student from value of normative indexes and the recommendations for choosing these indexes that regulate correlation of the value of class and home work of students in different kinds of lessons are considered.

V.N. Kanukov INNOVATION IN THE ADAPTATION OF THE SERIAL EQUIPMENT FOR THE OPERATING THEATRE IN MICROSURGERY
In this article the author gives the results of the doctors and engineer"s researches, nhich introduced some suggestions about the adaptation of the serial equipment for the operating theatre to the new technological conditions. They permited to achieve higher economic and proffecional result in exploiting the equipment and carrying out medical treatment.

O.V. Chekmaryova EVALUATING MOTOR TRANSPORT SHARE IN AIR POLLUTION WITHIN THE CITY OF ORENBURG
Ecological problems caused by motor transport have become especially urgent in Russia for the past ten years. In 1998 the automobile part of Russia accounted for 23.7 mln vehicles including 18.8 mln cars, 4.26 mln lorries and 627000 buses with growth rates of 5.3% - in 1996, 9.2% - in 1997, 5.2% - in 1998. Ecological problems proved to be especially urgent in large industrial centres. Vehicles run in the country do not meet modern European toxicological norms and eject much more noxious substances than their foreign analogues.

A.S. Pavlov ECOLOGICAL INDICATORY OF BORING MACHINES RUNNING
Pneumatic means of spurs and holes of small diameters are characterized by great noise and vibration. The sgueexed exhaust is the main noise generator. The oil spray occurs when air exhausts and it is this phenomenon that causes the air pollution.

M.G. Kucherenko, T.M. Chmereva EXCITED OXYGEN MOLECULES DESORBTION INDUCED BY VIBRATION TRANSITION FROM SURFACE MONOLAYER
The connection between oxygen molecules desorbtion from the surfactant monolayer to the gas phase and the reaction kinetics $^1\Delta_g$ (O_2) + immobilized surface centers → products is discovered. The desorbtion probability calculation is derived for the diatomic molecule when the process induced by a vibration transition. The pair distribution function taken into account a loss of O_2 - molecules is built for particles-reagents in the surfactant film.

V.A. Pomazkin ABOUT NON-SPECIFIC INFLUENCES OF THE PHYSICAL FACTORS TO THE BIO AND TECHNOSPHERES
The aspects of a non-specific influence of physical factors to the bio and technospheres's objects are discusses in this article. The author suggests the kuosimolicular-cinetic and buos: thermody namical approaches being studed and used NFF. The author gives the examples of his successful using of KMC and KTD reaches for studying physical, biological and other systems. The ways of using the phenomenon are offered to be studied; the nature of them is unknown.

D.I. Pastukhov, E.D. Pastukhova DOING A SUM Σ^a FOR THE EQUATION $U_{xx} - U_{yy} + \frac{2}{x+\gamma} U_x = 0$
The article deal nith doing a sum Σ^a for the equation of the second order derivatives nhen the coefficient is particular. This equation being an operating one for U_x doing particular. This equation being an operating one for doing a sum nith a parallax allows to understand rts structure. Doing a sum Σ^a nith a parallax is determined to exist and to be the only one under indicated conditions.

A.N. Polyakov THE USE OF PRISMATIC FINAL ELEMENTS IN THE THERMAL MODELING OF MACHINE-TOOLS
In this article the author gives the final-elemental matrixes of heat conduction, heat capacity and a heat loading vector for 5-and 6-sided prismatic final etaments. Tho ways for building a hiat model of a machine-tool are discussed: a numeral integration of a equation of unpermanent heat conduction and a modal approach according to the result of researches the author formulates the recommendations about improving the heat modeling of the machines-tools.

I.M. Kiyanov OPTIMUM GEOMETRY PARAMETERS IN CONSTRUCTION MECHANICS SYSTEMS WITH CONSTANT FORCES IN ADDITIONAL CONNECTIONS AND NON-LINEAR GEOMETRY
The article uses the energy method to prove that construction mechanics systems with constant forces in additional connections have optimum geometrical parameters corresponding to the maximum total additional connection forces' work and depending neither on the load nor on the pretension degree.

