



MINISTRY OF
EDUCATION AND
SCIENCE



MONGOLIAN UNIVERSITY OF
SCIENCE AND TECHNOLOGY
SCHOOL OF APPLIED SCIENCES



ICASE 2023

INTERNATIONAL
CONFERENCE ON
APPLIED SCIENCES AND
ENGINEERING 2023
(ICASE 2023)

PROGRAM

Ulaanbaatar
Mongolia

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Tumendemberel B.	Mongolian University of Science and Technology, Mongolia
Ulemj D.	Mongolian University of Science and Technology, Mongolia
Yanhui Yang	Nanjing Tech University, China
Zagazusem Kh.	Mongolian University of Science and Technology, Mongolia

PROGRAM OVERVIEW

June 16th 2023

TIME	WHAT	WHERE	
08:00-09:00	REGISTRATION	Conference Hall (CH), 3rd floor, Main building	Mongolian University of Science and Technology (MUST) 
09:00-10:00	Opening ceremony		
10:00-10:20	Group Photo		
10:20-11:00	Coffee Break		
11:00-11:30 11:30-12:00 12:00-12:30	Plenary section: Prof. Tseren-Onolt Ishdorj Prof. Hee-Joon Kim Prof. Alexander H.W. Schmitt		
12:30-14:00	LUNCH	MG steak	Galleria, Ulaanbaatar
14:00-16:00	Parallel oral presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	CH, 12 th floor 8 – 804 8 – 805 8 – 801	Building block 8, MUST 
16:00-16:30	Coffee Break	12 th floor	
16:30-18:30	Parallel oral presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	CH, 12 th floor 8 – 804 8 – 805 8 – 801	

June 17th 2023

09:00-09:30 09:30-10:00	Plenary section: Prof. Odkhuu Dorj Prof. Balu Gowtham	Conference Hall , 12 th floor	Building block 8, MUST
10:00-10:30	Coffee Break		
10:30-11:00 11:00-11:30	Plenary section: Prof. Gantumur Tsoggerel Dr. Munkhbayar Batmunkh		
11:30-13:00	LUNCH	MG steak	Galleria, Ulaanbaatar
13:00-15:00	Parallel oral presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	CH, 12 th floor 8 – 804 8 – 805 8 – 801	Building block 8, MUST
15:00-16:00	Coffee BREAK and POSTER SECTION	CH, 12 th floor	
16:00-17:30	Parallel oral presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	CH, 12 th floor 8 – 804 8 – 805 8 – 801	
18:00	BANQUET*	MG steak	Galleria, Ulaanbaatar

FIRST DAY OF CONFERENCE**June 16th, Friday****PLENARY SECTION:**

Time	Section chair	Room
11:00-12:30	Prof. Ochirbat Baatar	Conference hall

Time	Presentations
11:00-11:30 PL3001	COMPUTER SCIENCE FOR BIOMEDICAL SCIENCE: BIOCHIP DESIGN AND DRUG REPURPOSING Prof. TSEREN-ONOLT ISHDORJ Department of Computer Science, School of Information and Communication Technology, Mongolian University of Science and Technology, Ulaanbaatar, MONGOLIA
11:30-12:00 PL3002	BUILD UP A RESOURCE-RECYCLING SOCIETY DEVELOPING THE PHOSPHORUS RECOVERY PROCESS FROM SEWAGE SLUDGE ASH AND RELATING TECHNOLOGY Prof. HEE-JOON KIM Department of Environmental Chemistry and Chemical Engineering, School of Advanced Engineering, Kogakuin University, JAPAN
12:00-12:30 PL3003	QUIVERS: REPRESENTATIONS, BUNDLES, APPLICATIONS Prof. ALEXANDER H.W. SCHMITT Institut für Mathematik, Freie Universität Berlin, Berlin, Germany
12:30-14:00	LUNCH MG steak, 3rd floor of Galleria Ulaanbaatar

PARALLEL ORAL PRESENTATIONS**SECTION MC: Mathematics & Computational Science**

Time	Section chairs	Room
14:00-16:00	Prof. Sarantuya Tsedendamba	Conference hall
16:30-18:30	Prof. Naoyasu Kita	12 th floor

Time	Presentations
14:00-14:20 MC3101 online	NEW PRINCIPLES OF NONCONVEX OPTIMIZATION Prof. ALEXANDER STREKALOVSKY Institute for System Dynamics and Control Theory of Siberian Branch of Russian Academy of Sciences, Irkutsk, RUSSIA
14:20-14:40 MC3102	DECAY ESTIMATE AND ASYMPTOTIC BEHAVIOR OF SOLUTIONS TO THE SYSTEM OF SCHRÖDINGER EQUATIONS WITH CUBIC DISSIPATIVE NONLINEARITY <u>NAOYASU KITA</u> Faculty of Advanced Science and Technology, Kumamoto University, Japan
14:40-14:55 MC3103	SOME PROPERTIES OF THE VOLTERRA PENCILS <u>TSEDENBAYAR DASHDONDOG</u> , Jargalsaikhan Ts. and Buyantogtokh D. Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

