

# COM LINEINCE / GEND/

Ulaanbaatar Mongolia

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COMMITTEES	
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Ariunaa U.	School of Applied Sciences, Mongolian University of Science and Technology (MUST), Mongolia
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Baljinnyam Ts. Batnasan D. Battsetseg G. Enkhbayar Kh. Nyamsuren D. Otgondorj Kh. Tsedenbayar D. Dorjgotov A. Ilchgerel D. Ganchimeg Yu.	Department of Mathematics, MUST, Mongolia Department of Chemical Engineering, MUST, Mongolia
Tungalagtamir B. Ulziidelger B.	Department of Chemical Engineering, MUST, Mongolia Department of Chemical Engineering, MUST, Mongolia
Zoltuya Kh. Aldarmaa Ch.	Department of Chemical Engineering, MUST, Mongolia Department of Physics, MUST, Mongolia
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Batdemberel G. Delgertsetseg B.	Department of Physics, MUST, Mongolia Department of Physics, MUST, Mongolia
Enkhtsolmon O.	Department of Physics, MUST, Mongolia
Khatanbold E.	Department of Natural Sciences and Engineering, Railway
Munkhsaikhan G. Otgonbayar D. Tsermaa G.	Institute of Mongolia Department of Physics, MUST, Mongolia Department of Physics, MUST, Mongolia Department of Physics, MUST, Mongolia

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Albert Hans Dieter	Technische Universitaet Darmstadt, Germany
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Alexander Strekalovsky
Altanbagana M.

Institute for System Dynamics and Control Theory, Russia
Mongolian Academy of Sciences (MAS), Mongolia

Altangerel L. German Mongolian Institute for Resources and Technology,

Mongolia

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Ankhbayar G. National University of Mongolia, Mongolia

Arslan J. Mongolian University of Science and Technology, Mongolia

Avid B. Mongolian Academy of Sciences, Mongolia Ayurzana B. Mongolian Academy of Sciences, Mongolia

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**Purevsuren B.** Mongolian Academy of Sciences, Mongolia

Rike Yudianti,National Research and Innovation Agency, IndonesiaSheela Rani B.Sathyabama Institute of Science and Technology, IndiaTseren-Onolt I.Mongolian University of Science and Technology, Mongolia

Yanhui Yang Nanjing Tech University, China

### **PROGRAM OVERVIEW**

### June 09th, 2025

TIME	WHAT		WHERE
08:00-09:00	REGISTRATION		
09:00-09:30	Opening ceremony		
09:30-10:00	Prof. Altangerel Lkhamsuren		Juulchin Ballroom Galleria UB center
10:00-10:20	Group Photo	3rd floor, Conference	
10:20-11:00	Coffee Break	Hall.	
11:00-11:30 11:30-12:00 12:00-12:30	Plenary session: Prof. Luca Ottaviano Prof. Altansukh Batnasan Prof. Durvudkhan Suragan		men in the
12:30-14:00	LUNCH		
14:00-15:40	Parallel Oral Presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	8-906 8-801 8-805 Conference hall	Building block 8, MUST
15:40-16:10	Coffee Break	12 <sup>th</sup> floor	
16:10-18:00	Parallel Oral Presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	8-906 8-801 8-805 Conference hall	

### June 10<sup>th</sup>, 2025

09:00-09:30 09:30-10:00 10:00-10:30	Plenary Session: Prof. Uranchimeg Tudevdagva Prof. Jing Pei Cao Coffee Break Plenary session: Prof. Jargalan Narmandakh	12 <sup>th</sup> floor Conference Hall	Building block 8, MUST
11:00-11:30	Prof. Ralf Wunderlich		
11:30-13:00	LUNCH		Galleria, Ulaanbaatar
13:00-14:40	Parallel Oral Presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	8-906 8-801 8-805 Conference hall	
14:40-15:40	Coffee break and Poster session	12 <sup>th</sup> floor	Building block 8, MUST
15:40-17:00	Parallel Oral Presentations: Mathematics & Computational Science Chemical Technology & Engineering Physics & Environmental Science Engineering	8-906 8-801 8-805 Conference hall	
18:00	BANQUET*		Juulchin Ballroom Galleria, Ulaanbaatar

### FIRST DAY OF THE CONFERENCE

Monday, June 09th

#### **PLENARY SESSION:**

Time	Session chair	Room	
09:30-12:30	Prof. Ochirbat Baatar	Conference hall Juulchin ballroom	
Time	Presentations		
<b>09:30-10:00</b> PL4001	ON GAP FUNCTIONS LKHAMSUREN ALTA German-Mongolian Inst MONGOLIA	NGEREL	PROBLEMS  Technology, Ulaanbaatar,
10:00-11:00		COFFEE BREAK	
<b>11:00-11:30</b> PL4002	MATERIALS LUCA OTTAVIANO Department of Physical L'Aquila, ITALY	and Chemical Science	es (DSFC), University of CRSPECTIVES IN THE
<b>11:30-12:00</b> PL4003	RECOVERY OF RARESOURCES IN MONALTANSUKH BATNAS Department of Inorganic	RE EARTH ELEMENT GOLIA SAN Chemistry and Technol	ogy, Institute of Chemistry of Sciences, Ulaanbaatar,
<b>12:00-12:30</b> PL4004	DURVUDKHAN SURA Department of Ma KAZAKHSTAN	<u>GAN</u>	v University, Astana,
12:30-14:00	3 <sup>rd</sup>	LUNCH floor of Galleria Ulaank	oaatar

