# Summary

### ENGINEERING STAFF DEVELOPMENT IN RESEARCH UNIVERSITY: SYNERGY OF TRADITIONS AND INNOVATIONS

V.G. Ivanov, S.V. Barabanova,
M.F. Galikhanov, L.T. Miftakhutdinova
Kazan National Research Technological University

The paper deals with innovative processes in additional professional education for engineers. These processes are based on the modern state educational policy, new educational technologies, and multidisciplinary approach. The experience of KNRTU in designing continuing professional development programs in cooperation with business partners is suggested as a positive model.

### GLOBAL INTERDISCIPLINARY TEAMS IN ENGINEERING EDUCATION

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Multiple disciplines approach, which includes global enhanced interdisciplinarity, has been discussed in the engineering education context from the early 21st Century. There is very little disagreement about its importance for the engineers, the key question has been how to implement theory into practice both in the curriculum and in the actual learning enhancement phase. Both Problem-based learning and CDIO framework are constructivist learning approaches that emphasize these issues. In this paper, we discuss how to mitigate the social distance in these global education teams and therefore how it becomes the primary management challenge for the global interdisciplinary team leader. The management of the social distance is then paramount to identify and successfully improve the social distance. This approach reflects several components, namely, the structure, the process, the language, the identity, and the technology used.

A successful interdisciplinary and multidisciplinary teacher/learning depends on the general team dynamics. Several strategies to enhance interdisciplinary teams in engineering education are presented.

### ENGINEERS FOR INTERDISCIPLINARY TEAMS AND PROJECTS: MANAGEMENT OF TRAINING PROCESS

Yu.P. Pokholkov
National Research Tomsk Polytechnic University
Association for Engineering Education of Russia

The paper deals with the management issues of training specialists in the field of engineering and technology ready to work in interdisciplinary teams and projects. Interdisciplinarity in the engineering education is considered as a basis for critically new competitive engineering solutions. The indicators proving the presence of interdisciplinary management system at university are outlined. Based on the elaborated principles of interdisciplinary activities a set of required tools and elements to manage interdisciplinary training of engineers is presented.

### INTERDISCIPLINARY APPROACH IN ENGINEERING EDUCATION IN TERMS OF INTERNATIONAL FRAMEWORKS AND METHODOLOGY

V.M. Kutuzov, V.N. Pavlov,
D.V. Puzankov, S.O. Shaposhnikov
Saint Petersburg Electrotechnical University "LETI"

The article analyzes the standards and guidelines of international educational frameworks and initiatives in terms of interdisciplinarity of degree programmes in Engineering and Technology.

### POSSIBLE ALTERNATIVE OF INTERDISCIPLINARY LEARNING IN RUSSIAN ENGINEERING TRAINING SYSTEM

I.N. Konyukhov
Municipal state funded institution of additional education "Parus", Ufa city

At present the Russian system of supplementary education for schoolchildren does not imply interdisciplinary learning. One of the alternatives of such learning is to develop supplementary education programs for school age children that would involve diverse scientific and activity areas. Another challenge is to train instructors who would be able to implement such programs.

### THE ENGAGEMENT OF EDUCATIONAL PROCESS INTO THE PRACTICAL ACTIVITIES AS A MAIN ROUTE FOR DEVELOPMENT OF MODERN ENGINEERING EDUCATION

V.V. Shalay, A.V. Kosykh,
A.V. Myshlyavtsev, L.O. Shtripling
Omsk State Technical University

The best practices and perspectives of practice-oriented education development are disclosed in the article.

### INTERDISCIPLINARY APPROACH IN INTERACTIVE SELF-LEARNING

R.Z. Bogoudinova, I.M. Gorordetskaya
Kazan National Research Technological University

The paper considers theoretical and methodological bases for interdisciplinary approach to interactive self-learning and principles of academic process organization via interactive learning techniques.

### INTERDISCIPLINARY INTERACTION IN ISO 9001-2015 STANDARDS

M.V. Akulenok
National Research University of Electronic Technology MIET

The article is devoted to the analysis of quality management system of interdisciplinary interaction and trends in university QMS improvement in accordance with the requirements of the new implemented edition of International ISO 9000 standards, in particular, the requirement for risk management.

