MS10 & AMS5 Programme

Schedule of the conference

Date	Time	Event		Location
June 10	8:00-22:00	Registration		NEU INTERNATIONAL HOTEL
	18:30-20:30	Buffet dinner		Ball Room of NEU INTERNATIONAL HOTEL
June 11	8:00-22:00	Registration		NEU INTERNATIONAL HOTEL
	6:40-8:10	Breakfast		
	8:30-9:50	Opening remarks		Ball Room of NEU INTERNATIONAL HOTEL
	9:50-10:10	Coffee break		
	10:10-11:30	Plenary lecture		Ball Room of NEU INTERNATIONAL HOTEL
	12:00-13:00	Lunch		Xiangyue Restaurant of NEU INTERNATIONAL HOTEL
	14:00-15:30	Parallel Sessions	Session I: Electrochemical Synthesis and Preparation	Conference Room 407 of NEU INTERNATIONAL HOTEL
			Session II: Structure and Properties of Molten Salts	Conference Room 406 of NEU INTERNATIONAL HOTEL
			Session III: Nuclear and Solar Technology	Conference Room 402 of NEU INTERNATIONAL HOTEL
			Session IV:International Workshop on Molten Carbonates and Related Topics(IWMC2015)	Conference Room 405 of NEU INTERNATIONAL HOTEL
			Session V: Aluminum Production	Juxian Room of NEU INTERNATIONAL HOTEL
			Session VI: Ionic Liquid and its Application	VIP Room of NEU INTERNATIONAL HOTEL
	15:30-15:50	Coffee break		
	15:50-17:40	Parallel Sessions	Session I: Electrochemical Synthesis and Preparation	Conference Room 407 of NEU INTERNATIONAL HOTEL
			Session II: Structure and Properties of Molten Salts	Conference Room 406 of NEU INTERNATIONAL HOTEL
			Session III: Nuclear and Solar Technology	Conference Room 402 of NEU INTERNATIONAL HOTEL
			Session IV:International Workshop on Molten Carbonates and Related Topics(IWMC2015)	Conference Room 405 ofNEU INTERNATIONAL HOTEL
			Session V: Aluminum Production	Juxian Room of NEU INTERNATIONAL HOTEL
			Session VI: Ionic Liquid and its Application	VIP Room of NEU INTERNATIONAL HOTEL
	18:00-19:00	Dinner		
	19:00-21:00	Posters pasted		Central nave(Second floor) ofNEU INTERNATIONAL HOTEL

June 12	8:00-22:00	Registration		NEU INTERNATIONAL HOTEL
	6:40-8:10	Breakfast		
	8:30-9:50	Plenary lecture		Ball Room of NEU INTERNATIONAL HOTEL
	9:50-10:10	Coffee break		
	10:10-12:00	General Sessions	Session I: Electrochemical Synthesis and Preparation	Conference Room 407 of NEU INTERNATIONAL HOTEL
			Session III: Nuclear and Solar Technology	Conference Room 402 of NEU INTERNATIONAL HOTEL
			Session IV:International Workshop on Molten Carbonates and Related Topics(IWMC2015)	Conference Room 405 of NEU INTERNATIONAL HOTEL
			Session V: Aluminum Production	Juxian Room of NEU INTERNATIONAL HOTEL
	12:10-13:00	Lunch		Xiangyue Restaurant of NEU INTERNATIONAL HOTEL
	14:00-17:00	Sightseeing		Imperial palace of Qing dynasty
	18:00-19:00	Dinner		
	19:30-21:00	Sightseeing boat		Hunhe Park
June 13	8:00-22:00	Registration		NEU INTERNATIONAL HOTEL
	6:40-8:10	Breakfast		
	8:30-10:00	Parallel Sessions	Session I: Electrochemical Synthesis and Preparation-I	Conference Room 407 of NEU INTERNATIONAL HOTEL
			Session II: Electrochemical Synthesis and Preparation-II	Conference Room 406 of NEU INTERNATIONAL HOTEL
			Session III: Nuclear and Solar Technology	Conference Room 402 of NEU INTERNATIONAL HOTEL
			Session IV:International Workshop on Molten Carbonates and Related Topics(IWMC2015)	Conference Room 405 of NEU INTERNATIONAL HOTEL
			Session V: Aluminum Production	Juxian Room of NEU INTERNATIONAL HOTEL
	10:00-10:20	Coffee break		
	10:20-12:00	Poster session		Central nave(Second floor) ofNEU INTERNATIONAL HOTEL
	12:00-13:00	Lunch		Xiangyue Restaurant of NEU INTERNATIONAL HOTEL
	14:00-16:10	Parallel Sessions	Session I: Electrochemical Synthesis and Preparation-I	Conference Room 407 of NEU INTERNATIONAL HOTEL
			Session II: Electrochemical Synthesis and Preparation-II	Conference Room 406 of NEU INTERNATIONAL HOTEL
			Session IV:International Workshop on Molten Carbonates and Related Topics(IWMC2015)	Conference Room 405 of NEU INTERNATIONAL HOTEL
			Session V: Aluminum Production	Juxian Room of NEU INTERNATIONAL HOTEL
	17:30-18:30	Closing remarks		
	19:00-21:00	Banquet		