#### PARALLEL ORAL PRESENTATIONS

#### Section MC: Mathematics & Computational Science

	<del>_</del>	
Time	Session chair	Room
14:00-15:40	Prof. Sarantuya Tsedendamba	8-906
16:10-18:00	Prof. Naoyasu Kita	0-900

Time	Presentations
<b>14:00-14:20</b> MC4101	GENERALIZED SAMARSKII-IONKIN PROBLEM FOR PARTIAL DIFFERENTIAL EQUATIONS  ALEKSANDR KOZHANOV  Sobolev Institute of Mathematics of the Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia

<b>14:20-14:40</b> MC4102	SPECTRAL VOLTERRA EQUATION  DASHDONDOG TSEDENBAYAR  Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>14:40-15:00</b> MC4103	ISSUES OF DEVELOPMENT OF ARTIFICIAL INTELLIGENCE SYSTEMS IN PROBLEMS OF GROUP PURSUIT AND PROTECTION ALEXANDER DUBANOV Banzarov Buryat State University, Ulan-Ude, Russia
<b>15:00-15:20</b> MC4104	MEAGRE-EXPANSIVE FLOW  GANSUKH TUMUR, Nyamdavaa Ts.  Department of Mathematics, School of Mathematics and Natural Sciences,  Mongolian National University of Education, Ulaanbaatar, Mongolia
<b>15:20-15:40</b> MC4105	MODELING OF GAS DETONATION IN EXPLOSION CHAMBERS Purbo L. Abiduev, <u>TUMEN G.DARMAEV</u> , Smolina, Buryat State University, Russia
15:40-16:10	Coffee break
<b>16:10-16:30</b> MC4106	EXTENSIONS OF SOME ITERATIVE METHODS TO THE MULTIDIMENSIONAL CASE Zhanlav T., Otgondorj Kh., ENKHBAYAR KHANGAI Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>16:30-16:50</b> MC4107	THE MIXED BOUNDARY-VALUE PROBLEM FOR THE NONLINEAR HYPERBOLIC-PARABOLIC EQUATION OF A THERMAL CONDUCTIVITY FOR THE BOUNDED PLATES VLADISLAV KHANKHASAEV N., Safron Bairov A.  Department of Mathematics named after Ts.B. Shoynzhurov, East Siberian State University of Technology and Management, Ulan-Ude, Russia
<b>16:50-17:10</b> MC4108	SYSTEM DYNAMICS APPROACH FOR REDUCING AIR POLLUTION IN ULAANBAATAR CITY  Batbold L., Ochirbat B., <u>BATNASAN DASHDORJ</u> , Elbegjargal A.  Department of Mathematics, School of Applied Sciences, Mongolian University Science and Technology, Ulaanbaatar, Mongolia
<b>17:10-17:30</b> MC4109	METHOD OF IMPROVING CONTROLS IN NONLINEAR BY A CONTROL SYSTEMS WITH CONSTRAINTS BASED ON THE FIXED POINT PROBLEM  DMITRY TRUNIN  Buryat State University, Ulan-Ude, Russia
<b>17:30-17:50</b> MC4110	NUMERICAL STUDY OF THE BUCKLING OF A POLYMER COMPOSITE MATERIAL  ALDAR BALDANOV, Elena Bochektuyeva, Vadim Titov, Maksim Shatov, Roman Ivanov  Department of Information Technologies and Applied Mechanics, Faculty of Civil Engineering, East Siberia State University of Technology and Management, Ulan Ude, Russia

### Section CE: Chemical Technology & Engineering

Time	Session Chairs	Room	
14:00-15:40	Dr. Ilchgerel Dash	8-801	
16:10-18:00	Prof. Hee-Joon Kim	0 001	
Time	Presentations		
<b>14:00-14:20</b> CE4201	CHARACTERISTIC EVALUATION TAR USING THE PRINCIPAL OF HEE-JOON KIM., Yoko Nunom., For Department of Environmental Chenary Advanced, Engineering, Kogakuin	C <b>OMPONENT ANA</b> Bayartsaikhan Ts., Zol nistry and Chemical E	LYSIS tuya Kh., Naoki Kano
<b>14:20-14:40</b> CE4202	PRODUCTION OF HYDRO SEWAGE SLUDGE ASH ZOLTUYA KHASHBAATAR., B Hee Joon Kim Department of Chemical Engineerin University Of Science And Technol	at-Erdene E., Enkhtung, School of Applied	Sciences, Mongolian
<b>14:40-15:00</b> CE4203	THE STUDY TO DETER ACIDITHIOBACILLUS FERROS LOW-GRADE COPPER ORE BUJINLKHAM TUVD, Badamge Chinzorig R., Erdenechimeg D. Department of Chemical and Biolo and Technology, National University	OXIDANS(OR512156) arav Ch., Garamjav ogical Engineering, S	M., Ariunzaya Ts., chool of Engineering
<b>15:00-15:20</b> CE4204	HYDROTHERMAL FLOWT BIOMASS AND PYROLYSIS SOLID TIANLONG LIU Jiangsu Province Engineering Rese Resources, China University of Min	CHARACTERISTIC earch Center of Fine	Utilization of Carbon
<b>15:20-15:40</b> CE4205	A STUDY ON THE ATTENUA' THE ZOOVCH-OVOO URANIU KHULAN BYAMBASUREN, U Burmaa G., Nyamdelger Sh. Institute of Chemistry and Chemi Sciences, Ulaanbaatar, Mongolia	JM ORE PROCESS Iziibadrakh E., Ale	ING PLANT  n S., Altansukh B.,
15:40-16:10	Co	ffee break	
<b>16:10-16:30</b> CE4206	FROM AQUEOUS SOLUTION LEAVES  NAOKI KANO. Enkhtuul M. Ganchimeg Yu., Hee-Joon Kim. Department of Chemistry and Chen Niigata University, Japan	USING MODIFIE , Munkhpurev B.,	Naoto Miyamoto,