### TECHNOLOGY IN THE LEARNING DESIGN BY UNIVERSITY TEACHERS IN THE RUSSIAN CONTEXT

R. Martínez-López, M. Reznichenko
Samara National Research University (Russia)
C. Yot, C. Marcelo
University of Seville (Spain)

This research describes the type of the learning activities technology used by the teachers at the Russian Universities. Results offer evidence to the strong influence of confidence as a predictor of teachers' technology use and transfer. An instrument is adapted in Russian context for future research.

### COMPUTER APPLICATIONS IN ENGINEERING EDUCATION: NEW OPPORTUNITIES IN TRAINING ENGINEERS FOR CREATIVE ECONOMYY

I.V. Makarova, R.G. Khabibullin
Kazan Federal University
A.M. Ushenin, S.A. Mikheeva,
V.S. Karabtsev
PTC "KAMAZ"

The article addresses the issue of ensuring qualitative training of specialists for mechanical engineering and road-and-transportation complex. To increase the competitiveness of the personnel, a new education pattern is proposed. It has been revealed that introduction of system approach in engineering training makes it possible to handle the prob-

lems in training engineers able to design, manufacture, and maintain complex machines and equipment.

### A SYSTEM OF INTEGRATED FIELD-ORIENTED TRAINING OF SPECIALISTS BASED ON INNOVATIVE RESEARCH AND DEVELOPMENTS

I.R. Kuznetsov, V.N. Malyshev, M.E. Shevchenko
Saint Petersburg Electrotechnical University "LETI"
O.G. Petkau, A.Yu. Tarakanov
Scientific Research Institute Vektor

The article presents innovative university strategy for solving scientific and practical problems and training of field-oriented specialists for science and industry focused on the development of an advanced interdisciplinary training of specialists and modernization of educational environment in the field of advanced radioelectronic measures, as well as on an efficient commercialization of scientific research and developments.

### SYNERGY OF EDUCATIONAL CLUSTER DEVELOPMENT IN THE FRAMEWORK OF UNIVERSITY SUPPLEMENTARY PROFESSIONAL EDUCATION

A.G. Zakharova, K.O. Ponomareva
National Research Tomsk Polytechnic University

The article deals with advantages of cluster additional vocational education. Synergetic effect is considered in the development of program cluster in the framework of additional vocational education in a university. A strategy in program cluster development is suggested using scenario development based on "neosystem approach".

### FOSTERING PROFESSIONAL COMPETENCES WITHIN INTEGRATED ENGINEERING EDUCATION PROGRAMS

V.M. Kutuzov, N.V. Lysenko
Saint Petersburg Electrotechnical University "LETI"

The article discloses special aspects of specialists' cycle education. The requirements of employers towards HEI graduates' competences are presented. Types of Centers for Competences executing integrated educational programs are described.

### INTERDISCIPLINARITY IN EDUCATION: EDUCATION PROGRAMMME DESIGN

L.V. Redin, V.G. Ivanov
Kazan National Research Technological University

The significance of interdisciplinarity in education under the condition of sharp growth in patent activity in developed countries and the increased role of intellectual property items in modern economy are shown. Inderdisciplinarity is based on the network relations among the studied disciplines. Goal, content, and trends in interdisciplinarity are presented in the system of re-training, staff development, and Bachelor's training.

### DEVELOPMENT OF SPECIALISTS' TRAINING ENVIRONMENT FOR INTERDISCIPLINARY RESEARCH PROJECTS USING RASA CENTER IN TOMSK AS AN EXAMPLE

Yu.Sh. Sirazitdinova, O.O. Bugaeva
National Research Tomsk Polytechnic University

At present, the Russian system of higher professional education stands at a pivotal moment. Challenges of globalization and international competition for talented specialists pose new problems for the Russian universities. The article considers experience of Tomsk Polytechnic University in development of environment for training students in interdisciplinary research projects in collaboration with leading scientists and research-educational centers.





### ENGINEERING TEACHER TRAINING ON THE BASIS OF INTERDISCIPLINARY APPROACH

V.V. Kondrat'ev
Kazan National Research Technological University

The paper deals with one of the topical issues of today's engineering education, i.e. integrated interdisciplinary knowledge acquired by an engineer. Considering engineering teacher training based on interdisciplinary approach, the authors analyze such notions as "interdisciplinarity" and "interdisciplinary approach". These notions are connected with changes in the system of university teacher training and continuous professional development, which are specified in the paper. The most important methodological principle to ensure the efficiency of teacher training system has been identified – the education system should be sensitive to the changes in science, technics and technologies, which, in turn, results in changes in engineer's and teacher's professional activities.