Detailed schedule

June 11, Thursday

Opening remarks

Time	Event
8:30-9:30	Opening ceremony
9:30-9:50	Group photo taken
9:50-10:10	Coffee break

Plenary Lecture

Ball Room of NEU INTERNATIONAL HOTEL

Chairpersons: Catherine Bessada & Hongmin Zhu

Time	Event	Title	Speaker	Affiliation
10:10-10:50	Plenary Lecture I	Oxide reduction using electrolysis in $CaCl_2$-CaO or LiCl-Li_2O melt	Ryosuke O. Suzuki	Hokkaido University, Japan
10:50-11:30	Plenary Lecture II	Novel applications of molten organic salts in electrochemical processing of metals	Ramana Reddy	University of Alabama, U.S.A.

Parallel Sessions

Session I Electrochemical Synthesis and Preparation(Conference Room 407 of NEU INTERNATIONAL HOTEL)

Chairpersons: Sergey. A. Kuznetsov & Toshiyuki Nohira

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	A novel electrodeposition process of crystalline silicon using water-soluble KF-KCl molten salt	Toshiyuki Nohira	Kyoto University, Japan
14:30-14:50	General Presentation	Controllable preparation of nanostructured Si and /or Ge via electrolysis of oxides in molten chlorides	Wei Xiao	Wuhan University, China
14:50-15:10	General Presentation	Cathodic behaviour of Hf(IV) in NaCl-KCl-K_2HfF_6 molten salts	Yanke Wu	General Research Institute for Non-ferrous Metals, Beijing, China
15:10-15:30	General Presentation	Fabrication of Mg-Al-Pr alloys by co-deposition of Pr, Al and Mg ions in LiCl-KCl molten salts	Hao Tang	Material Institute of China Academy of Engineering physics, China
15:30-15:50	Coffee break			
15:50-16:20	Keynote Lecture	Synthesis of functional coatings in molten salts	Sergey. A. Kuznetsov	Kola science Centre of the Russian Academy of Sciences, Russia
16:20-16:40	General Presentation	Direct electrochemical reduction of the porous $CaTiO_3$ synthesized by the TiO_2-Na_2CO_3 and $CaCl_2$	Hongwei Xie	Northeastern University, China
16:40-17:00	General Presentation	Synthesis of coatings and crystals of refractory metal carbides on carbon fibers in molten salts	Vladimir S. Dolmatov	Kola science Centre of the Russian Academy of Sciences, Russia
17:00-17:20	General Presentation	Boriding of titanium via molten salt electrolysis near the phase transition temperature	Bixia Wang	Xi`an University of Architecture and Technology, China
17:20-17:40	General Presentation	Formation of molybdenum silicide via molten salt electrolysis	Osamu Takeda	Tohoku University, Japan
17:40-18:00	General Presentation	Electrochemical preparation of NbC powder in molten $CaCl_2$-NaCl	Qiushi Song	Northeastern University, China

Session II Structure and Properties of Molten Salts(Conference Room 406 of NEU INTERNATIONAL HOTEL)

Chairpersons: Catherine Bessada & Jinglin You

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	Towards a better description of speciation in molten salts: coupling between experimental and calculated high temperature NMR and XAFS spectra	Catherine Bessada	CNRS, UPR3079 CEMHTI, Univ Orleans, 1D Av recherche Scientifique, France
14:30-14:50	General Presentation	X-ray photoelectron spectroscopy of binary and ternary fluorides	Miroslav Boca	Institute of Inorganic Chemistry Slovak Academy of Sciences, Slovakia
14:50-15:10	General Presentation	Calculation of contour diagrams in molten salt systems	Shuanglin Chen	CompuTherm, LLC, U.S.A
15:10-15:30	General Presentation	Evaluation of the thermal physical properties of alkali fluoride eutectic molten salt	Xuehui An	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
15:30-15:50	Coffee break			
15:50-16:20	Keynote Lecture	Micro-structure study of inorganic melts by Raman spectroscopy and theoretical simulation methods	Jinglin You	Shanghai University, China
16:20-16:40	General Presentation	Fluoroacidity evaluation of molten fluoride media using diffusion coefficient of one electroactive specie: HfF_4	Mickael Kergoat	Paul Sabatier University Toulouse, France
16:40-17:00	General Presentation	Coordination structure of uranium / thorium in molten salt using X-ray absorption fine structure spectroscopy	Linjuan Zhang	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
17:00-17:20	General Presentation	Volume properties of fluoride molten salts	Blanka Kubikova	Institute of Inorganic Chemistry Slovak Academy of Sciences, Slovakia
17:20-17:40	General Presentation	Thermal and structural study of the system $KF-Al_2O_3$	A.Rakhmatullin	Conditions Extremes et Materiaux, France
17:40-18:00	General Presentation	Thermodynamic Re-optimization of the $CaO-P_2O_5$ System	Wei Xie	University of Science and Technology Beijing, China

Session III Nuclear and Solar Technology(Conference Room 402 of NEU INTERNATIONAL HOTEL)