<b>16:30-16:50</b> CE4207	STUDYING THE EFFECT OF K ADDITION ON THE SYNTHESIS OF C <sub>2+</sub> HYDROCARBONS BY HYDROGENATION OF CARBON DIOXIDE  ERMUUN GAN-ERDENE, Manlaibaatar P., Tsogbadrakh N., Enkhsaruul B. Department of Chemistry, School of Arts and Sciences, National University of Mongolia, Ulaanbaatar, Mongolia	
<b>16:50-17:10</b> CE4208	RESEARCH ON USING SYNTHETIC POLYMERS AS FUEL  BATTSETSEG TSOG, Bat-Erdene E., Zoltuya Kh.  Department of Chemical Engineering, School of Applied Sciences, Mongolian University Of Science And Technology, Ulaanbaatar, Mongolia	
<b>17:10-17:30</b> CE4209	MODELLING AND OPTIMIZATION HYDROGEN PRODUCTION THROUGH STEAM METHANE REFORMING  LKHAGVAJAV PUREVDORJ, Tamiraa G.  Geological Center for Research and Analysis, Ulaanbaatar, Mongolia	
<b>17:30-17:50</b> CE4210	STUDY OF THE EFFECT OF ELECTRON ACCEPTORS IN CATHOLYTE OF TWO-CHAMBER MICROBIAL FUEL CELL USING CATION EXCHANGE MEMBRANE  KHISHIGSHINEN DORLIG, Tugskhuslen T., Chinzorig R., Munkhjargal Sh., Erdenechimeg D.  Department of Chemical and Biological Engineering, School of Engineering and Technology, NUM, Ulaanbaatar, Mongolia	
17:50-18:00	DISCUSSION	

### **Section PE: Physics & Environmental Science**

**Session Chairs** 

14.00-15.40 16:10-18:00	Dr. Delgertsetseg Byambasuren Dr. Tuya Sanjaa 8-805
Time	Presentations
<b>14:00-14:20</b> PE4301	AN EQUATION OF STATE FOR A HARD HOMONUCLEAR DIATOMIC FLUID DERIVED FROM THE INTEGRAL EQUATION METHOD  BANZRAGCH TSEDNEE, Tsogbayar Ts., Tsookhuu Kh. Centre of Quantum Science and Technology, Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia.
<b>14:20-14:40</b> PE4302	THE FORMATION OF A VORTEX IN A BOSE-EINSTEIN CONDENSATE  SUKH OCHIR, Aldarmaa Ch., Zorigt G.  Department of Physics, School of Applied Sciences, Mongolian University Of Science And Technology, Ulaanbaatar, Mongolia
<b>14:40-15:00</b> PE4303	PHOTOELECTRON MOMENTUM DISTRIBUTION OF HELIUM ATOM  ISHDORJ ADYADOLJIN, Aldarmaa Ch., Zorigt G., Khenmedekh L., Altangoo O.  Department of Physics, School of Applied Sciences, Mongolian University Of Science And Technology, Ulaanbaatar, Mongolia

Room

<b>15:00-15:20</b> PE4304	DFT STUDY OF BaFe <sub>12</sub> O <sub>19</sub> -MgFe <sub>2</sub> O <sub>4</sub> NANOCOMPOSITES: THICKNESS-DEPENDENT STRUCTURAL, MAGNETIC, AND CHARGE ANALYSIS  SODKHUU DORJ, Jargalan N.,Odkhuu D., Sangaa D. Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia  STARK RESONANCE PARAMETER FOR ATOMIC HYDROGEN		
<b>15:20-15:40</b> PE4305	REVISITED  TSOGBAYAR TSEDNEE, Banzragch Ts., Tsookhuu Kh. Center of Quantum Science and Technology, Institute of Physics and Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia		
15:40-16:10	Coffee break		
<b>16:10-16:30</b> PH4306	AIR POLLUTION AND HEALTH OF VULNERABLE GROUPS IN MONGOLIA: A REVIEW OF EXISTING STUDIES  ENKHJIN ENKHBOLD, Gantuya G. Faculty of Raw Materials and Environmental Engineering, German-Mongolian Institute for Resources and Technology, Ulaanbaatar, Mongolia		
<b>16:30-16:50</b> PH4307	INVESTIGATION OF ENVIRONMENTAL RADIATION DISPERSION DURING URANIUM MINING IN MONGOLIA: IMPACTS AND MITIGATION STRATEGIES  CHIMEDTSOGZOL NYAMBUU, Bulgansaikhan B., Amgalan M. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia		
<b>16:50-17:10</b> PH4308	COMPARATIVE STUDY OF INSULATION MATERIALS FOR COST- EFFECTIVE AND ENERGY-EFFICIENT PRIVATE RESIDENTIAL BUILDINGS  Jagarzusum M., <u>URANTSETSEG TSOGTBAYAR</u> , Amgalan M.  Department of Civil Engineering, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia		
<b>17:10-17:30</b> PH4309	MATHEMATICAL MODELING OF ANTHROPOGENIC LOADS BASED ON SATELLITE DATA  NOMINDARI DAMDINSUREN, Tuya S., Bayartugs T.  Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia		
17:30-18:00	DISCUSSION		