### EDUCATIONAL STANDARDS AS A BASIS FOR INTERDISCIPLINARY INTEGRATIVE MODULE

G.V. Bukalova
Orel State University n.a. I.S. Turgenev

The author proves axiological function of the integrative approach which is implemented for the new educational standards to be applied for engineering education. The conditions to enhance discipline integration process are determined in terms of systemology fundamentals. The author describes the stages of the integrative module design. The experience in the design of interdisciplinary integrative educational module (automotive transport) is shared and discussed.

### TEAM WORK FOR COMPREHENSIVE ENGINEERINGY

O.N. Timofeev
Kazan National Research Technological University

The paper considers the ways to ensure education quality. The principles of creative self-development are described to demonstrate that the psychological function of education, i.e. goal-oriented activity and intentionality, plays an important role in transition from development to self-development. The personality self-development is controlled by the mechanism of emotion regulation and determined by the level of emotional intelligence. The author analyses the assessment criteria for the quality of engineering education provided in higher education institutions in the signatory countries of Washington Accord. The major requirement for engineering student training, which ensures the high quality of education, is to develop the abilities and skills of comprehensive engineering. The authors suggest that leadership skills are the key engineer's competencies to be developed in Russia. The interconnection between comprehensive engineering and leadership skills has been revealed. Also, it has been established that the four abilities and relevant skills included in emotional intelligence (EQ) are essential professional qualities of the leader. The levels of PDLS development have been identified.

### PARTICULARITIES OF SELF-STUDY WITHIN "ELECTRONICS AND NANO-ELECTRONICS" EDUCATION PROGRAMMES

M.V. Akulenok, A.V. Zheleznyakova
National Research University of Electronic Technology MIET

The paper considers the ways to organize student self study within Electronics and Nano-Electronics education programs. The case-study is analyzed in terms of process approach to education and program interdisciplinarity.

## MODERN APPROACHES TO THE ASSESSMENT OF SOFT SKILLS AND PROFESSIONAL COMPETENCES: THE INTERDISCIPLINARY ASPECT

G.I. Ibragimov
Kazan National Research Technological University
E.M. Ibragimova
Kazan Federal University

This article discloses three approaches to understanding the structure of competences as an object of assessment. The key problems faced by teaching staff, when assessing competences, are underlined. The role and place of various means for diagnostics and assessment of competences are presented. The key development trends of different form, methods and means for competences assessment are determined in line with the interdisciplinary approach.

## ADAPTATION OF BACHELOR AND MASTER DEGREE PROGRAMS TO MEET MODERN STANDARDS (INFORMATION SYSTEMS AND TECHNOLOGIES)

V.A. Dubenetsky, A.G. Kuznetsov, V.V. Tsekhanovsky
Saint Petersburg Electrotechnical University "LETI"

The paper considers different approaches to the use of models, which are applied in the sphere of information technologies and specified in modern standards and guidelines, for the development of bachelor and master degree programs, the specialty of Information Systems and Technologies. The authors give examples of educational process management based on Unified Modeling Language (UML).

## DEVELOPMENT OF GLOBAL PROFESSION-RELATED FOREIGN LANGUAGE COMPETENCY ON THE BASIS OF INTEGRATIVE APPROACH AS AN IMPORTANT ASPECT IN INTERDISCIPLINARY TEAM WORK TRAINING FOR PETROLEUM WORKERS

T.A. Starshinova, V.G. Ivanov, O.A. Larionova
Kazan National Research Technological University

Interdisciplinary tasks of petroleum industry boost intensive international collaboration and intercultural cooperation. This necessitates development of global profession-related foreign language competency required for both engineers and middle-ranking staff since it is a crucial factor in interdisciplinary and international team work training for the next generation of petroleum workers. The authors of the present paper suggest educational process design based on integrative approach and relevant principles.

## ECONOMIC, SCIENTIFIC AND TECHNICAL FACTORS IN QUALITY MANAGEMENT

V.P. Semenov
Saint Petersburg Electrotechnical University "LETI"

The article examines interaction of economic, scientific and technical factors in quality management training including not only development of new approaches, but also design of integrated systems based on the principles of total quality management. In order to estimate efficiency of interdisciplinary projects, multi-criteria and multi-model approaches are considered essential.