14:55-15:10 MC3104	USING MATHEMATICAL METHODS FOR DECISION <u>ENKHBAYAR JAMSRANJAV</u> and Tserendulam Sh. Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
15:10-15:25 MC3105	STUDY ON GLOBAL DYNAMICS OF A SPECIAL SYMMETRICALLY LAID COMPOSITE LAMINATED RECTANGULAR PLATE <u>WENSAI MA</u> , Dongxiao Li, Fanghao Liu, and Shufeng Lv Department of Mechanics, Inner Mongolia University of Technology, Hohhot, China
15:25-15:40 MC3106	GENERALIZED INTEGRAL REPRESENTATION METHOD AS APPLIED TO NUMERICAL SIMULATION OF BOUSSINESQ WAVE <u>KHONGORZUL DORJGOTOV</u> , Gantulga Ts. and Baljinnyam Ts. Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
15:40-15:55 MC3107	STOCHASTIC OPTIMAL CONTROL PROBLEM OF CONSUMPTION AND PENSION INSURANCE PURCHASE WITH UNCERTAIN LIFETIME <u>GERELTUYA TERBISH</u> , Tserenbat O., Batsukh Ts. and Nyamsuren D. Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
15:55-16:30	Coffee BREAK
16:30-16:45 MC3108	IMPACT OF REPRESENTATIVE CAPACITY ON THE SIZE OF PARLIAMENTARY INSTITUTION IN MONGOLIA <u>TUYAGEREL GANBAT</u> , Undrakh D. and Battugs S. Department of Political Science, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
16:45-17:00 MC3109	SYNERGISTIC DRUG COMBINATION STUDY WITH MULTI-OMICS DATA INTEGRATION <u>ALTANKHUYAG AVIRMED</u> , Dolgorsuren B., Temuulen D., Yansen Su and Tseren-Onolt I. Department of Computer Science, School of Information and Communication Technology, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
17:00-17:15 MC3110	ON PROBLEMS RELATED TO THE HIGHER-ORDER SCHRÖDINGER OPERATORS <u>TELMEN ENKHTUVSHIN</u> and Galtbayar A. Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
17:15-17:30 MC3111	THE LONG RUN RELATIONSHIP BETWEEN BUDGET AND TRADE DEFICIT OF MONGOLIA <u>NARANCHIMEG CHIMEDRAVDAN</u> and Davaasuren Ch. Department of Fundamental Sciences, University of Finance and Economics, Ulaanbaatar, Mongolia
17:30-17:45 MC3112	LIE SYMMETRY REDUCTIONS OF (2+1)-DIMENSIONAL GENERALIZED KDV EQUATION AND MULTI-COMPONENT NONLINEAR SCHRÖDINGER EQUATIONS <u>YUSHAN BAI</u> and Yana Liu College of Science, Inner Mongolia University of Technology, Hohhot, China

17:45-18:00 MC3113	DC OPTIMIZATION APPROACH FOR BIMATRIX GAME FOR FINDING BERGE EQUILIBRIUM <u>MENGKEZHULA Sa.</u> , Batbileg Sukhee, Enkhbat R. and Battur G. Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
18:00-18:15 MC3114	THE SEARCH SOLUTIONS IN MILITARY EVENTS <u>BATCHIMEG TSENDPUREV</u> , Sainbayar D. and Ankhbayar G. Ulaanbaatar School, National University of Mongolia, Ulaanbaatar, Mongolia
18:15-18:30 MC3115	MULTI-PERIOD LOAN INTEREST RATE NASH MODEL WITH BASEL II SOLVENCY CONSTRAINT <u>ENKHBAYAR KHANGAI</u> , Battulga G. and Batbileg S. Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

SECTION CE: Chemical Technology & Engineering

Time	Section chairs	Room
14.00-16.00	Dr. Ilchgerel Dash	8-804
16.30-18.00	Dr. Badral Gansukh	
Time	Presentations	
14:00-14:20 CE3201	FABRICATION OF LOW-COST CERAMIC MEMBRANE DEVELOPED WITH CROSS-LINKED CHITOSAN FOR REMOVAL OF Cr(VI) <u>NAOKI KANO</u> , Munkhpurev B., Enkhtuul M., Naoto Miyamoto, Ganchimeg Yu. and Hee-Joon Kim Department of Chemistry and Chemical Engineering, Faculty of Engineering, Niigata University, Niigata, Japan	
14:20-14:40 CE3202	INVESTIGATION ON CHARACTERIZATION OF DIFFERENT TYPE OF COALS AND PREPARATION OF COAL DERIVED ACTIVATED CARBON ON THEIR BASES <u>PUREVSUREN BARNASAN</u> , Batbileg S., Namkhainorov J., Jargalmaa S., Avid B., Shiirov G. and Battsetseg M. Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia	
14:40-14:55 CE3203	STUDY OF ROASTING PROCESS OF COPPER SULFIDE CONCENTRATE WITH POTASSIUM CHLORIDE <u>NYAMJARGAL LHAMTOGMID</u> , Burmaa G. and Burmaa D. Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia	
14:55-15:10 CE3204	PROPERTIES OF WOOLEN WOVEN COATED WITH MELANIN OF YAK HAIR <u>BATCHIMEG GANBAATAR</u> , Oyunchuluun L., Dagvasuren E., Batsuren Ch. and Nadmid G. Research and Development Institute of Light Industry, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia	
15:10-15:25 CE3205	RESEARCH STUDY ON POSSIBILITY OF RECOVERY OF Au AND Ag BY REPROCESSING OF TAILINGS OF GOLD AND SILVER ORE PROCESSING PLANT <u>ALTANSUKH NERGUI</u> , Dormaa B., Tsend-Ayush Ts. and Oyuntungalag Kh. Research Institute, Erdenet mining corporation SOE, Mongolia	

15:25-15:40 CE3206	<p>SYNTHESIS OF HYDROXYAPATITE NANOPARTICLES USING DOLOMITE POWDER</p> <p><u>ZOLTUYA KHASHBAATAR</u>, Akama Shota, Narantsetseg M., Naoki Kano, Hee-Joon Kim</p> <p>Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>
15:40-15:55 CE3207	<p>EFFECT OF DECALIN AS A HYDROGEN DONOR IN CRACKING OF ATMOSPHERIC RESIDUE FROM TAMSAGBULAG OIL, MONGOLIA</p> <p><u>ANUJIN MUNKHJIN</u>, Myagmarjav O., Myagmargerel B., Narangerel J., Bayasgalan U., Gantsetseg B., Tugsuu Ts., and Khulan B.</p> <p>Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia</p>
15:55-16:30	Coffee BREAK
16:30-16:50 CE3208 Online	<p>COMPUTING THE RELATIVE ABUDANCE OF ATMOSPHERIC PRENUCLEATION CLUSTERS FROM AB INITIO THERMOCHEMICAL CALCULATIONS</p> <p><u>TUGULDUR ODBADRAKH</u></p> <p>Department of Chemistry, Furman University, Greenville, South Carolina, USA</p>
16:50-17:10 CE3209 online	<p>TECHNOLOGICAL CALCULATION OF THE REFINERY INDUSTRY OF THE TAMSAGBULAG DEPOSIT</p> <p><u>MENG HE</u>, and Tungalagtamir B.</p> <p>Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>
17:10-17:25 CE3210	<p>A STUDY ON CHEMICAL PURIFICATION OF GRAPHITE CONCENTRATE FROM ZULEGT ORE, MONGOLIA</p> <p><u>BATTUMUR TUMURSUKH</u> and Munkhbaatar P.</p> <p>Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>
17:25-17:40 CE3211	<p>DETERMINATION OF CHEMICAL ELEMENTS AND HEAVY METAL CONTENT IN LIVESTOCK ANIMAL MEAT IN MONGOLIA BY ATOMIC ABSORPTION SPECTROMETER (AAS)</p> <p><u>TURMUNKH GERELCHULUUN</u>, Uranzaya. B. and Bolormaa. D</p> <p>Department of Biotechnoloy, School of Industrial Technology, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>