Chairpersons: Louis Maksoud & Jianqiang Wang

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	High temperature molten salts research in thorium molten salts reactor nuclear energy system	Jianqiang Wang	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
14:30-14:50	General Presentation	A way to limit the corrosion in the Molten Salt Reactor concept: the salt redox potential control	Mathieu Gibilaro	Universite de Toulouse; UPS, CNRS; Laboratoire de Genie Chimique, France
14:50-15:10	General Presentation	Zirconium and hafnium separation with molten Salt technology	Liang Xu	Delft University of Technology, Netherlands
15:10-15:30	General Presentation	Research on corrosive property of mixture molten salt	Yuanwei Lu	Beijing University of Technology, China
15:30-15:50	Coffee break			
15:50-16:20	Keynote Lecture	Experimental investigation of chloride molten salts for thermal energy storage applications	Louis Maksoud	German Aerospace Center (DLR), Germany
16:20-16:40	General Presentation	Assessment of essential equipment and research on molten salts heat transfer performances using high-temperature molten salt loop	Zhongfeng Tang	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
16:40-17:00	General Presentation	Selective elemental separation of nuclear spent fuel surrogates by partial direct reduction and anodic dissolution in molten $CaCl_2$	Anthony Stevenson	University of Nottingham, U.K.
17:00-17:20	General Presentation	The electrochemical removal of impurity oxides on YSZ electrode in LiF-NaF-KF (FLiNaK) Melts	Miao Shen	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
17:20-17:40	General Presentation	Electrochemical behavior of Pr(III) on liquid Bi electrode and anodic dissolution of Bi-Pr-Li alloy in LiCl-KCl melts	Tingting Pei	Harbin Engineering University, China
17:40-18:00	General Presentation	Thermal physical properties of molten salts	Peng Zhang	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China

Session IV International Workshop on Molten Carbonates and Related Topics(IWMC2015) (Conference Room 405 of NEU INTERNATIONAL HOTEL)
Chairpersons: Michel Cassir & J. Robert Selman

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote lecture	A review of options for scale-up and optimization of a Direct Carbon Fuel Cell (DCFC)	J. Robert Selman	Illinois Institute of Tech., U.S.A.
14:30-14:50	General Presentation	Effects of SO_2 on MCFC	Massimiliano Della Pietra	ENEA-Casacia, Italy
14:50-15:10	General presentation	Wetting behavior of graphitic carbon in molten carbonate under DCFC (Direct Carbon Fuel Cell) conditions	J. Robert Selman	Illinois Institute of Tech., USA
15:10-15:30	General Presentation	AC impedance analysis with mass-transfer resistance in a molten carbonate fuel cell	Choong Gon Lee	Hanbat National Univ., Korea
15:30-15:50	Coffee break			
15:50-16:10	General presentation	Optimization of MCFC cathode: protective coatings, electrolyte modification & oxygen kinetics	A.Melendez-Ceballos	PSL Research Univ., France
16:10-16:30	General Presentation	Seebeck coefficient of gas electrodes in molten carbonate electrolyte	Xue Kang	Univ. of Sci. & Tech., Norway
16:30-16:50	General Presentation	Investigation of high concentrations of SO_2 at MCFC cathode inlet	Jaroslaw Milewski	Warsaw Univ. of Tech., Poland
16:50-17:10	General Presentation	Selected aspects of coal utilization in direct fuel cell technology	Magdalena Dudek	AGH-Univer. of Sci. & Tech., Poland

Session V Aluminum Production(Juxian Room of NEU INTERNATIONAL HOTEL)

Chairpersons: Geir Martin Haarberg & Xiangwen Wang

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	Challenges for controlling anode reaction products in multi-electrode aluminium smelting cells	Barry J. Welch	University of Auckland, University of New South Wales, New Zealand
14:30-15:00	Keynote Lecture	A transparent cell for photographic studies of physical chemistry in molten salt solutions	Bingliang Gao	Northeastern University, China
15:00-15:20	General Presentation	Cold-sprayed Cu-Ni-Fematerials as inert anodes for Al production in low-temperature KF-AlF_3 electrolyte	Gregory Goupil	INRS-Énergie Materiaux Telecommunications Canada
15:20-15:40	General Presentation	Numerical investigation on the impact of anode change on heat transfer and fluid flow in aluminum smelting cells	Qiang Wang	Northeastern University, China
15:40-15:50	Coffee break			
15:50-16:20	Keynote Lecture	Alcoa STARProbe™ - A reality of relocating analytical labs to smelter's potroom floor	Xiangwen Wang	Alcoa Technical Center, U.S.A.
16:20-16:50	Keynote Lecture	Mechanisms of fluoride loss and capture in aluminium smelting	Margaret Hyland	University of Auckland, New Zealand
16:50-17:10	General Presentation	Cathode structure optimization of 400kA prebaked anode aluminum reduction cell	Yungang Ban	N.E.U Engineering & Research Institute Co. Ltd, China
17:10-17:30	General Presentation	Potassium balance in 160kA and 200kA prebaked aluminum reduction cells	Youjian Yang	Northeastern University, China
17:30-17:50	General Presentation	A computational fluid dynamics (CFD) study of the effects of anode slot width on bubble behavior	Zhibin Zhao	Northeastern University, China

Session VI Ionic Liquid and its Application(VIP Room of NEU INTERNATIONAL HOTEL)