## INTERDISCIPLINARITY IN PRACTICE-ORIENTED TRAINING OF BACHELORS IN LINE WITH THE CDIO INITIATIVE

A.M. Boronakhin, A.A. Minina, R.V. Shalymov
Saint Petersburg Electrotechnical University "LETI"

In the context of modern constantly changing realm the successfulness of technical HEIs' graduates is determined not only by their current knowledge, but also by their ability to adapt to these changes. This article is devoted to the efforts of the Saint Petersburg Electrotechnical University "LETI" and namely the Faculty of Information Measurement and Biotechnical Systems (FIMBS) on implementing the CDIO Initiative approaches for development of the required students' competences.

## PROMOTION OF COOPERATION IN RESEARCH AND DEVELOPMENT BETWEEN UNIVERSITIES AND INDUSTRY IN THE CZECH REPUBLIC

L. Musílek
Czech Technical University in Prague

Universities must react to the situation in industry, increasingly oriented towards sophisticated technologies. Grant applications submitted together with industrial companies, direct support of applied research by industry, integrating students into applied research, project-oriented education, all these ways help to bring universities closer to the needs of industry. Supporting collaboration between universities and industry in the Czech Republic is briefly reviewed in the paper.

## THE VITAL COLLABORATION OF INDUSTRY AND ACADEMIA FOR THE CREATION OF INTERDISCIPLINARY REAL WORLD STUDENT PROJECTS

P.A. Sanger
Purdue University, USA

The global economy in which engineers live is in constant change and evolution. The requirements for engineers today includes not only solid technical knowledge but also require they know how to apply that knowledge to real world problems. For these reasons, engineering education must reach beyond the academic world and draw in industry. The real world experiences that engineering students must have to be effective come from industry and not the more research oriented university environment. This paper reviews what avenues are available to enrich and grow the university/industry relationship and in particular, this paper describes an approach successfully implemented in the U.S. of industry sponsored and driven, final year, interdisciplinary, year long, capstone projects.

## PROFESSIONAL ACTIVITIES IN VIRTUAL LEARNING ENVIRONMENT: INTERDISCIPLINARY TRAINING CASE STUDY

V.S. Sheinbaum, P.V. Pyatibratov, M.S. Khokhlova, D.V. Grishin, A.A. Pel'menyeva
Gubkin Russian State University of Oil and Gas (National Research University)

The technology of performing professional activities in virtual learning environment has been developed and is being successfully implemented at Gubkin Russian State University of Oil and Gas. The education is provided in the form of trainings for interdisciplinary groups of students, which simulate real world project and production activities. The paper describes one of the training case studies.

## POWERFUL INTERDISCIPLINARY ADULT EDUCATION FOR INDUSTRY: "COMBINING ANDRAGOGY AND PROJECT BASED LEARNING"

I.V. Pavlova, V.G. Ivanov
Kazan National Research Technological University
P.A. Sanger
Purdue University, USA

In this rapidly changing world of technology and economic conditions, it is essential that practicing professionals continue

to grow in their skills and knowledge in order to stay competitive and relevant in the industrial workplace. This paper describes an approach to adult education that combines the best techniques of andragogy with project-based learning taking advantage of the experience, maturity and wisdom of the adult learner. Well-known project based learning (PBL) exercises such as the Skyscraper Project [1] and the "Deep Dive" video [2] have been adapted and expanded to include andragogic approaches and capitalize on the knowledge and depth of maturity in these mature learners.

### INTERDISCIPLINARY PROJECT MANAGEMENT IN NETWORKING CO-OPERATION: TRAINING STUDENTS OF BACHELOR'S DEGREE PROGRAMME (MACHINERY ENGINEERING)

M.A. Loschilova, M.S. Vaichuk
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The paper reveals the necessity for new open system of professional education to eliminate the gap between labor market demand and education services supplied. The authors suggest the ways for networking cooperation in training students of bachelor's degree in machinery engineering programme, which is based on the principles of openness and continuation.