## **Section ENG: Engineering**

Time	Session Chairs	Room
14:00-15:40	Dr. Mungunshagai Gansukh	Conference hall
16:10-18:00	Prof. Ayurzana Badarch	12 <sup>th</sup> floor

Time	Dyogontotions	
1 ime	Presentations  STRUCTURAL DESIGN AND ANALYSIS OF A TRUSS FRAME FOR LIFTING SUNKEN FUEL TRUCKS, TRACTOR AND	
<b>14:00-14:20</b> ENG4401	VEHICLES FROM LAKE KHUVSGUL	
	ULZIISAIKHAN PUREVSUREN, Naidandorj R., Renchinvanjil Ya.,	
	Ayurzana B., Gankhulug Ts., Galbadrakh D.	
	Department of Mechanical Engineering, School of Mechanical Engineering	
	and Transportation, Mongolian University of Science and Technology,	
	Ulaanbaatar, Mongolia ANCILLARY SERVICES FOR HVDC DISPATCHING CONTROL IN	
	MONGOLIA: DEVELOPMENT OF A STRATEGY	
14:20-14:40	ZAGDKHOROL BAYASGALAN, Tsetsgee B.	
ENG4402	Department of Electrotechnique, School of Power Engineering, Mongolian	
	University of Science and Technology, Ulaanbaatar, Mongolia	
	EARLY-AGE TEMPERATURE EFFECT ON THE PROPERTIES OF	
	CONCRETE CURED BY ELECTRICAL HEATING IN COLD	
14:40-15:00	WEATHER Sodnomtseren P., KHISHGEE RADNAABAZAR, Zorigt T., Batzaya B.,	
ENG4403	Duinkherjav Y.	
L1104403	Department of Structural Engineering, School of Civil Engineering and	
	Architecture, Mongolian University of Science and Technology,	
	Ulaanbaatar, Mongolia	
	URGENT NEEDS OF FLOOD RESILIENCE IN THE SUBURBAN	
	AREAS OF THE UPPER SELBE RIVER, ULAANBAATAR, MONGOLIA	
15:00-15:20	AYURZANA BADARCH, Batzorig G., Tuya S., Nasanbayar N.	
ENG4404	Department of Engineering Structures, School of Civil Engineering and	
	Architecture, Mongolian University of Science and Technology,	
	Ulaanbaatar, Mongolia	
	MORPHOLOGY AND SEDIMENT TRANSFER OF THE SELBE RIVER	
15:20-15:40	URANZAYA BAYARAA	
ENG4405	School of Civil Engineering and Architecture, Mongolian University of	
	Science and Technology, Ulaanbaatar Mongolia	
15:40-16:10	Coffee break	
	MODELING THE LOSS OF STABILITY OF A THIN-WALLED	
	MULTILAYER PLATE MADE OF LAYERED MATERIALS UNDER IMPACT	
16:10-16:30	LUBOV ALEKSANDROVNA BOKHOEVA, Vitaly Evdokimovich Rogov.,	
ENG4406	Anatoly Ivanov	
	East-Siberian State University of Technology and Management, Ulan-Ude,	
	Russia	

<b>16:30-16:50</b> ENG4407	INTEGRATING ENVIRONMENTAL FACTORS AND COMMUNITY NEEDS IN PUBLIC SPACE PLANNING: LESSONS FROM ULAANBAATAR  BILIGT ALTANKHUYAG, Bolormaa D., Ariuntuya M., Tergel M., Tuvshin B., Tsovoodavaa G.  Department of Architecture, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>16:50-17:10</b> ENG4408	PUBLIC SPACE AND UNIVERSAL DESIGN FOR STREET IN ULAANBAATAR, MONGOLIA SHINEZAYA ENKHBAT, Benjamin Küsters., Gonchigbat I., Tsovoodavaa G. School of Architecture and Design, Citi University, Ulaanbaatar, Mongolia
<b>17:10-17:30</b> ENG4409	UNDERSTANDING THE KNOWLEDGE AND SUPPORT NEEDS OF CONSTRUCTION PROFESSIONALS IN ADVANCING GREEN BUILDING PRACTICES  ARIUNTUYA MYAGMARJAV., Uelun-Ujin P., Tsovoodavaa G., Bolormaa D.  Department of Architecture, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>17:30-17:50</b> ENG4410	OPTIMIZATION OF SPRAY DRYING CONDITIONS OF WHOLE POWDER SEA BUCKTHORN (HIPPOPHAE RHAMNOIDES L. JUICE POSWER)  ODGEREL ULZIIBAT., Md. Zohurul ISLAM., Yutaka KITAMURA., Mito KOKAWA., BALJINNYAM J., TSOLMONBAATAR D. School of Industrial Technology, Mongolian University Science and Technology, Ulaanbaatar, Mongolia
17:50-18:00	DISCUSSION