Chairpersons: Koichi Ui & Shimou Chen

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	Microstructure of ionic liquids at interfaces and its application in lithium ion battery	Shimou Chen	Institute of Process Engineering, Chinese Academy of Sciences, China
14:30-14:50	General Presentation	Addition effect of various tetraalkyl ammonium ions in electrolytes on electrochemical reactions of lead acid batteries	Nobumitsu Hirai	Suzuka College, Japan
14:50-15:10	General Presentation	Butylsulfate-based wide electrochemical window ionic salts for future electrochemical applications	Tzi-yi Wu	National Yunlin University of Science & Technology, Taiwan
15:10-15:30	General Presentation	Charge-discharge behavior of TiO_2/C negative electrode in Na[FSA]-[C3C1pyrr][FSA] ionic liquid for sodium secondary batteries	Changsheng Ding	Kyoto University, Japan
15:30-15:50	Coffee break			
15:50-16:20	Keynote Lecture	Electrochemical characteristics of natural graphite electrode in TFSA-based room-temperature ionic liquids	Koichi Ui	Iwate University, Japan
16:20-16:40	General Presentation	Preparation of graphene by graphite electro-exfoliation in ionic liquid-water mixtures	Junli Xu	Northeastern University, China
16:40-17:00	General Presentation	Simulation study of the effect of water on the structure and diffusion of 1-Butyl-3-methylimidazolium Trifluoromethanesulfonate ionic liquids	Guocai Tian	Kunming University of Science and Technology, China
17:00-17:20	General Presentation	Electrodeposition of cobalt from urea-acetamide-LiCl low temperature molten salt	Min Li	Northeastern University, China
17:20-17:40	General Presentation	Iodide-based ionic liquids as potential electrolytes for Dye-sensitized solar cells	Tzi-yi Wu	National Yunlin University of Science & Technology, Taiwan

June 12, Friday

Plenary Lecture

Ball Room of NEU INTERNATIONAL HOTEL

Chairpersons: Geir Martin Haarberg & Jilai Xue

Time	Event	Title	Speaker	Affiliation
8:30-9:10	Plenary Lecture III	Revival & new trends in molten carbonates science and applications	Michel Cassir	PSL Research University, France
9:10-9:50	Plenary Lecture IV	Theory and techniques of deep energy conservation of aluminum electrolysis	Naixiang Feng	Northeastern University, China
9:50-10:10	Coffee break			

Parallel Sessions

Session I Electrochemical Synthesis and Preparation-I (Conference Room 407 of NEU INTERNATIONAL HOTEL)

Chairperson: Toshihide Takenaka

Time	Event	Title	Speaker	Affiliation
10:10-10:40	Keynote Lecture	The metal alloy prepared by molten salt electrolysis	Milin Zhang	Harbin Engineering University, China
10:40-11:10	Keynote Lecture	Electrodeposition of metals from molten salts	Geir Martin Haarberg	Norwegian University of Science and Technology, Norway
11:10-11:30	General Presentation	Oxygen in halide melts containing niobium compounds: influence on the composition of cathodic deposits	Sergey A. Kuznetsov	Kola Science Centre of Russian Academy of Sciences, Russia
11:30-11:50	General Presentation	Electrorefining of high carbon ferromanganese in molten salt to produce pure manganese	Saijun Xiao	Anhui University of Technology, China
11:50-12:10	General Presentation	Electrodeposition of tantalum coatings on Ni-Ti alloy substrate	Ekaterina. A. Marenkova	Kola Science Centre of Russian Academy of Sciences, Russia

Session III Nuclear and Solar Technology (Conference Room 402 of NEU INTERNATIONAL HOTEL)

Chairperson: Zhongfeng Tang

Time	Event	Title	Speaker	Affiliation
10:10-10:40	Keynote Lecture	Achieving actinide separation over lanthanides by aluminium cathode based electrolysis in LiCl-KCl eutectic	Weiqun Shi	Institute of High Energy Physics, Chinese Academy of Sciences, China
10:40-11:00	General Presentation	The application of molten salt electrochemical technology in TMSR fuel cycle	Dewu Long	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
11:00-11:20	General Presentation	Cyclic voltammetry of CeO_2-X (X=ZnO, Bi_2O_3, NiO) powder in LiCl melt	Kui Liu	Institute of High Energy Physics, Chinese Academy of Sciences, China
11:20-11:40	General Presentation	Electrochemical behavior of La on liquid Bi electrode in molten salts	Qunqun Gu	Harbin Engineering University, China
11:40-12:00	General Presentation	Study of thermodynamic properties of Ce-Zn alloys and electrochemical extraction of cerium assisted by zinc in LiCl-KCl eutectic	Lixia Luo	Institute of High Energy Physics, Chinese Academy of Sciences, China

Session IV International Workshop on Molten Carbonates and Related Topics (IWMC2015) (Conference Room 405 of NEU INTERNATIONAL HOTEL)