SECTION PE: Physics & Environmental Science

Time	Section chairs	Room
14.00-15.55	Dr. Jargalan Narmandakh	8-805
16.30-18.30	Prof. Tsermaa Galya	

Time	Presentations
14:00-14:20 PE3301 online	THERMAL CONDUCTIVITY OF NANOCRYSTALLINE SILICON AT HIGH TEMPERATURE <u>BATTOGTOKH JUGDERSUREN</u> Jacobs Engineering Group, Hanover, MD, USA
14:20-14:40 PE3302	STRUCTURAL AND OPTICAL PROPERTIES OF CELLULOSE NANOCRYSTALS FABRICATED USING SPRAY-DRYING PROCESS <u>CHEL-JONG CHOI</u> and Jong-Hee Kim School of Semiconductor and Chemical Engineering, Semiconductor Physics Research Center (SPRC), Jeonbuk, South Korea
14:40-14:55 PE3303	THE PHONON DISPERSION OF GRAPHENE <u>MYAGMARSUREN GENDEN</u> , Amartaivan Ts., Gantulga Ts., and Enkhtor L. School of Sciences and Arts, National University of Mongolia, Ulaanbaatar. Mongolia
14:55-15:10 PE3304	PLASMONIC NANOFOCUSING FOR TIP-ENHANCED NANOSPECTROSCOPY <u>TING MEI</u> and Wending Zhang School of Physical Science and Technology, Northwestern Polytechnical University, Xi'an, China
15:10-15:25 PE3305	PRESSURE CONSISTENCY FOR BINARY HARD-SPHERE MIXTURES FROM AN INTEGRAL EQUATION APPROACH <u>BANZRAGCH TSEDNEE</u> , Tsogbayar Ts. and Tsookhuu Kh. Laboratory of Theoretical and High Energy Physics, Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
15:25-15:40 PE3306	PHOTOIONIZATION CROSS SECTION OF A HYDROGENIC IMPURITY IN A PIEZOELECTRIC CORE-SHELL NANOWIRE <u>SIHUA HA</u> and Jun Zhu College of Sciences, Inner Mongolia University of Technology, Hohhot, China
15:40-15:55 PE3307	LIGHTNING RECORDING SYSTEM DESIGN AND LIGHTNING SIGNALS RECORDED FROM MONGOLIA <u>ALTANSUKH MAIBAYAR</u> , Otgonbaatar M., Ulam-Orgikh D., Turtogtokh T., Erdenebaatar D. and Begzsuren T. Department of Physics, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia.
15:55-16:30	Coffee BREAK
16:30-16:45 PE3308	MAGNETRON SPUTTER DEPOSITION OF CALCIUM <u>DULMAA ALTANGEREL</u> , Tuvjargal N, Galbadrakh R. and Diederik Depla Department of Physics, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia

16:45-17:00
PE3309
STRAY GRAIN SUSCEPTIBILITY DURING LASER REMELTING/CLADDING PROCESS IN NI-BASED SINGLE CRYSTAL SUPERALLOYS
NAN WANG
School of Physical Science and Technology, Northwestern Polytechnical University, Xi'an, China

17:00-17:15
PE3310
AERODYNAMIC FORCES ACTING ON CIRCULAR AND RECTANGULAR CYLINDERS USING THE ENTROPIC LATTICE BOLTZMANN METHOD
KHENMEDEKH LOCHIN, and Tsetsegsuren Ts.
Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia.

17:15-17:30
PE3311
SYNCHRONIZATION OF TIME-DELAY INTERACTING CAVITATION OSCILLATORS NEAR THE LIQUID FREE SURFACE
TSEREN DAVAADORJ, Altangerel N. and Munkh-Erdene D.
Office of the Radiation Safety and Nuclear Technology Association, Ulaanbaatar, Mongolia.

17:30-17:45
PE3312
ESTIMATION OF AVERAGE PARTICLE SIZE AND STANDARD DEVIATION ON SCANNING ELECTRON MICROSCOPY IMAGES THROUGH FOURIER TRANSFORMATION
MUNGUNSHAGAI G. and Munkhbaatar A.
Department of Electric Technique, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

SECTION ENG: Engineering

Time	Section chair	Room
14:00-16:00	Dr. Mungunshagai	8-801

Time	Presentation
14:00-14:15 ENG3405	MIX DESIGN STUDY OF CEMENT-TREATED BASE. <u>ERKHEMBAYAR OTGONDAVAA</u> Department of Engineering Structure, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:15-14:30 ENG3406	STUDY ON INCREASED RELIABILITY OF RELAY PROTECTION AND AUTOMATION FOR 110 KV TRANSMISSION LINE HIGH-LOAD AND SHORT-DISTANCE IN A RING NETWORK OF NATIONAL POWER TRANSMISSION GRID, MONGOLIA STATE-OWNED COMPANY <u>ICHINKHORLOO NAMSRAI, Lhagvademberel B. and Battulga M.</u> School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:30-14:45 ENG3407	EXPERIMENTAL STUDY ON THE DETERMINATION MECHANICAL CHARACTERISTICS OF CONCRETE WITH STEEL FIBER <u>SERGELEN PUREV and Enkhtur Sh.</u> Department of Structural Engineering and Construction Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