### ENGINEERING TEACHER TRAINING ON THE BASIS OF INTERDISCIPLINARY APPROACH

V.V. Kondrat'ev, V.G. Ivanov
Kazan National Research Technological University

The paper deals with one of the topical issues of today's engineering education, i.e. integrated interdisciplinary knowledge acquired by an engineer. Considering teachers of engineering training based on interdisciplinary approach, the authors analyze such notions as "interdisciplinarity" and "interdisciplinary approach". These notions are connected with changes in the system of university teachers training and continuing professional development, which are specified in the paper. The most important methodological principle to ensure the efficiency of teachers training system has been identified – the education system should be sensitive to the changes in science, technics and technologies, which, in turn, result in changes in engineer's and teacher's professional activities.

### IMPROVED TEACHING OF MATHEMATICS AS AN IMPORTANT COMPONENT OF INTERDISCIPLINARY ENGINEERING EDUCATION

V.I. Shvetsov
Lobachevsky State University of Nizhni Novgorod
S. Sosnovsky
German Center for Artificial Intelligence (DFKI)

The paper considers the outcomes of the project "Modern Educational Technologies for Math Curricula in Engineering Education of Russia" (Tempus), implemented by the consortium of European and Russian higher educations institutions. Having analyzed the national and international experience in teaching mathematics, the authors suggest a new method to enhance math teaching thus improving the quality of engineering education. The method implies using the intelligent system of e-learning.

### INTERDISCIPLINARY-BASED ADDITIONAL PROFESSIONAL EDUCATION FOR STUDENTS OF TECHNOLOGICAL UNIVERSITY

F.T. Shageeva, V.G. Ivanov
Kazan National Research Technological University

The article describes the project of National Research University. It has been revealed that additional professional education based on the interdisciplinary approach enhances interdisciplinary competency of students, thus, increasing their competitiveness. Such a training requires not only application of universal education technologies, but also search for numerous alternative solutions.

### IMPROVING YOUNG EMPLOYEES TRAINING AT ENGINEERING, REPAIR AND INSTALLATION ENTERPRISES

R.G. Abdeev, E.R. Abdeev,
E.V. Bakieva, M.A. Lobanov
Bashkir State University

The article considers the implementation of network as a form of training in the higher school. It highlights the necessity of implementing this form of training students for engineering enterprises involved in repair and installation of equipment. The authors offer a model of interaction between engineering enterprises in the framework of network industry educational programs.

### CROSS-CULTURAL INTERDISCIPLINARY STUDY OF LEARNING MOTIVATION OF ENGINEERING STUDENTS IN RUSSIA AND THE USA

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Purdue University, USA
I.M. Gorodetskaya, V.G. Ivanov
Kazan National Research Technological University

The paper addresses cross-cultural analysis of the learning motivation of Russian and US students majoring in engineering. The study is carried out with the use of psychological and pedagogical methodology. Empiric analysis has not revealed significant differences between the Russian and US groups, however some peculiarities in the hierarchy and structure of motivational sphere were found and should be taken into consideration in organizing international mobility programs.

SUMMARY

### INTERDISCIPLINARY FCA- AND TRIZ-BASED PROJECTS: EXPERIENCE AND PROSPECTS IN TRAINING TEACHERS

V.V. Likholetov, B.V. Shmakov
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(National Research University)

The paper analyzes the ways to improve the quality of engineering training in Russia. It proves the importance of using Russian experience in problem-solving and project-based learning, as well as, it necessitates introduction of training course for teachers to be involved in interdisciplinary FCA- and TRIZ-based projects.

### STUDENT SATISFACTION WITH EDUCATION QUALITY AS A SYNERGY FACTOR

R.Z. Bogoudinova, V.G. Ivanov,
D.N. Mingazova, O.Yu. Khatsrinova
Kazan National Research Technological University

The article provides a method to evaluate the quality of educational process. The authors suggest evaluating the quality of education in terms of consumer satisfaction, taking into consideration the weight-of- coefficient for each quality indicator. The analysis has revealed the dependence between positive tendencies in classroom management and satisfaction level of students.

### PROFESSIONAL IDENTITY AS A FACTOR OF PROFESSIONAL MOBILITY

M.G. Reznichenko, V.I. Stychkova
Samara National Research University

Professional mobility is an important factor of engineer's career development. The authors emphasize that developed status of professional identity is a precondition for the professional mobility. The article provides the results of tests that revealed a negative trend of professional identity development. Contextual education approach is proposed as a solution to the existing problem.