Chaipersons: Armelle Ringuede & Jonghee Han

Time	Event	Title	Speaker	Affiliation
10:10-10:40	General presentation	The polarization of the Ni electrode in the molten carbonate electrolysis cell (MCEC)	Lan Hu	KTH Royal Institute of Technology, Sweden
10:40-11:00	General Presentation	Molten carbonate electrolysis (MCE) for resource and environmental sustainability	Dihua Wang	Wuhan University, China
11:00-11:20	General Presentation	Methodological approach and challenges of CO_2 valorization in molten carbonates	Michel Cassir	PSL Research University, France
11:20-11:40	General Presentation	Electrochemical reduction of CO_2 to carbon nanomaterials in molten alkali carbonates	Happiness V. Ijije	University of Nottingham, U. K.
11:40-12:00	General Presentation	Electrochemical conversion CO_2 to carbon and oxygen gas in the LiF-Li_2CO_3 systems	Liangxing Li	Northeastern University, China

Session V Aluminum Production(Juxian Room of NEU INTERNATIONAL HOTEL)

Chairperson: Yanqing Lai

Time	Event	Title	Speaker	Affiliation
10:10-10:40	Keynote Lecture	Chemistry and electrochemistry of chromium compounds in cryolite-based melts	Pavel Fellner	Slovak University of Technology in Bratislava, Slovakia
10:40-11:10	Keynote Lecture	Re-understanding of the Bath Temperature of Aluminium Reduction Cell	Xiquan Qi	N.E.U Engineering & Research Institute Co. Ltd, China
11:10-11:30	General Presentation	Preparation of Al-Sc master alloy in Na_3AlF_6-K_3AlF_6-AlF_3 molten salt by electrolysis	Zhongliang Tian	Central South University, China
11:30-11:50	General Presentation	The characteristics of complex aluminum electrolyte system	Haitang Qin	Zhongfu Industry Co., Ltd, Henan, China
11:50-12:10	General Presentation	DFT simulation on electrodeposition of scandium at liquid aluminum cathode from fluoride melts	Yi Qian	University of Science and Technology Beijing

June 13, Saturday

Parallel Sessions

Session I Electrochemical Synthesis and Preparation-I (Conference Room 407 of NEU INTERNATIONAL HOTEL)

Chairpersons: Dihua Wang & George Chen

Time	Event	Title	Speaker	Affiliation
8:30-9:00	Keynote Lecture	Nano-structured carbon from graphite via molten salt electrochemistry	Carsten Schwandt	University of Nizwa, Oman
9:00-9:20	General Presentation	Electrodeposition of titanium at liquid metal cathodes in molten chlorides	Handong Jiao	University of Science and Technology Beijing, China
9:20-9:40	General Presentation	Production of AlN crystal by reduction-nitridation in molten salt	Kiwamu Katagiri	Tohoku University, Japan
9:40-10:00	General Presentation	Antimony alloys as high performance cathode for liquid metal battery	Haomiao Li	Huazhong University of Science and Technology, China
10:00-10:20	Coffee break			

Session II Electrochemical Synthesis and Preparation-II (Conference Room 406 of NEU INTERNATIONAL HOTEL)

Chairpersons: Qian Xu & Bing Li

Time	Event	Title	Speaker	Affiliation
8:30-9:00	Keynote Lecture	Preparation of vanadium by electroreduction of V_2O_5 in molten salt $CaCl_2$-NaCl	Shulan Wang	Northeastern University, China
9:00-9:20	General Presentation	Electrochemical reduction of SiO_2 granules on liquid Zn cathode in molten $CaCl_2$	Kouji Yasuda	Kyoto University, Japan
9:20-9:40	General Presentation	Electrochemical preparation of V_2O_3 from $NaVO_3$ and its reduction mechanism	Wei Weng	University of Science and Technology Beijing, China
9:40-10:00	General Presentation	Investigation on the current efficiency of Nd electrolysis from LiF-NdF_3-Nd_2O_3 melts	Bing Li	East China University of Science and Technology, China
10:00-10:20	General Presentation	Direct electrolytic preparation of chromium metal using alkali-alkaline-earth metal chloride melts distribution	Zhengwei Liu	Institute of Process Engineering, Chinese Academy of Sciences, China
10:20-10:30	Coffee break			

Session III Nuclear and Solar Technology (Conference Room 402 of NEU INTERNATIONAL HOTEL)

Chairperson: Weiqun Shi

Time	Event	Title	Speaker	Affiliation
8:30-9:00	Keynote Lecture	Electrochemical and coordination behaviors of metal ions in molten salts: implications for pyrochemical reprocessing	Hui He	China Institute of Atomic Energy, China
9:00-9:20	General Presentation	Electrochemical formation of Mg-Lu films and Mg-Lu alloys in molten LiCl-KCl salts	Tao Jiang	Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics, China
9:20-9:40	General Presentation	Electrochemical behavior of lanthanides and actinides on a liquid Ga electrode in molten chlorides melts	Tsuyoshi Murakami	Central Research Institute of Electric Power Industry (CRIEPI), Japan
9:40-10:00	General Presentation	Electrochemical behavior of La(III) on the zinc-coated and bismuth-coated W electrodes in LiCl-KCl eutectic	Yalan Liu	Institute of High Energy Physics, Chinese Academy of Sciences, China
10:00-10:20	Coffee break			