### SECOND DAY OF THE CONFERENCE

Tuesday, June 10th

#### **PLENARY SESSION:**

Time	Session chair	Room		
09:00-10:00 10:30-11:30	Prof. Hiromitsu Takaba. Prof. Luca Ottaviano	Conference hall 12 <sup>th</sup> floor		
Time	Presentations			
<b>09:00-09:30</b> PL4005	URANCHIMEG TUDEVD	ES IN EDUCATION: PROS AGVA lian University of Science		
<b>09:30-10:00</b> PL4006	DIRECTIONAL THERMAL CONVERSION OF LIGNITE TO CHEMICAL AND CARBON-BASED MATERIALS  JING-PEI CAO  Jiangsu Key Laboratory of Coal-based Greenhouse Gas Control and Utilization, China University of Mining & Technology, Xuzhou, Jiangsu, CHINA			
10:00-10:30	COFFEE BREAK	COFFEE BREAK		
<b>10:30-11:00</b> PL4007	EXPERIMENT FOR NEX JARGALAN NARMAN N.Tsogbadrakh, D.Odkhuu,	POUNDS: BRIDGING KT-GENERATION MAGN DAKH, E.Uyanga, D.Sa Kh.Odbadrakh Technology, Mongolian Aca	ngaa, D.Sodkhuu,	
<b>11:00-11:30</b> PL4008	STOCHASTIC OPTIMAL CONTROL OF HEATING SYSTEMS WITH A GEOTHERMAL ENERGY STORAGE RALF WUNDERLICH Institute of Mathematics, Brandenburg University of Technology Cottbus - Senftenberg, GERMANY			
12:30-14:00	3 <sup>rd</sup> flo	LUNCH or of Galleria Ulaanbaatar		

#### PARALLEL ORAL PRESENTATIONS

#### **Section MC: Mathematics & Computational Sciences**

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Time	Session Chairs	Room	-
13:00-14:40	Prof. Aleksandr Kozhanov	8-906	
15:40-17:50	Prof. Tsedenbayar Dashdondog	8-900	
Time	Presentations		
<b>13:00-13:20</b> MC4111	L <sup>2</sup> -DECAY ESTIMATE OF THE SEQUATIONS WITH ATTRACTIVE KITA NAOYASU, Hayato Miyazaki, Takumamoto University, Japan	-DISSIPATIVE	

<b>13:20-13:40</b> MC4112	THE STABILITY OF STATE MODEL OF LANE-CHANGE MOTION FOR THE AUTONOMOUS VEHICLE  SER-OD BAYARAA  Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia		
<b>13:40-14:00</b> MC4113	CALCULATION OF AERODYNAMIC CHARACTERISTICS OF AN ARBITRARY PROFILE AT NON-STATIONARY FLOW Purbo L. Abiduev, Zhargal G.Dambaev, <u>TUMEN G.DARMAEV</u> Buryat State University, Ulan-Ude, Russia		
<b>14:00-14:20</b> MC4114	MATHEMATICAL ANALYSIS OF ELECTROCARDIOGRAMS FOR CONTROL SIGNAL DEVELOPMENT  TUNGALAG MYANGAD  Department of Information Technology, School of Information and Communication Technology, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia		
	THE FOURTH BOUNDARY VALUE PROBLEM FOR A		
<b>14:20-14:40</b> MC4115	HYPERBOLIC-PARABOLIC EQUATION WITH A VARIABLE HEAT CONDUCTIVITY COEFFICIENT AND A NONLINEAR RADIATION SOURCE Khankhasaev Vladislav, MUNYAEV SERGEY Department of Fundamental Mathematics, Buryat State University, Ulan-Ude, Russia		
14:40-15:40	Coffee break and Poster session		
<b>15:40-16:00</b> MC4116	ANUNSUPERVISED ANOMALY DETECTION IN MULTIVARIATE TIME SERIES: DETECTING SUDDEN STRATOSPHERIC WARMING EVENTS  KHULAN MYAGMAR, Bayanjargal D., Tsolmon R., Charles Lin Department of Applied Mathematics, School of Information Technology and		
	Flectronics National University of Mongolia Ulaanhaatar Mongolia		
<b>16:00-16:20</b> MC4117	Electronics, National University of Mongolia, Ulaanbaatar, Mongolia  FIXED POINT METHODS FOR FINDING DEGENERATE  EXTREMAL CONTROLS  IVAN KAZMIN, Alexander Buldaev  Buryat State University, Ulan-Ude, Russia		
	FIXED POINT METHODS FOR FINDING DEGENERATE EXTREMAL CONTROLS  IVAN KAZMIN, Alexander Buldaev		
MC4117 16:20-16:40	FIXED POINT METHODS FOR FINDING DEGENERATE EXTREMAL CONTROLS  IVAN KAZMIN, Alexander Buldaev Buryat State University, Ulan-Ude, Russia  DECAY ESTIMATE AND ASYMPTOTIC BEHAVIOR OF THE SOLUTIONS TO DISSIPATIVE NONLINEAR SCHRÖDINGER EQUATIONS WITH TIME-DEPENDENT AMPLIFICATION GERELMAA JADAMBA, Kita Naoyasu		

17:20-17:40 MC4121	MULTIPLICATIVE MODEL OF THE DYNAMICS OF REGIONAL MACROECONOMIC INDICATORS KONSTANTIN P. DYRKHEEV	
	Buryat State University, Ulan-Ude, Russia	
17:40-17:50	DISCUSSION	