14:45-15:00 ENG3401	REDUCING EMISSIONS INTO THE ENVIRONMENT DURING THE OPERATION OF SMALL-CAPACITY BOILERS <u>ANASTASIYA IVANOVA</u> , Tsolmon Kh. and Viktor Ivanov Department of Thermal Engineering, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia Institute of Engineering & Technology, North-Eastern Federal University, Yakutsk, Republic of Sakha (Yakutia), Russia
15:00-15:15 ENG3402	RESEARCH OF SMART LIGHTING SYSTEM FOR ENERGY EFFICIENT OFFICE USING IMAGE PROCESSING <u>MANDAKH OYUN-ERDENE</u> , Tsanjidkhuu J. and Bat-Erdene B. Department of Electric Technique, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
15:15-15:30 ENG3403	BUILDING EXTERNAL ENVELOPE HYGROTHERMAL PROPERTY ASSESSMENTS ANALYSIS <u>NARANTSATSRAL CHULUUNBAATAR</u> and Bilguun B. Department of Environmental Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
15:30-15:45 ENG3404	PHASE CHANGE MATERIAL APPLICATION TO TROMP-WALL STRATEGIES FOR HOUSING IN ULAANBAATAR, MONGOLIA <u>TEMUULEN BAT-OCHIR</u> , Tsovoodavaa G., Uelun-Ujin P. and Bolormaa D. Department of Architecture, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
15:45-16:00 ENG3408	DETERMINATION OF GEOMETRIC CHARACTERISTICS OF FATIGUE CRACKS BY DIGITAL IMAGE PROCESSING METHODS <u>BOKHOEVA LYUBOV ALEXANDROVNA</u> , Bazaron S.A., Bochektueva E.B. East Siberia State University of Technology and Management, Klyuchevskaya, Ulan-Ude, Russia
16:00-16:30	Coffee BREAK

SECOND DAY OF CONFERENCE**JUNE 17th, Saturday****PLENARY SECTION:**

Time	Section chairs	Room
09:00-10:00	Prof. Munkhsaikhan Gonchigsuren	Conference
10:30-11:30	Prof. Ganchimeg Yunden	hall
Time	Presentations	
09:00-09:30 PL3004 Online	TOWARDS NANOMAGNETIC MATERIALS DESIGN Prof. ODKHUU DORJ Department of Physics, Incheon National University, Incheon, SOUTH KOREA	
09:30-10:00 PL3005 Online	DETERMINATION OF CAUSES OF GROUNDWATER POLLUTION IN MAJOR CITIES OF SOUTHERN INDIA-A CASE STUDY THROUGH MAJOR IONS AND TRACE ELEMENT ANALYSIS Prof. BALU GOWTHAM Department of Geology, Government Arts College (Autonomous), INDIA	
10:00-10:30	Coffee BREAK 12 th floor, building block 8, MUST	
10:30-11:00 PL3006	CONVERGENCE OF DISCRETE EXTERIOR CALCULUS Prof. GANTUMUR TSOGEREL Department of Mathematics and Statistics, McGill University, CANADA	
11:00-11:30 PL3007	EXPLORING TWO-DIMENSIONAL MATERIALS FOR EMERGING PHOTOVOLTAIC CELLS Dr. MUNKHBAYAR BATMUNKH Queensland Micro- and Nanotechnology Centre, School of Environment and Science, Griffith University, AUSTRALIA	
11:30-13:00	LUNCH MG steak, 3 rd floor of Galleria Ulaanbaatar	

PARALLEL ORAL PRESENTATIONS**SECTION MC: Mathematics & Computational Science**

Time	Section chairs	Room
13:00-15:00	Prof. Galtbayar Artbazar	Conference hall
16:00-17:45	Prof. Tsendenbayar Dashdondog	12 th floor
Time	Presentations	
13:00-13:20 MC3116	THE MODIFIED PARALLEL TANGENT GLOBAL SEARCH ALGORITHM FOR FINDING ANTI-BERGE EQUILIBRIUM IN BIMATRIX GAME <u>ENKHBAT RENTSEN</u> , Pavel S., Tatiana Z., and Alexander G. The Institute of Mathematics and Digital Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia	
13:20-13:40 MC3117	A NOVEL PATH INTEGRATION METHOD FOR THE STOCHASTIC RESPONSE OF VIBRO-IMPACT SYSTEMS <u>LIANG WANG</u> School of Mathematics and Statistics, Northwestern Polytechnical University, Xi'an, China	

13:40-13:55 MC3118	<p>INVARIANCE PROPERTIES OF TIME FRACTIONAL LINEAR DIFFUSION-WAVE EQUATIONS <u>NOMUUN BAYANMUNKH</u>, Khongorzul D., Bayarpurev M., Gantulga Ts. and Uganbayar Z. Department of Mathematics, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia</p>
13:55-14:10 MC3119	<p>OPTIMAL L^2-DECAY OF SOLUTIONS TO NONLINEAR SCHRÖDINGER EQUATIONS WITH A LONG-RANGE DISSIPATIVE NONLINEARITY <u>TAKUYA SATO</u> Faculty of Advanced Science and Technology, Kumamoto University, Kumamoto, Japan</p>
14:10-14:25 MC3120	<p>ON THE PROPERTIES OF BÄCKLUND TRANSFORMATIONS ON PAINLEVÉ 6TH EQUATIONS <u>AMARZAYA AMARTUVSHIN</u>, Davaadorj Balbaan Department of Mathematics, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia</p>
14:25-14:40 MC3121	<p>QUINTIC B-SPLINE METHOD FOR SOLVING LANE-EMDEN TYPE EQUATIONS <u>OTGONDORJ KHUDER</u>, Zhanlav T., Ulziibayar V. and Mijiddorj R. Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>
14:40-14:55 MC3122	<p>Goal programming approach to achieve sustainable forest management: Case study in Mongolia <u>USUKHBAYAR ENKHJARGAL</u>, Atartsetseg T., Battur G., Batchuluun Ts. and Gerelbaatar S. and Bayanmunkh N. Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia.</p>
14:55-16:00 Coffee BREAK and POSTER SECTION	
16:00-16:15 MC3123	<p>MULTI-FIDELITY REDUCED-ORDER OPTIMIZATION ALGORITHM <u>MANYU XIAO</u> and Piotr Breitkopf Xi'an Key Laboratory of Scientific Computation and Applied Statistics, School of Mathematics and Statistics, Northwestern Polytechnical University, Xi'an, China</p>
16:15-16:30 MC3124	<p>A NEW TECHNIQUE FOR LOSS RESERVE ESTIMATION <u>BARSBOLD BAZARRAGCHAA.</u>, Dudarii O., Enkhtaivan D. and Denzen G. Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia.</p>
16:30-16:45 MC3125	<p>A CNN MODEL FOR SERS SPECTRA DETECTION OF SARS-COV-2 PROTEINS <u>ANKHBAYAR NYAMDAAVA</u>, Kiran Kaladharan, Erdene-Ochir G., Anudari B., Fan-Gang Tseng and Tseren-Onolt I. Department of Information Technology, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>