Session IV International Workshop on Molten Carbonates and Related Topics (IWMC2015) (Conference Room 405 of NEU INTERNATIONAL HOTEL)

Chairperson: Carina Lagergren

Time	Event	Title	Speaker	Affiliation
8:30-8:50	General Presentation	Raman spectra and melting behavior of molten carbonate coexisting with rare-earth doped ceria	Minoru Mizuhata	Kobe University, Japan
8:50-9:10	General Presentation	A combined electrochemical & modeling approach of composite carbonate/oxide electrolytes for hybrid fuel cells	Armelle Ringuede	PSL Research University, France
9:10-9:30	General Presentation	Alkali-carbonates (Singly, binary and ternary alkaline carbonates) effects @ doped ceria as a composite electrolyte for Low temperature (300-600 ^{o}C) solid oxide fuel cell	Amjad Ali	COMSATS Institute of Information Technology, Pakistan
9:30-9:50	General Presentation	Carbon dioxide absorption behavior of surface-modified lithium orthosilicate / potassium carbonate coexistence system prepared with ball-milling	Kyohei Kanki	Kobe University, Japan
9:50-10:20	Coffee break			

Session V Aluminum Production(Juxian Room of NEU INTERNATIONAL HOTEL)

Chaiperson: Xiquan Qi

Time	Event	Title	Speaker	Affiliation
8:30-9:00	Keynote Lecture	CFD modelling of bath flow in aluminium reduction cells: A multi-scale modeling approach	Yuqing Feng	Commonwealth Scientific and Industrial Research Organisation, Australia
9:00-9:20	General Presentation	Numerical simulation of the anode voltage drop in an aluminum reduction cell	Tuofu Li	Northeastern University, China
9:20-9:40	General Presentation	Numerical simulation of flow field for the 6 kA new rare earth electrobath	Yongfu Wu	Inner Mongolia university of Science and technology, China
9:40-10:00	General Presentation	Research on the behaviour of anodic bubble in a laboratory transparent electrolysis cell	Yipeng Huang	Northeastern University, China
10:00-10:20	Coffee break			

Poster session

10:20-12:00, **Central nave(Second floor)** of NEU INTERNATIONAL HOTEL

Parallel Sessions

Session I Electrochemical Synthesis and Preparation-I (Conference Room 407 of NEU INTERNATIONAL HOTEL)

Chairperson: Shulan Wang

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	Several applications of molten salt electrochemistry to energy storage materials and technologies	Kai Jiang	Huazhong University of Science and Technology, China
14:30-14:50	General Presentation	Electrowinning of copper-neodymium alloys from mixed neodymium oxide-copper oxide in molten fluoride media	Mickael Kergoat	Paul Sabatier University Toulouse, France
14:50-15:10	General Presentation	Development of a lab-scale production process for solar grade silicon via molten salt electrolysis	Xiao Yang	Kyoto University, Japan
15:10-15:30	General Presentation	Investigation on the reaction progress between zirconium and cuprous chloride for in-situ preparing LiCl-KCl-$ZrCl_4$ melt	Yanqing Cai	Northeastern University, China
15:30-15:50	General Presentation	Anodic dissolution behaviour of tungsten carbide in NaCl-KCl molten salt	Liwen Zhang	Beijing University of Technology, China
15:50-16:10	Coffee break			

Session II Electrochemical Synthesis and Preparation-II (Conference Room 406 of NEU INTERNATIONAL HOTEL)

Chairperson: Wei Han

Time	Event	Title	Speaker	Affiliation
14:00-14:30	Keynote Lecture	Electrochemical preparation of carbon/Cr-O-C multilayer coatings on stainless steel in molten LiCl-KCl-K_2CO_3	Qian Xu	Shanghai University, China
14:30-14:50	General Presentation	Influence of Ba^{2+} cations on the electrochemical behavior of the Cr(III)/Cr(II) redox couple in alkali halide melts	Yu.V. Stulov	Kola Science Centre of Russian Academy of Sciences, Russia
14:50-15:10	General Presentation	Electrochemical reduction of Si(IV) and Ti(IV) in cryolite molten salt	Aimin Liu	Northeastern University, China
15:10-15:30	General Presentation	Electrochemical preparation of Ni from NiO in molten sodium hydroxide	Jianbang Ge	University of Science & Technology Beijing, China
15:30-15:50	General Presentation	Protective and catalytic coatings based on refractory metal carbides	Anton R. Dubrovskiy	Kola Science Center of Russian Academy of Sciences, Russia
15:50-16:10	Coffee break			

Session IV International Workshop on Molten Carbonates and Related Topics (IWMC2015) (Conference Room 405 of NEU INTERNATIONAL HOTEL)
Chaiperson: Minoru Mizuhata