Room

### Section CE: Chemical Technology & Engineering

**Session Chairs** 

Time

Tille	Session Charts Room
13:00-14:40	Prof. Erdenechimeg Dolgor
15:40-17:30	Prof. Purevsuren Barnasan
Time	Presentations
	SYNTHESIS OF MAGHEMITE NANOPARTICLES FROM IRON
<b>13:00-13:20</b> CE4211	PHOSPHATE USING ALKALINE SOLUTION AND EVALUATION OF ITS BATTERY CHARACTERISTICS  HIROKAZU OKAWA, Shun Ikeda, Mitsuki Ota, Takahiro Kato, Enkhtuya T., Tsermaa G.  Graduate School of Engineering Science, Akita University, Akita, Japan
<b>13:20-13:40</b> CE4212	THERMAL DISSOLUTION OF COAL FROM THE KHOOT DEPOSIT  Batbileg S., Namkhainorov J., Shiirav G., PUREVSUREN BARNASAN  Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
<b>13:40-14:00</b> CE4213	POLYMER SYNTHESIS AND RECYCLING <u>VLADIMÍR SEDLAŘÍK</u> Center of Polymer Systems, Tomas Bata University in Zlin, Czech Republic
<b>14:00-14:20</b> CE4214	CARBON DIOXIDE SEPARATION USING ZEOLITE MEMBRANES INVESTIGATED BY MOLECULAR SIMULATION HIROMITSU TAKABA School of Advanced Engineering, Kogakuin University, Tokyo, Japan
<b>14:20-14:40</b> CE4215	EXPERIMENTAL STUDY OF BIOLEACHING USING BACTERIA CULTURED FROM PLS SOLUTION OF THE COPPER PLANTS GARAMJAV MUNKHBAT, Delgerjargal A., Erdenechimeg D. Chemical laboratory, Achit Ikht LLC, Orkhon, Mongolia
14:40-15:40	Coffee break and Poster session
<b>15:40-16:00</b> CE4216	ADSORPTIVE REMOVAL OF BROMIDE IONS BY AG-MODIFIED CERAMIC MEMBRANE SYNTHESIZED FROM KAOLIN AND DOLOMITE  MUNKHPUREV BAT-AMGALAN, Enkhtuul M., Naoki Kano., Naoto Miyamoto., Hee-Joon Kim., Ganchimeg Yu.  Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>16:00-16:20</b> CE4217	INVESTIGATION INFLUENCE FACTOR OXIDATION OF COPPER CONCENTRATE UNDER ATMOSPHERIC CONDITIONS GERELTUYA GANBAATAR, Gerelsaikhan B., Maralmaa B., Ochirkhuyag B., Erdenechimeg D. Geological Center for Research and Analysis, Ulaanbaatar, Mongolia

<b>16:20-16:40</b> CE4218	REDUCTION OF WATER HARDNESS BY NATURAL ZEOLITE VIA BATCH PROCESS  OYUNDARI DANDARBAATAR, Enkhzul E., Tamiraa G., Ochirkhuyag B., Amgalan B.  Department of Chemical and Biological Engineering, School of Engineering and Technology, National University of Mongolia, Ulaanbaatar, Mongolia
<b>16:40-17:00</b> CE4219	COPPER ADSORPTION IN NATURAL AND COMPOSITE ZEOLITE MATERIALS  UNUR-ODONTUYA SUNDEV, Undarmaa A., Enkhjin B., Amgalan B., Ochirkhuyag B., Tamiraa G. Geological Center for Research and Analysis, Ulaanbaatar, Mongolia
17:00-17:30	DISCUSSION

## Section PE: Physics & Environmental Science

Time	Session Chairs	Room
13:00-15:00	Dr. Uyanga Enkhnaran	8-805
Time	Presentation	
<b>13:00-13:20</b> PE4310		FeCo COMPOSITE  nga A., Jargalan N., Odkhuu D., Sangaa D.  plogy, Mongolian Academy of Sciences
<b>13:20-13:40</b> PE4311	INDICATORS URANCHIMEG TUNGALAG, Z	ASSURANCE USING PERFORMANCE Zorigt G., Erdenekhuu N. and Technology, Open Education Institute.
<b>13:40-14:00</b> PE4312	SKILLS NERGUI ALTANGEREL, Altan	ENTS TO SUPPORT "MONOZUKURI" goo O., Gantuya B. olian National University of Education
<b>14:00-14:20</b> PH4313	AS A RAW MATERIAL WURIGUMULA, Erdene-Ochir Department of Physics, Natura	G., Munkhtsetseg S.  I Science Division, School of Arts and Mongolia, Ulaanbaatar, Mongolia
<b>14:20-14:40</b> PH4314	EXFOLIATED TMDS ODONTUYA BAYARSAIKH. Otgonbayar D., Munkhsaikhan G	of Applied Sciences, Mongolian University

<b>14:40-15:00</b> PH4315	LIQUID PHASE EXFOLIATION OF MoS2 NANOSHEETS IN IPA AND NMP SOLUTIONS  ERDENETUYA ORGODOLZANGIAT, Odontuya B., Ganchimeg Yu., Batdemberel G., Otgonbayar D., Munkhsaikhan G.  Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia	
15:00-16:00	Coffee break and Poster session	

