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**INTERNATIONAL EUROASIA CONGRESS ON  
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with the paper entitled

**INFLUENCE OF ROTATIONAL SPEED ON THERMAL BEHAVIOR AND TENSILE  
STRENGTH OF FRICTION WELDED AISI 316L AND COPPER JOINTS**

**Prof. Dr. Gülzar İBRAHİMOVA**

*(Vice Rector of Baku Eurasian University)*  
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**ABSTRACT BOOK**



# ABSTRACT BOOK

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<b>AUTHORS</b>	<b>AFFILIATION</b>	<b>TOPIC TITLE</b>
Assoc. Prof. Dr. Daniyarova AE	<i>Karaganda State Technical University (Kazakhstan)</i>	DEPOSIT BY PROFESSOR NI KARASEVA IN AUTOMATION AND CONTROL HEAT SUPPLY PROCESSES AT ENTERPRISES IN KAZAKHSTAN AND THE CIS
Prof. Candidate of T.S., P.A. Tanzharykov Sh.D. Taskara	<i>Korkyt Ata University (Kazakhstan)</i>	METHODOLOGY OF IMPROVING THE LIFTING DEVICE OF DRILLING INSTRUMENTSH
Prof. Candidate of T.S., P.A. Tanzharykov A.Zh.Nasradin	<i>Korkyt Ata University (Kazakhstan)</i>	TECHNOLOGY OF DESALINATION OF PETROLEUM PRODUCTS BY DEEMULSIFIERS
Dr. Fares KHALFALLAH Latifa DJAIDJA Dr. Elhadj RAOUACHE Dr. Youcef AOUABDIA	<i>University of M'sila (Algeria)</i>	INFLUENCE OF ROTATIONAL SPEED ON THERMAL BEHAVIOR AND TENSILE STRENGTH OF FRICTION WELDED AISI 316L AND COPPER JOINTS
Dr. Ydyryshbayeva Moldir	<i>Al-Farabi Kazakh National University (Kazakhstan)</i>	DEVELOPMENT OF BAYESIAN NETWORKS FOR A DECISION SUPPORT SYSTEM DURING THE ANALYSIS OF INTERNAL CYBER THREATS



## CONTENT

CONGRESS ID	I
PROGRAM	II
PHOTO GALLERY	III
CONTENT	IV

Author	Title	No
Adnan GERÇEK Güneş ÇETİN GERGER Serkan BENK Müge Seda ATEŞ	ANALYSIS OF THE FACTORS DETERMINING TAX LITERACY OF TAXPAYERS IN TURKEY	1
Feride BAKAR TÜREGÜN Adnan GERÇEK Emine Rüyam KÜÇÜKSÜLEYMANOĞLU Halil SERBES	MEASUREMENT OF TAX LITERACY SCORE IN TURKEY AND ITS RELATIONSHIP WITH DEMOGRAPHIC VARIABLES	3
Kübra ŞAHİN ÇEKEN	TRACES OF INTER-ARTS IN JAN FABRE "BEECATTER"	5
Yasemin KURTLU	TEACHING STORY ARTS THROUGH LYRICS IN EIGHTH GRADE TURKISH LESSON	7
Dariia Lazareva	PROFESSIONAL TRAINING OF POLICE OFFICERS FOR OBTAINING A PHD IN THE FIELD OF LAW AT THE DNIPROPETROVSK STATE UNIVERSITY OF INTERNAL AFFAIRS	9
Merve TUNA KAYILI Feride Çiğdem KARA	ZERO ENERGY BUILDINGS AND TURKEY	12
Thair Al-Taiee	CLIMATE WARMING IMPACT ON THE FLOOD DISCHARGES TIME IN SOME TIGRIS RIVER TRIBUTARIES IN IRAQ	14
Huseyin AVCI Reza DIDARIAN Aliakbar EBRAHIMI Hamed GHORBANPOOR Hossein HASHEMPOUR Fatma DOĞAN GUZEL	INVESTIGATION OF VIGNO 1-5 CYCLOTIDES SEPARATION FROM VIOLA IGNOBILIS THROUGH MICROFLUIDIC CHIP	15
Farhad Buzo Mikaeel Jivan Qasim Ahmed Berivan Khalid Salih Dr. Sherzad Ibrahim Mustafa Gahin Abdulrahman Tayib	SEROPREVALENCE OF NEWCASTLE DISEASE VIRUS IN BACKYARD CHICKENS IN DUHOK PROVINCE, KURDISTAN REGION OF IRAQ	17
Şefika VEREMCİ Sevil PAMUK CEBECİ	DIAGNOSIS OF THE CORONARY ANGIOGRAPHY PATIENT IN ACCORDANCE WITH THE LIFE MODEL	18
Sevil PAMUK CEBECİ Şefika VEREMCİ	THE ROLE OF THE NURSE IN THE MANAGEMENT OF ANXIETY OF THE CORONARY ANGIOGRAPHY PATIENT	21
Sevil PAMUK CEBECİ Hilal DURMAZ	EXAMPLE OF HOLISTIC APPROACHES IN NURSING: MASSAGE THERAPY	24