V.A. Pomazkin, A.A. Makaeva THE MAGNETIC - ACTIVATED WATER IN THE BUILDING TECHNOLOGIES
The question about using. The magnetic-activated water for hardening the concrete mixtures is discussed in this article. The authors open the reasons of a low industrial need for these high-effective technologies and show the ways, which allow to use the magnetic activation of water for hardening concretes. It allows to approve technical and servicing parameters of wares and economize about 10-15% of cement. The article shows the experiment's results, nhich were carried ont by the authors on more then 150 experimental cubs.

E.A. Kravchenko THE LANGUAGE OF COLOUR IN THE SPACE
The problems of colour and colour space are considered in this article. The problem of colour has a particular importance while using the colour design in the public communication, the everyday life, the surrounding world. The necessary understanding of tail awgnage of thes pace and the colour, a skill to read and use it for expressing your ideas. These problems are touched upon at the chair of architecture and design of the Orenburg State University.

S.B. Kolokolov COMPUTER-AIDED DESIGN OF IRREGULAR PLANE FRAMES FOR BIULDING CONSTRACTIONS
Computer-aided design of irregular plane frames is considered. Construction set of equations for work method may be realized for the frame with arbitrary disposition and the type connection of cross-bars with vertical posts.

V.I. Ryazanov, V.I. Zhadanov, V.N. Tarasov, A.N. Kalinin UNLINEAR SUM FOR THE PANEL - CASING WORKING NITH THE SEGMENTAL VAULT WHICH LEANS ON THE FOUNDATIONS
The article tackles the unlined sum for the panel-casing working nith the segmental vauet which leans on the foundations. This sum is a result of analyses made on the panel-casing models.

A.S. Sizak, V.N. Tarasov COMPUTER SOFTIVARE RELIABILITY AND PROTECTION ESTIMATE
Such questions as computer protection levels classification, software protection estimate from an unsactionized access and rhs reliabrerby determination are boucked upon in the article.

V.A. Korotkov, T.M. Zubkova, D.A. Musienko MIXING THE MATERIALS IN A CYLINDRICAL CANAL
The parameter of a clisplacement's defect may ke used for a definition of the quality of a mixed product in the canal. The cylindrical canals of spinnerets have become of a great importance, that is why the dependence nas given in the article for a definition of the displacement's defect in the canal of the cylindrical spinneret. The diagrammes of the changing in the displacement's defect are given on a radius of the spinnerets canals with different lengthes.

S.I.Pluzhnikova, A.I.Varonbov, A.P.Ivanova, M.F.Vasilyeva, A.D.Pripadchev, Zh.K.Usenbaeva TECHNOLOGICAL DESCRIPTION OF THE PROCESS OF POURING INGREDIENTS MOVING IN TARO VIBROMIXER
On the basis of parametrical syntheses elements one considered the approach to forming the mood of depiction process of pouring ingredients moving in taro vibromixers. The complex of parameters based on the technological depiction of the process and its interconnections revealed is analyzed.

A.M.Pitshuchin, A.V.Shalkin THE COMPLEX MANAGEMENT SYSTEMS CHARACTERIZED BY THE HIERARCHY IN ONE DIRECTION AND BY THE MULTISTRUCTURE IN ANOTHER ARE DEFINED AS MATRIX ONES
In the article such systems are classified, multistrutural system of parallel action are thoroughly considered and the problem of optimal approach is set and solved.

N.I. Zhezhera THE PRESSURE OF WORKING LIQUID IN THE SPLITS WITH THE CURVED WALLS OF THE REQULATING VALVES OF AUTOMATIC AND CONTROL SYSTEMS
The result of equations are given for measuring the pressure in the splits with a moving reciprocating wall of the regulating valves of automatic and control sytems. The author gives the analysis about influence of concave and convexity of walls the distribution of pressure both from the wall and pressure"s modification.