**Section ENG: Engineering** 

Time	Session Chairs	Room
13:00-14:40	Prof. Tsovoodavaa Gantumur	Conference hall
15:40-17:30	Prof. Makoto Nanko	12 <sup>th</sup> floor
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15:40-17:3	90 FIOI. Makoto Ivaliko 12 11001
Time	Presentations
<b>13:00-13:20</b> ENG4411	DIRECT GAS NITRIDING OF ADDITIVELY MANUFACTURED MARAGING STEELS  MAKOTO NANKO, Nazuna Ideta., and Yen-Ling Kuo  Department of Mechanical Engineering, Nagaoka University of Technology, Nagaoka, Japan
<b>13:20-13:40</b> ENG4412	DEVELOPMENT OF ANTIBACTERIAL GELATIN-BASED HYDROGEL FOR SUSTAINED INFECTION CONTROL IN BIOMEDICAL TUYAJARGAL IIMAA, Hiroyuki Ijima Department for Graduate Education Policy and Management, Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia
<b>13:40-14:00</b> ENG4413	IMPROVED PERFORMANCE OF ORGANIC PHOTOVOLTAIC CELLS WITH ITO ANODE MODIFIED BY MOLECULAR SELF-ASSEMBLED MONOLAYER  DELGERTSETSEG BYAMBASUREN, Sarangerel Kh.  Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>14:00-14:20</b> ENG4414	EXPERIMENTAL ANALYSIS OF HARMONIC EFFECTS ON POWER TRANSFORMER IN WIND FARM  BATTULGA MUNKHBAATAR, Bat-Erdene B., Purevdash D.,  TUVSHINBAYAR BANDI  Department of Electric Technique, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>14:20-14:40</b> ENG4415	INVESTIGATION OF THE EFFECT OF TILT ANGLE ON THE PERFORMANCE OF A SOLAR POWER PLANT SARANGEREL KHAYANKHYARVAA, Munkhtuya E. Department of New Renewable Energy, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
14:40-15:40	Coffee break and Poster session
<b>15:40-16:00</b> ENG4416	STUDY ON INSTALLING A SOLAR POWER PLANT AT A LANDFILL SITE IN MONGOLIA  Munkhtuya E, ZAGDKHOROL Bayasgalan.  Department of Electrotechnique, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

<b>16:00-16:20</b> ENG4417	IMPROVING INDOOR CONFORT AND ENERGY EFFICIENCY THROUGH ARCHITECTURAL PLANNING IN SINGLE FAMILY HOUSE: A CASE STUDY OF ULAANBAATAR'S CLIMATE CONDITIONS  BADRAKH BAYAR, Tsovoodavaa G. Department of Architecture, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>16:20-16:40</b> ENG4418	THE IMPROVEMENT OF MICROCLIMATE DESIGN IN RESIDATIAL SUB DISTRICT USED BY THE COMPUTATIANAL FUID DYNAMIC LKHAGVAJAV NYAMSUREN, Tsovoodavaa G. Department of Architecture, School of Civil Engineering and Architecture, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
<b>16:40-17:00</b> ENG4419	A STUDY ON THE PHASE-OUT OF HCFCS AND THE IMPLEMENTATION OF ENERGY-EFFICIENT AIR CONDITIONING SYSTEMS IN BUILDINGS  ANGARAG NEMEKH, Urantsetseg Ts. Department of Plumbing Engineering, Institute of Engineering, School of Ulaanbaatar, Mongolia
17:00-17:30	DISCUSSION

#### **POSTER SESSION:**

Time	Room				
14:40-15:40	12 <sup>th</sup> floor of building block 8				
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POS4101	THE EFFECTS OF INTELL DEVELOPMENT, AND ITS EMPIN NARANCHIMEG CHIMEDRAVDAN Department of Fundamental Sciences, Economics, Ulaanbaatar, Mongolia	RIC ANALYS N., Elbegjarga	al A., Eldev-	Ochir E	
POS4102	USING AUTOMATED VALUATION Enkhsuren Adilbish, Enkhtuya Bavuud ANKHTUYA DORJGOTOV, Mungur Department of Mathematics, School of of Science and Technology, Ulaanbaata	dorj, Bayartuş nsukh Shirnen Applied Scie	gs Tamjav, i	Zolzaya	a Dashdorj,
POS4103	GENERATING FUNCTION MET ITERATIONS WITH P (P = 5, 6) OI ULZIIBAYAR VANDANDOO, Zhanl Mongolian University of Science and T	RDER OF Colav T.	ONVERGE		NG NEW
POS4104	METHODOLOGIES FOR DETER SUBSIDENCE AT THE INTERSEC Baasansuren Sanjaasuren, Munkhgerel Department of Mathematics, School of of Science and Technology, Ulaanbaata	TION OF C. Tsegmid, <u>AR</u> Applied Scie	AVE MINI RIUNGEREI	<b>NG</b> L JARG	<u> SAL</u>
POS4105	NONSTANDARD FINITE DIFFER MODEL TUMURKHUYAG BADARCH, Batg Institute of Mathematics and Digital Te	erel Balt		-	

Ulaanbaatar, Mongolia.