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## SYNERGY OF INTERDISCIPLINARY TEACHING IN HUMANITIES

L.M. Bogatova
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The paper deals with synergy effect resulted from interdisciplinary teaching of humanities. The author identifies homogeneous and heterogeneous synergies and pays particular attention to interdisciplinary aspect of the humanities. The analysis of interaction between moral and legal components of the education process in high school reveals that the synergy effect has a profound social and cultural context connected with the development of personality of a certain type.

## MORAL EDUCATION OF STUDENTS IN THE FRAMEWORK OF HUMANITIES PROVIDED BY HIGH ENGINEERING SCHOOL

E.N. Tarasova
Kazan National Research Technological University

The paper discusses the results of the study devoted to moral education of students in the framework of humanities provided by high engineering school. The aim and content of humanities in terms of moral education has been identified. The issues specific to interdisciplinary relationships in the framework of humanities provided for engineering students are studied. Educational potential of humanities for development of student moral qualities is defined. The paper also provides a brief review of the theoretical model of moral education of engineering students, which incorporate teaching of humanities in higher technical school.

## EFFECTS OF INTERDISCIPLINARY EDUCATION TO THE COMPETITIVENESS OF ENGINEERS

A.V. Szarka
University of Debrecen

Interdisciplinarity is discussed as one of the effective tools increasing young generation's enthusiasm for engineering; increasing motivation of engineering students; increasing collaboration efficiency between professionals of different fields. Paper includes history and new systems of interdisciplinarity in engineering education, dual education system preparing new graduates for real industrial environment of inter- and multidisciplinary activities.

## AN INTERDISCIPLINARY APPROACH FOR ACQUIRING COMPETENCE FOR SOCIAL RESPONSIBILITY

J.J. Perez
Universitat Politecnica de Catalunya

Graduate students should exhibit hard competences – specific knowledge – in their field of study and, also soft or transversal competences that provide complementary abilities to use the former in any specific environment. Social responsibility is among the list of transversal competences. This competence provides graduates a guidance to develop their activities as professionals within a framework of sustainable development, in such a way that projects include considerations concerning environmental, social and economic dimensions. In the present work we revise the concept of social responsibility and propose a quality assurance procedure to assess and improve the level of competence achieved by graduates.





## DEVELOPMENT OF ECO-FRIENDLY TECHNOLOGY OF COLLOIDAL DEPOSIT UTILIZATION IN PULP AND PAPER INDUSTRY

A.V. Bogdanov, A.S. Shatrova, O.L. Kachor
Irkutsk National Research Technical University

Development of eco-friendly technology for intensive processing of sludge-lignin deposits, which is based on the best available utilization methods, is one of the urgent task to be addressed. The proposed technology to recover deposits in the storage pits of Baikalsk Pulp and Paper Mill on the basis of natural freezing allows reducing the costs and enhancing environmental safety of the project.

## FORMATION OF PROFESSIONAL COMPETENCES FOR FUTURE ENVIRONMENTAL ENGINEERS BASED ON THE INTERDISCIPLINARY APPROACH

A.E. Irismetov
Kazan National Research Technological University

The article discloses new requirements towards future environmental engineers, who will be conducting environmental protection under new socio-economic conditions. The definition of professional competency of an environmental engineer is determined.

## PROJECT MANAGERS: WHAT SHOULD THEY BE LIKE?

A.A. Dul'zon
National Research Tomsk Polytechnic University

The article discusses working conditions and basic duties of project managers in comparison with those of line managers. It provides the main duties of project managers and basic requirements for their professional, communicative and personal characteristics and competencies. It also discusses the issue of project manager salary.

## DEPENDENCE OF INTERDISCIPLINARY PROJECT MANAGEMENT ON DIFFERENCE BETWEEN CORPORATE CULTURES

P.A. Podrezova, V.M. Kizeev
National Research Tomsk Polytechnic University

The article discusses the influence of corporate culture on a large interdisciplinary project organization. In particular, in the case where large organizations involved in a project, have a vertical linear structure and unique corporate culture. The article describes the project «The Opening of the research and educational center «Modern manufacturing technologies» as an example.

## LEADERSHIP AND CORPORATE CULTURE, THEIR IMPACT ON COMPANY GROWTH

M.S. Vaichuk
National Research Tomsk Polytechnic University

The term "values" is no longer used only in a political context. The intangible factors become the key of stability and a driver of development. In this regard, the article provides the correlation of corporate culture development and the presence of a strong leader in a company with dynamics of companies' profitability ratios.