16:45-17:00 MC3126	APPLICATION OF SPHERE PACKING TO PARAMETRIC LINEAR PROGRAMMING <u>LUTBAT YADAMSUREN.</u> , Bayartugs .T., Ulziibayar V. and Enkhbat R. Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
17:00-17:15 MC3127 online	DYNAMIC ASPECTS OF THE SEIR EPIDEMIC MODEL INCORPORATING PSYCHOLOGICAL INFLUENCE <u>GHAUS UR RAHMAN</u> , Saad Ihsan Butt, Dumitru Baleanu and Rahim Uddin Department of Mathematics and Statistics, University of Swat, Pakistan
17:15-17:30 MC3128 online	USING HYERS-ULAM STABILITY FOR TARIG TRANSFORM OF LINEAR DIFFERENTIAL EQUATIONS AND ITS APPLICATIONS <u>N. SUBASHINI NARAYANASWAMY</u> Department of Mathematics Sathyabama Institute of Science and Technology, Semmancherry, Chennai, Tamilnadu, India
17:30-17:45 MC3129 online	SOME NEW SUBCLASSES OF BI-UNIVALENT FUNCTIONS DEFINED BY CONVOLUTION ASSOCIATED WITH LINEAR DIFFERENTIAL OPERATOR <u>PREMA S.</u> , Bhuvaneshwari Raja and N. Subashini Narayanaswamy Department of Mathematics, Rajalakshmi Institute of Technology, Chennai, Tamil Nadu, India,

SECTION CE: Chemical Technology & Engineering

Time	Section chairs	Room
13:00-14:30	Prof. Purevsuren Barnasan	8-804
15:30-17:00	Prof. In-Hyuck Song	
Time	Presentations	
13:00-13:20 CE3212	CERAMIC MEMBRANE FOR ENVIRONMENTAL APPLICATION: RECENT DEVELOPMENTS AND PROSPECT <u>IN-HYUCK SONG</u> , Hong Joo Lee, Jang-Hoon Ha, and Jongman Lee Korea Institute of Materials Science, Changwon, South Korea	
13:20-13:40 CE3213	FUTURE DEPLETION OF HEAVY OIL/BITUMEN RESERVES: IMPROVEMENT OF EFFICIENCY AND REDUCTION OF GHG EMISSION <u>TAYFUN BABADAGLI</u> Department of Civil and Environmental Engineering, School of Mining and Petroleum, University of Alberta, Edmonton, AB, Canada	
13:40-13:55 CE3214	STRATEGIC TENDENCY FOR THE DEVELOPMENT OF COAL PREPARATION AND PROCESSING TECHNOLOGY <u>SEDDORJ RENCHINBYAMBA</u> , Chinzorig B. and Daariimaa T. School of Geology and Mining Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia	
13:55-14:10 CE3215	SYNTHESIS OF CHITASON BASED NEW MATERIAL FOR RECOVERY OF Pt (IV) <u>ENKHTUYA MAJIGSUREN.</u> , Ulziidelger B., Ganchimeg Yu., Nasanjargal Sh., Chuluuntsetseg Ts., Munkhpurev B. and Naoki Kano Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia	

14:10-14:25 CE3216	DISPERSION AND ORIENTATION OF MONTMORILLONITE IN NYLON-6 <u>ILCHGEREL DASH</u> , Robb Winter, Ulziidelger B., Myagmarnaran Ts. and Batbileg S. Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:25-14:40 CE3217	DESIGN, PREPARATION, AND APPLICATION OF THERMALLY CONDUCTIVE POLYMER COMPOSITES <u>YANHUI CHEN</u> Key Laboratory of Special Functional and Smart Polymer Materials of Ministry of Industry and Information Technology, School of Chemistry and Chemical Engineering, Northwestern Polytechnical University, Xi'an, China
14:40-14:55 CE3218	INVESTIGATION ON PYROLYSIS TAR AND ITS CHEMICAL COMPOSITION OF BOOROLJUUT COAL FROM MONGOLIA <u>BATTSETSEG MUNKHTAIVAN</u> , Namkhainorov J., Batbileg S., Borkhuukhen S., Shiirav G. and Purevsuren B. Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
14:55-16:00	Coffee BREAK and POSTER SECTION
16:05-16:20 CE3219	RESEARCH ON OBTAINING ZEOLITE FROM THE ASH OF ERDENET THERMAL POWER STATION <u>QIAN YU</u> , Tungalagtamir B., Enkhtsetseg E., Byambagar B., Munkhbaatar P. Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
16:20-16:35 CE3220	A STUDY ON IDENTIFICATION OF THE COMPLICATIONS OF MOLYBDENUM FLOTATION <u>AMARJARGAL TSEDEN</u> ., Oyuntungalag Kh. and Tseden-Ayush Ts. Research Institute, Erdenet Mining Corporation SOE, Mongolia
16:35-16:50 CE3221	IMPROVE THE USE OF CHEMICAL INSTRUMENTAL ANALYSIS <u>KHALIUN MYAGMAR</u> Medimpex International LLC, Ulaanbaatar, Mongolia
16:50-17:05 CE3222	COMBINING ANALYTICAL METHODS WITH ADVANCED INSTRUMENTS <u>ERKHEMBAYAR JAMIYANJAV</u> ., CIT LLC, Ulaanbaatar, Mongolia

SECTION PE: Physics & Environmental Science

Time	Section chairs	Room
13:00-14:55	Prof. Gantuya Ganbat	8-805
15:30-17:15	Dr. Uyanga Enkhnanan	