POS4106	MATHEMATICAL MODELS AND APPLICATIONS IN MINING TSATSRAL GALBAT, Ariunaa Uuriintsetseg Department of Mathematics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4201	REMOVAL OF PT (IV) USING WHEAT BASED BIOSORBENT NYAMJARGAL LKHAMTOGMID, Ganchimeg Yu., Burmaa G., Sukhbat S. Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia.
POS4202	FACTORS AFFECTING THE INOSINE-5'-MONOPHOSPHATE (5'-IMP) CONTENT IN MUSCLES OF MONGOLIAN SHEEP ERKIGUL BUKYEI, Gerelt B, Buyanchimeg B., Enkhbat T. School of Engineer and Technology, Mongolian University of Life Sciences, Ulaanbaatar, Mongolia
POS4203	MODELING THE IMPACT OF RECIRCULATING WATER ON MOLYBDENUM FLOTATION  TSEELEI SUREN, Odontuya G., Uyanga D., Khureldavaa O., Ichinnorov A., Sarangerel D., Oyuntsetseg D.  Erdenet Institute of Technology, Branch of Mongolian University of Science and Technology, Orkhon, Mongolia
POS4204	STUDY ON THE ADSORPTION ACTIVITY OF COMPOSITE MATERIALS FOR HEAVY METAL IONS  ULZIIDELGER BYAMBASUREN, Enkhtuya M., Munkhpurev B., Ganchimeg Yu., Naoki Kano Department of Chemical Engineering, School of Applied Sciences, Mongolian University Of Science And Technology, Ulaanbaatar, Mongolia
POS4205	STUDY OF RAW MATERIALS FOR THERMAL INSULATION MATERIALS  BAYARJARGAL SANDAGDORJ, Dolgorjav R., and Saran G.  Department of Chemical Engineering, School of Applied Sciences, Mongolian University Of Science And Technology, Ulaanbaatar, Mongolia
POS4206	MODELING AND SIMULATION OF METHANOL PRODUCTION FROM SYNGAS  ILCHGEREL DASH, Ulziidelger B, Jargaldelger B, Nyam-Osor S.  Department of Chemical Engineering, School of Applied Sciences, Mongolian University Of Science And Technology, Ulaanbaatar, Mongolia
POS4207	INVESTIGATION ON THE REMOVAL OF ORGANIC POLLUTANTS FROM AQUEOUS SOLUTION Sergelen E., Siqin Zhao, Ilchgerel D., Sukhbat S., <u>GANCHIMEG YUNDEN</u> Department of Chemical Engineering, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4208	HYDROCHEMICAL CHARACTERISTICS AND UTILIZATION OF HOT SPRINGS IN ARKHANGAI PROVINCE  ICHINNOROV AMARJARGAL, Odontuya G., Oyuntsetseg D., Bolormaa O. Institute of Chemistry and Chemical Technology, Mongolian Academy of Sciences, Ulaanbaatar, Mongolia
POS4301	THE CALCULATION OF GROUND STATES OF NOBLE GAS ATOMS USING QUANTUM FLUID DENSITY FUNCTIONAL APPROACH NARANCHIMEG DAVGIIKHOROL, Sukh O., Munkhsaikhan G. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

POS4302	ANALYSIS OF SYSTEM DYNAMICS MODEL FOR POLICY IMPACTS ON SOLID WASTE MANAGEMENT IN ULAANBAATAR CITY  ELBEGJARGAL ARIYA, Enkhtsolmon O., Genjiu Xu Department of Management Strategy, School of Management, Mongolian University of Science and Technology, Mongolia
POS4303	THICKNESS IDENTIFICATION OF TWO-DIMENSIONAL MoS2 LAYERS USING X-RAY POWDER DIFFRACTOMETER  OTGONBAYAR DUGERJAV, Munkhsaikhan G., Jargalan S., Gurbadam E., Odontuya B., Ganchimeg Yu., Jamiyanaa D., Battogtokh J., Batdemberel G. Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4304	STRUCTURAL PROPERTIES OF AL-DOPING OF BisTi3FeO15 THIN FILMS  UYANGATUGS TSEDEEKHUU, Ariunbayasgalan A., Munkhsaikhan G.  Department of Physics, School of Applied Sciences, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4401	EFFECTS OF DRYING AS A PRESERVATION TECHNIQUE ON THE QUALITY ATTRIBUTES AND NUTRIENT PROFILE OF MONGOLIAN PASTURE-RAISED SHEEP SPLEEN POWDER Solongo G., MAIZUL BANZRAGCH., Lkhagvasuren B., Odgerel U., Gantulga B., Tuyatsetseg J., Enkhtuya B., Tsolmonbaatar D. Department of Biotechnology and Nutrition, School of Food, Light Industry and Design, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4402	ENGINEERING CALCULATIONS AND TECHNOLOGY OF LIFTING OPERATIONS OF SUNKEN VEHICLES FROM LAKE KHUVSGUL ULZIISAIKHAN PUREVSUREN, Naidandorj R., Renchinvanjil Ya., Ayurzana B., Gankhulug Ts., Galbadrakh D., Ider G. Department of Mechanical Engineering, School of Mechanical Engineering and Transportation, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4403	RESEARCH AND EXPERIMENT OF VIBRATING MIXER WITH INCLINED CYLINDER DRUM RENCHINVAANJIL YADAM, TSOLMONBAATAR DANJKHUU. Department of Mechanics and Mechatronics, School of Mechanical Engineering and Transportation, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia
POS4404	ENGINEERING CALCULATIONS AND TECHNOLOGY OF LIFTING OPERATIONS OF SUNKEN SUKHBAATAR VESSEL FROM LAKE KHUVSGUL  ULZIISAIKHAN PUREVSUREN., Naidandorj R., Renchinvanjil Ya., Ayurzana B., Khenmedekh L., Gankhulug Ts., Galbadrakh D., Ider G., Khash-Ochir N.  Department of Mechanical Engineering, School of Mechanical Engineering and Transportation, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia.
POS4405	METHODOLOGICAL APPROACH TO THE DEVELOPMENT OF THE ELECTRIC POWER SYSTEM OF MONGOLIA, TAKING INTO ACCOUNT THE CURRENT TREND AND CHALLENGE BAT-ERDENE BAYAR., BATMUNKH SEREETER.  Department of Electric Technique, School of Power Engineering, Mongolian University of Science and Technology, Ulaanbaatar, Mongolia

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