Time	Event	Title	Speaker	Affiliation
14:00-14:20	General Presentation	Metals preparation through electrochemical splitting the solid oxides in molten carbonate	Xinhua Chen	Wuhan University, China
14:20-14:40	General Presentation	Carbonization of waste biomass in molten salts to produce capacitive carbon	Beihu Lu	Soochow University, China
14:40-15:00	General Presentation	Electrochemical investigation of Li_2CO_3 discharge behavior on a tungsten electrode in molten LiCl-LiF system	Baoguo Zhang	University of Science and Technology Liaoning, China
15:00-15:20	General Presentation	CO_2 decomposition by ZrO_2 anode and molten salt electrolysis in $CaCl_2$-CaO or LiCl-Li_2O	Ryosuke O. Suzuki	Hokkaido University, Japan
15:20-15:40	General Presentation	Demonstration of direct oxidation of pyrolysis bio-oil from olive mill waste in a solid oxide fuel cell	Amal Elleuch	University of Sfax, Tunisia
15:40-16:10	Coffee break			

Session V Aluminum Production(Juxian Room of NEU INTERNATIONAL HOTEL)

Chaiperson: Yuqing Feng

Time	**Event**	**Title**	**Speaker**	**Affiliation**
14:00-14:30	Keynote Lecture	Technology optimization and improvement for energy saving of 240kA aluminum reduction cells	Xuemin Liang	Central South University Institute Co. Ltd.
14:30-14:50	General Presentation	Molten system NaF-KF-AlF_3-Al_2O_3 - transport numbers and structure	Pavel Fellner	Slovak University of Technology in Bratislava, Slovakia
14:50-15:10	General Presentation	Thermodynamics and kinetics of commercial alumina chlorination in fluidized bed	Junling Zhang	Institute of Process Engineering, Chinese Academy of Sciences, China
15:10-15:30	General Presentation	Effect of cryolite ratio on bath/sodium penetration and changes inporous structures of graphite cathode materials during aluminum electrolysis	Qiwei Tan	University of Science & Technology Beijing, China
15:30-15:50	General Presentation	Experimental and theoretical approaches of speciation in NaF-AlF_3 melts: high temperature NMR measurements, molecular dynamics and DFT calculations	Kelly Machado	CNRS, UPR3079 CEMHTI, Univ Orleans; UPMC Univ Paris 06, CNRS, ESPCI, France
15:50-16:10	Coffee break			

Poster list

No.	Title	Presenter	Affiliation
S-P-1	Effect of oxidants CrF_3 on the corrosion of pure metals in molten (Li,Na,K)F	Yanli Wang	Institute of Metal research, Chinese Academy of Sciences, China
S-P-2	Electrochemical corrosion behavior of Ni-based alloy GH3535 in molten (Li,Na,K)F at 700 ^oC	Huijun Liu	Institute of Metal Research, Chinese Academy of Sciences, China
S-P-3	Electrochemical investigation on the stable iron species in molten FLINAK	Hao Peng	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
S-P-4	Viscosity properties of molten KNO_3-$NaNO_2$-$NaNO_3$ ternary system	Jinhui Cheng	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
S-P-6	Experimental determination of the phase relationship of CaO-SiO_2-5%MgO-20%Al_2O_3 -TiO_2 system	Junjie Shi	Northeastern University, China
S-P-7	Physical properties of KCl-NaCl and KCl-NaCl-$MgCl_2$ melts	Xun Li	China Institute of Atomic Energy, China
S-P-8	The reason for the abnormal ratio of the standard rate constants of charge transfer in chromium-containing molten salts	Vyacheslav G. Kremenetsky	Kola Science Centre of Russian Academy of Sciences, Russia
S-P-9	Molecular simulation of the thermal and transport properties of alkila chloride salts	Gechuanqi Pan	Sun Yat-Sen University, China
S-P-11	Assessment of removing oxyanions and corrosive metal ions in molten fluoride by active metals	Yang Wang	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
S-P-12	Quantum chemistry calculation on ionic structures of NaF-KF-AlF_3 molten salt	Yanan Zhang	University of Science and Technology Beijing, China
S-P-13	Preparation and properties of magnesium/calcium chloride composites as high temperature thermal energy storage and transfer materials	Heqing Tian	SunYat-sen University, China
S-P-14	Effect of artificial impurities for ageing testing of zirconium materials, Incoloy 800HT and Haynes®230 in FliNaK	Miroslav Boca	Institute of Inorganic Chemistry Slovak Academy of Sciences, Slovakia
S-P-15	Thermodynamic description of the CsF-ThF_4 and CsF-UF_4 systems	Kun Wang	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
S-P-16	Critical assessment and thermodynamic modeling of Na_2O-P_2O_5 system	Zhanmin Cao	University of Science and Technology Beijing, China