Time	Presentations
13:00-13:20 PE3313	MANAGING END-OF-LIFE ELECTRIC VEHICLES AND THEIR BATTERIES IN THE GLOBAL SOUTH: RISKS AND CHALLENGES <u>LUISA FEROLLA SPYER PRATES</u> , Daniel Karthe, Lulu Zhang, Jack O'Connor, Lili Wang, Christina Dornack and Halim Lee Institute for Integrated Management of Material Fluxes and of Resources, United Nations University, Dresden, Germany
13:20-13:40 PE3314	EFFECTS OF MAIN INORGANIC SALTS ON AGGREGATION AND SEDIMENTATION OF ENDOGENOUS FINE LOESS PARTICLES IN GROUNDWATER OVER GUANZHONG PLAIN, CHINA <u>YAOGUO WU</u> , Mengyin Yi, Chengzhen Meng, Ran Sun, Sihai Hu School of Chemistry and Chemical Engineering, Northwestern Polytechnical University, Xi'an, China
13:40-13:55 PE3315	PREDICTION OF REAERATION AND DEOXYGENATION RATE CONSTANT IN SELBE RIVER, MONGOLIA: DISSOLVED OXYGEN AND BOD ASSIMILATIVE CAPACITY OF THE RIVER <u>BAT-ERDENE PUREVSUREN</u> , Usukhbayar P., Gerelt-Od D., Tuya S. and Ariuntuya Ts. Raw Material and Environmental Engineering Faculty, German-Mongolian Institute for Resources and Technology, Ulaanbaatar, Mongolia
13:55-14:10 PE3316	RESEARCH OF NON-BALANCED DYNAMICS OF PASTURE ECOSYSTEMS IN MONGOLIA <u>DAVAASUREN CHIMEDREGZEN</u> and Chuluun T. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:10-14:25 PE3317	IMPACT OF INTEGRATED HOME INSULATION AND HEATING SOLUTIONS IN MONGOLIA ON AIR QUALITY AND HEALTH <u>OYUN-ERDENE OTGONBYAMBA</u> , Buuviedulam A., Gantuya G., Suvd S., Bilguun G., Byambatogtokh B., Battsetseg N., Bataa Ch., Burmaajav B. and Suvd B. National Center for Public Health, Ulaanbaatar, Mongolia
14:25-14:40 PE3318	ASSESSMENT OF INDOOR ENVIRONMENTAL CONDITIONS IN SCHOOLS IN ULAANBAATAR, MONGOLIA <u>SUVD BATBAATAR</u> , Oyun-erdene O., Erdenetsteseg D., Buuveidulam A., Zul A., Chinzorig B., Suvd S., Gantuya G., Bayarbold D. and Burmaajav B. National Center for Public Health, Ulaanbaatar, Mongolia
14:40-14:55 PE3319	SATELLITE BASED ESTIMATION OF LANDCOVER CHANGE AND SOIL DEGRADATION IN URGAMAL, DURVOLJIN, ERDENEKHAIRKHAN SOUMS OF ZAVKHAN PROVINCE <u>SANJAA TUYA.</u> , Zambal B, Erdemjargal P. and Avirmed B. Center for Hydrometeorology and Environmental Monitoring, Zavkhan aimag, Mongolia
14:55-16:00	Coffee BREAK and POSTER SECTION

16:00-16:15 PE3320 Online	IDENTIFYING GROUNDWATER SITE SUITABILITY OF ARTIFICIAL RECHARGE STRUCTURES IN KALRAYAN HILLS, TAMIL NADU FOR TRIBAL COMMUNITY USING RESISTIVITY SURVEY AND GEOSPATIAL TECHNOLOGY <u>NAGAMANI KATTUKOTA</u> , Amgalan Magsar, Mohammad Suhail Meer and Packialakshmi Shanmugam Centre for Remote Sensing, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India
16:15-16:30 PE03321 Online	NOVEL OPERATIONAL STRATEGY OF ANAEROBIC PROCESSES TO RECOVER VOLATILE FATTY ACIDS FROM FOOD WASTES <u>MENG SUN</u> , Xi Zhang, Rajeev Goel, Bing Liu, Mitsuharu Terashima, Hidenari Yasui Faculty of Environmental Engineering, The University of Kitakyushu, Kitakyushu, Japan
16:30-16:45 PE3322 Online	CARBON FOOTPRINT CALCULATION OF THE UNIVERSITY OF KITAKYUSHU, JAPAN AND MONGOLIAN UNIVERSITY OF SCIENCE AND TECHNOLOGY AND WAYS TO REDUCE THE SOURCES OF GREENHOUSE GAS EMISSIONS <u>ONON GANTSOGT</u> , Matsumoto Toru and Enkhtsolmon Otgonbayar Department of Environmental Systems, Graduate School of Environmental Engineering, The University of Kitakyushu, Kitakyushu, Japan
16:30-16:45 PE3323 Online	RUNOFF MODELING USING SCS-CN AND GIS APPROACH IN THE CHENNAI TAMIL NADU <u>NAGAMANI KATTUKOTA</u> and Mohammad Suhail Meer Centre for Remote Sensing and Geoinformatics Sathyabama Institute of Science and Technology Chennai, Tamil Nadu, India.
16:45-17:00 PE3324	TIME SERIES ANALYSIS FOR THE ESTIMATION OF GROSS PRIMARY PRODUCTION USING THE SATELLITE DATA <u>DELGERMAA ERKHEMJARGAL</u> , Bayanjargal D., Tsolmon R. and Kazuhito Ichii School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
17:00-17:15 PE3325	CHANGES OF THE LAND SURFACE OF OGII LAKE BASIN <u>NOMINDARI DAMDINSUREN</u> , Purev-Erdene E. and Bayartugs T. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
17:00-17:15 PE3326	COMPARATIVE STUDY ON LEGAL ENVIRONMENT FOR MANAGEMENT OF END-OF-LIFE ELECTRIC VEHICLES AND LITHIUM-ION BATTERIES IN MONGOLIA VS. OTHER COUNTRIES <u>UELUN MUNKHJARGAL</u> , Luisa Prates, Daniel Karthe and Gantuya Ganbat German-Mongolian Institute for Resources and Technology, Ulaanbaatar, Mongolia