**INTERNATIONAL EUROASIA Congress on Scientific Researches and Recent Trends 9**

18-20 February 2022/Antalya – Turkey

Faiz Muhammad Shaikh Fateh Muhammad Marri Jan Muhammad Mri	PERFORMANCE EFFICIENCY OF MCB BANK BEFORE AND AFTER GLOBAL FINANCIAL CRISIS	533
Subhashish Dey	THE E-WASTE MANAGEMENT FOR CONTROLLING THE ENVIRONMENTAL POLLUTION	534
Daniyarova AE	DEPOSIT BY PROFESSOR NI KARASEVA IN AUTOMATION AND CONTROL HEAT SUPPLY PROCESSES AT ENTERPRISES IN KAZAKHSTAN AND THE CIS	535
P.A. Tanzharykov Sh.D. Taskara	METHODOLOGY OF IMPROVING THE LIFTING DEVICE OF DRILLING INSTRUMENTS	537
Fares KHALFALLAH Latifa DJAIDJA Elhadj RAOUACHE Youcef AOUBDIA	INFLUENCE OF ROTATIONAL SPEED ON THERMAL BEHAVIOR AND TENSILE STRENGTH OF FRICTION WELDED AISI 316L AND COPPER JOINTS	539
Ydyryshbayeva Moldir	DEVELOPMENT OF BAYESIAN NETWORKS FOR A DECISION SUPPORT SYSTEM DURING THE ANALYSIS OF INTERNAL CYBER THREATS	540
Sabit Gulzhaynar Sabitkyzy	THE USE OF DIGITAL TECHNOLOGIES IN TEACHING GEOGRAPHY ANNOTATION	541
Aruzhan Yerailyeva	TAX CHALLENGES OF THE DIGITAL ECONOMY IN THE REPUBLIC OF KAZAKHSTAN	543
Gulzira O. ABDULLAYEVA	THE DIGITAL LEARNING ENVIRONMENT OF A MODERN UNIVERSITY: STUDENT OPINION	544
Mukayev Amangeldy Nurlanovich Doskeeva Gulashar Zharmagambetovna	THE DIGITAL LEARNING ENVIRONMENT OF A MODERN UNIVERSITY: STUDENT OPINION	545
Kosherbaev R.N Alipbek A.Z. Kosherbaeva Aziza	UNDERSTANDING NEW EDUCATIONAL MECHANISMS THROUGH HISTORICAL FOUNDATIONS OF THE NETWORK COMMUNITY IN THE HISTORY OF NOMADS AND NOMADIC CIVILIZATION	548
Kosherbaev R.N	LITERARY TEXT: NATIONAL AND CULTURAL DOMINANTS COMPARATIVE LITERATURE	548
Oshanova Oryntay Zhanabayevna	MEDIA SAFETY AND CHILDREN'S RIGHTS IN KAZAKHSTAN	550
Issayeva R. B. Myrzabekova G. T. Saula Suleimonova Kulniyazova G. M.	IMPROVING PEDIATRIC POSTGRADUATE EDUCATION IN CENTRAL ASIA	551
Aidar Mambetkazyev Dina Dzhusubaliyeva Dilyara Woodward	ORGANIZATION OF EDUCATION PROCESS WITH THE USE OF EDTECH IN A POST-PANDEMIC ENVIRONMENT IN HIGHER EDUCATION INSTITUTIONS IN KAZAKHSTAN	552
Kabidenova Zhuldyz Tanabayeva Anar	THE MONEY ISSUE AND THE WOMAN IN THE MODERN KAZAKH SOCIETY	553
Kanapyanova Raushan Khabdulmutalyapovna Abizhanova Asem Shaimerdenovna	HISTORY OF WESTERN - EUROPEAN AND RUSSIAN EMBROIDERY	554



## INTERNATIONAL EUROASIA

Congress on Scientific Researches and Recent Trends 9

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### INFLUENCE OF ROTATIONAL SPEED ON THERMAL BEHAVIOR AND TENSILE STRENGTH OF FRICTION WELDED AISI 316L AND COPPER JOINTS

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#### ABSTRACT

This experimental work aims to study the effect of variations of rotary friction welding parameters on the thermal behavior and mechanical properties of dissimilar joints stainless steel/copper. To achieve this objective, a rotary friction welding process of AISI 316L stainless steel rods with copper rods was carried out, using a milling machine as the friction welding machine, with changing the rotational speed, and measuring the temperature changes of the joints during the welding process. After welding, the joints were subjected to tensile tests to evaluate their mechanical strength. The experimental results showed a strong relationship between the rotational speed and the thermal behavior of the joints, and the strength of the joints is also affected by the changes of the rotational speed.

**Keywords:** Rotary friction welding, Copper, AISI 316L stainless steel, rotational speed, temperature measurement, tensile strength.