SECTION ENG: Engineering

Time	Section chair	Room
13:00-14:55	Dr. Ulemj Damiran	8-801

Time	Presentations
13:00-13:15 ENG3409	A STUDY ON THE CONVECTIVE HEATING METHOD OF COLD WEATHER CONCRETING <u>KHISHGEE RADNAABAZAR</u> , Uranchimeg D., Duinkherjav Ya. and Bolormunkh G. Department of Structural Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
13:15-13:30 ENG3410	STUDY OF MATERIAL SUPPLY CRITICAL FACTORS AFFECTING THE CONSTRUCTION INDUSTRY IN MONGOLIA <u>ENKHBOLD SURENJAV</u> , and Altanzagas O. Department of Civil Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
13:30-13:45 ENG3411	COMPUTATION OF LIGHTNING ELECTRO-MAGNETIC TRANSIENTS ON WIND TURBINE TOWER STRUCTURE <u>CHINGES TSERENSAMBUU</u> and Qingmin Li Department of Electrical Engineering, School of Power Electrical Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
13:45-14:00 ENG3412	OPTIMAL DESIGN OF BLDC MOTORS USING A MULTI-OBJECTIVE DIFFERENTIAL EVOLUTION ALGORITHM <u>ULZIINOROV DONDOV</u> and Nyambayar B. Department of Electro Technique, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:00-14:15 ENG3413	SUPPORTING THE FLEXIBILITY AND RELIABILITY OF POWER SYSTEMS: OPTIMAL SCHEDULING APPROACH <u>ZAGDKHOROL BAYASGALAN</u> , Tsetsgee B., Adarsuren S., Tumengerel P., Altangerel B. and Bat-Undral B. Department of Electro Technique, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:15-14:30 ENG3414	ULTIMATE MOMENT CAPACITY OF 50 M ULTRA-HIGH PERFORMANCE FIBER REINFORCED CONCRETE COMPOSITE BOX GIRDER <u>TSAS-ORGILMAA MAKHBAL</u> and Sang Mook Han Department of Environmental Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:30-15:00 ENG3415	INVESTIGATION OF FACTORS AFFECTING AN ACCURACY OF THE FAULT LOCATION DETERMINATION METHOD FOR OVERHEAD ELECTRIC TRANSMISSION LINES <u>BAYARMAA ULZIIBAT</u> , and ARSLAN J. Department of Electro Technique, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
15:00-16:00	Coffee BREAK and POSTER SECTION

POSTER SECTION:

Time	Room
15:00-16:30	12 th floor of building block 8

Section	Presentations
POS3101	MAIN DIFFICULTIES IN COMPUTING THE SCHWARTZ-CHRISTOFFEL INTEGRAL <u>SONINBAYAR JAMBAA</u> , Department of Applied Mathematics, School of Engineering and Applied Sciences, National University of Mongolia, Ulaanbaatar, Mongolia
POS3102	MULTIPLICATIVE OPTIMAL CONTROL PROBLEM <u>BAYARTUGS TAMJAV</u> , Enkhbat R. and Ulziibayar V. Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3103	TIME EFFECT OF LIGHT SIGNALS ON TRAFFIC SPEED <u>GANZORIG DASHDORJ</u> Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3104	FUTURE DEVELOPMENT TREND OF SUKHBAATAR DISTRICT, ULAANBAATAR CITY <u>ALTANKHUYAG BUYANKHISHIG</u> and Agvaanjigmid B. Specialist in foreign relations, cooperation, Department of Public Administration, Office of the Governor of Sukhbaatar District, Ulaanbaatar, Mongolia
POS3105	ON ONE OPTIMIZATION METHOD FOR LINEARLY CONTROLLED SYSTEMS WITH CONSTRAINTS <u>DMITRY TRUNIN</u> Buryat State University, Ulan-Ude, Russia
POS3106	POSITIVITY AND ELEMENTARY STABILITY: EXTENDED NSFD SCHEME FOR THE SEIR EPIDEMIC MODEL <u>ENKH-AMAR SHAGDAR</u> and Batgerel B. Institute of Mathematics and Digital Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
POS3107	MAXIMUM PRINCIPLE METHODS BASED ON FIXED POINT PROBLEMS <u>ALEXANDER BULDAEV</u> and Ivan Kazmin Buryat State University, Ulan-Ude, Russia
POS3108	POLYNOMIAL WENO RECONSTRUCTION <u>ARIUNAA UURIINTSETSEG</u> and Michael Dumbser Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3109	METHODS FOR FINDING EXTREMAL CONTROLS IN DISCRETE-CONTINUOUS CONTROL SYSTEMS <u>ALEXANDER BULDAEV</u> and Vladislav Dumnov Buryat State University, Ulan-Ude, Russia
POS3110	A TWO-STAGE APPROACH FOR BEAM HARDENING ARTIFACT REDUCTION IN LOW-DOSE DENTAL CBCT <u>TAIGYNTUYA BAYARAA</u> Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

POS3201	KINETIC STUDY OF THERMAL DECOMPOSITION OF SHIVEE-OVOO AND TAVANTOLGOI COALS <u>JARGALMAA SONINKHUU.</u> , Avid B., Purevsuren B., Shiirav G., Ilchgerel D., Namkhainorov J. and Battsetseg M. Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
POS3202	SULFATION ROASTING OF COPPER TECHNOGENIC CONCENTRATE; A DFT CALCULATION <u>NYAMDELGER SHIRCHINNAMJIL.</u> Khulan B., Ulziibadrakh E. and Ochirkhuyag T. Laboratory of Inorganic Chemistry, Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
POS3203	PREPARATION OF GLASS-CERAMIC COMPOSITES BY ONE STAGE HEAT TREATMENT FROM WASTE GLASS AND FLY ASH <u>BAYARZUL UYAT.</u> Temuujin J. and Saran G. Laboratory of Material Science and Technology, Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
POS3204	THE STUDY OF RECOVERY OF PRECIOUS METALS AND RARE EARTH ELEMENTS FROM THE E-WASTE AND NIMH BATTERY WASTE <u>BURENTOGTOKH GAVAASUREN.</u> Urangoo Sh. and Dorjgotov A. Chemical Engineering Department, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3205	STUDY ON GASIFICATION OF COAL FROM SHIVEE-OVOO DEPOSIT OF MONGOLIA <u>SYERIKJAN KHUANGAN.</u> Enkhtsetseg E., Byambagar B., Tungalagtamir B., Quansheng Liu, and Purevsuren B. Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3206	MECHANOCHEMICAL MODIFICATION STUDY OF NATURAL ZEOLITE TO IMPROVE THE ADSORPTION <u>DOLGORJAV RENTSENDAAVA</u> and Saran G. Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3207	THE FUEL CONSUMPTION MATHEMATICAL MODELLING OF A PUBLIC TRANSPORT BUS IN URBAN TRAFFICS <u>ALTANTSETSEG TSEVEG.</u> Bayartugs T. and Tsetsegsuren Ts. Department of Technical Mechanics, School of Mechanical Engineering and Transportation, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3208	NATURALLY CROSSLINKED HYDROGELS FOR WOUND DRESSINGS <u>AMARJARGAL SAARAI</u> and Solongo G. Tavan Bogd Property LLC, Ulaanbaatar, Mongolia
POS3301	A NUMERICAL METHOD FOR SOLVING TIME DEPENDENT HARTREE-FOCK EQUATIONS OF HELIUM ATOM USING CWDVR APPROACH <u>SUKH OCHIR.</u> Naranchimeg D. and Munkhsaikhan G. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3302	SCANNING PROBE MICROSCOPY OBSERVATION OF MOLYBDENUM DISULFIDE SURFACE <u>ODONTUYA BAYARSAIKHAN.</u> Otgonbayar D., Munkhsaikhan G., Jargalbat P. and Batdemberel G.

	Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3303	<p>SYSTEM DYNAMIC MODELLING AND FINANCIAL ANALYSIS OF SOLID WASTE MANAGEMENT IN ULAANBAATAR, MONGOLIA <u>OTGONBAYAR ENKHTSOLMON</u>, Elbegjargal A., Munkhsaikhan G. and Battushig U. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>
	Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3304	<p>CALCULATION OF THE ENTROPY FOR HARD-SPHERE FROM INTEGRAL EQUATION METHOD <u>PUREVKHUU MUNKHBAATAR</u>, Banzragch Ts., Tsogbayar Ts. Tsookhuu Kh. Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia</p>
POS3305	<p>PHOTOELECTRON DISTRIBUTIONS OF SOME INERT GAS ATOMS <u>ALDARMAA CHULUUNBAATAR</u>, Zorigt G. and Khenmedekh L. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia</p>
POS3306	<p>INVESTIGATION OF DISTRIBUTION RESIDUAL STRAIN IN AUSTENITE SAMPLE USING THE TOF NEUTRON DIFFRACTION <u>BADMAARAG ALTANGEREL</u>, Sangaa D., Sikolenko V., Enkhtur L. and Duinkherjav Y. Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia Frank Laboratory of Neutron Physics, Joint Institute for Nuclear Research, Dubna, Russia</p>
POS3307	<p>INFLUENCE OF ULTRASOUND ACTIVATION ON CORROSION RATE OF POROUS NI-TI SHAPE MEMORY ALLOYS BY SHS <u>MAASHAA DOVCHINVANCHIG</u> and Purevdagva E. Department of Physics and Mathematics, School of Applied Sciences, Mongolian University of Life Sciences, Ulaanbaatar, Mongolia</p>
POS3308	<p>THEORETICAL AND EXPERIMENTAL STUDIES OF STRUCTURAL AND OPTICAL PROPERTIES OF PR-DOPED LIYF4 COMPOUNDS <u>TUVJARGAL NOROV SAMBUU</u>, Deng Lili, Battsenguun P., Tsogbadrakh N. and Davaasambu J. Department of Physics, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia</p>
POS3309	<p>BI DOPED BARIUM HEXAFERRITE: PREPARATION AND CHARACTERIZATION <u>KHONGORZUL BAATARTSOGT</u>, Enkhmend B., Uyanga E., Trukhanov A.V. and Sangaa D. Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia</p>
POS3310	<p>THEORETICAL STUDY OF INTERACTION FULLERENE MOLECULES WITH AND WITHOUT OXYGEN ATOMS <u>JARGALAN NARMANDAKH</u>, Chagdarjav M., Batgerel B., Tropin T.V. and Odkhuu D. Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia</p>
POS3401	<p>SURVEY DURING THE CHANGES OF LOOP NUMBERS ON THE MAIN KNITTING DATA <u>DALKHJAV SHATAR</u></p>

	Department of Technical Mechanics, School of Mechanical Engineering and Transportation, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3402	PREDICTING THE SERVICE LIFE OF BRIDGE STRUCTURES IN HARSH CLIMATIC CONDITIONS <u>KHASNAVCH SAMBUU</u> School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3403	WASTEWATER TREATMENT SOLUTIONS AND POLLUTION REDUCTION OPPORTUNITIES FOR WOOL SCOURING INDUSTRIES <u>ARIUNAA GANBAT</u> , Chuluunkhuyag S., Munkhbaatar P., Uuganbayar B. and Amgalan M. Department of Environmental Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3404	USING DEM-CFD SIMULATION IN BERRIES SEPARATION PROCESS <u>ULZIISAIKHAN P.</u> , Ganbold D. and Gangerel Kh. Department of Technical Mechanics, School of Mechanical Engineering and Transportation, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3405	HIGH-DENSITY PUR (POLYURETHANE) FOAM AS INSULATION MATERIAL FOR PIPES IN DISTRICT HEATING SYSTEMS <u>TSERENDOLGOR DUGARGARAMJAV</u> and Chantsaldulam E. School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3406	STUDY ON CALCULATION OF VARIABLE RESISTANCE IN HEAT SUPPLY HYDRAULIC MODE <u>ENKHBAYAR BAT-ERDENE</u> and Tserendolgor D. School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3407	STUDY OF TECHNOLOGICAL CHARACTERISTICS OF SOME WHEAT VARIETIES <u>TUYATSETSEG JAMBAL</u> School of Industrial Technology, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS3408	MATHEMATICAL MODELING AND ENERGY EFFICIENCY OF DRYING PROCESS OF POTATO IN A CLOSED-LOOP AIR CIRCULATION HEAT DRYER WITH A MOISTURE REMOVAL CONDENSER THROUGH NATURAL COOL <u>MYAGMARJAV CHULUUN</u> , Baljinnyam J. and Tuyatsetseg J. Department of Architecture, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

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