E-P-1	Effects of pulse peak current density on morphology of iridium from NaCl-KCl-CsCl-$IrCl_3$ melt	Lei Li	National University of Defense Technology, China
E-P-2	Rhenium coatings prepared from chlorides molten salts by electrodeposition	Jiangfan Wang	National University of Defense Technology, China
E-P-3	Ultrafine grain iridium coating prepared by electrodeposition form Cs_3IrCl_6-NaCl-KCl-CsCl molten salts	Yongle Huang	National University of Defense Technology, China
E-P-4	Electro-deposition of carbon films on nickel wire in a LiCl-KCl-$CaCl_2$-CaC_2 melt	Ying Chen	Northeastern University, China
E-P-5	Electrochemical deposition of zirconium diboride coatings in molten chloride salts	Qian Wang	Institute of Metal Research, Chinese Academy of Sciences, China
E-P-6	Influence of the second coordination sphere on the standard rate constants of charge transfer for the redox couple Ti(IV)/Ti(III) in chloride-fluoride melt	Daria A. Vetrova	Kola science Centre of the Russian Academy of Sciences, Russia
E-P-7	Electrochemical synthesis of zirconium silicides directly from $ZrSiO_4$	Hongxia Liu	Northeastern University, China
E-P-8	Electrochemical performance of titanium carbide-derived carbon prepared by molten salt electrolysis	Huan Liu	Northeastern University, China
E-P-9	Study on the preparation of titanium and titanium carbide-derived carbon by molten salt electrolysis process	Rongxia Zhang	Northeastern University, China
E-P-10	Preparation of Titanium by Strontium Thermoelectric Reduction in SrF_2-NaF Molten Salt	Yapeng Kong	Northeastern University, China
E-P-11	Electrochemical deposition of tin in molten LiCl-KCl at 450 ˚C	Bo Qin	Norwegian University of Science and Technology, Norway
E-P-12	Electro-recycling metallic tungsten from hard metal scrap	Na Wang	Beijing University of Technology, China
E-P-14	Influence of current density on metal fog formation of Li deposition in LiCl-KCl	Naohiro Koiso	Kansai University, Japan
E-P-15	Electrochemical reduction of various Ti compounds in MgF_2-CaF_2 above 1373K	Kakeru Shimokawa	Kansai University, Japan
E-P-16	Electrochemical exfoliation of graphite into high specific surface graphene in molten salt	Shu Huang	Huazhong University of Science and Technology, China
M-P-1	Effects of minor alloying elements (Si, Mn and Al) on the corrosion resistance of cathode current collector materials in molten carbonate at 650℃	Soo Hoon Ahn	Korea Advanced Institute of Science and Technology (KAIST), Korea
M-P-2	Operating characteristics of molten carbonate fuel cell (MCFC) at marine environments	Min Goo Kang	Korea Institute of Science and Technology, Korea
M-P-3	Increasing phase stability of the alpha-$LiAlO_2$ for molten carbon fuel cell using mechanochemical processing	In Yea Kim	Kola Science Centre of Russian Academy of Sciences, Russia

M-P-4	Oxygen reduction at the metal | solid oxide electrolyte interface	Andrzej Raźniak	AGH University of Science and Technology, Poland
M-P-5	Accelerated tests for MCFC	Massimiliano Della Pietra	ENEA-Casacia, Italy
M-P-6	Performance of CrN-Coated SS316L as protective layer in molten carbon fuel cell	You Na Lee	Gachon Univ., Korea
I-P-1	Electrodeposition of inermetallic compound (Cu5Zn8) from zinc oxide in 1-ethyl-3-methylimidazolium fluoride ionic liquids	Wencai He	Northeastern University, China
I-P-2	Molecular dynamics simulations study of effects of ethanol on the structural and properties of imidazolium-based ionic liquid	Guocai Tian	Kunming University of Science and Technology, China
I-P-3	Simple and clean synthesis: imidazolium based ionic liquids as attractive solvents for native chemical ligation of peptides	Ming Chen	University of Bonn, Germany
N-P-1	One step synthesis of FLiBe molten salt	Guoqiang Zong	Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, China
N-P-2	Kinetics of leaching iron from SoG-Si cutting slurry waste with hydrochloric acid	Yang Liu	Northeastern University, China
N-P-3	The kinetics of leaching iron and phosphorus from rice husk ash in hydrochloric acid solution	Jingqiang Wang	Northeastern University, China
N-P-4	Pretreatments and pelletization of diatomite and its potential use as photocatalyst carriers	Puqi Jia	Northeastern University, China
N-P-5	The electrochemical behavior of Samarium (III) in the LiCl-KCl eutectic	Rushan Lin	China Institute of Atomic Energy, China
N-P-6	High-corrosion-resistant materials in LiCl-KCl melts for pyrochemical reprocessing	Ning Wang	China Academy of Engineering Physics, China
N-P-7	Electrochemical behavior of Ce(III) in LiCl-KCl eutectic on the Liquid Ga electrode	Youqun Wang	China Institute of Atomic Energy, China
N-P-8	Electrolysis removal of impurity Cr^{3+} existing in LiF-NaF-KF melts	Miao Shen	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
N-P-9	Thermal storage investigation of HTS high temperature molten salt by absorption spectroscopy	Tao Su	Shanghai Institute of Applied Physics, Chinese Academy of Sciences, China
N-P-10	Thermodynamic investigation of the NaF-NaCl-$NaNO_3$ system for solar thermal energy storage	Qiang Peng	GuangDong Pharmaceutical University
N-P-11	Synthesis and characterization of cerium-doped titanium dioxide/diatomite integrated photocatalytic pellets for the adsorption and degradation of tetracycline hydrochloride using solar light	Yan Chen	Northeastern University, China
N-P-12	Electrochemical formation of Cu-Yb alloy films on a Cu electrode in the eutectic LiCl-KCl melts	Bin Liu	Harbin Engineering University, China
N-P-13	The electrochemical behavior of yttrium ion at solid tungsten and nickel electrode and the selective preparation of Y-Ni intermetallic compounds from LiCl-KCl melts	Mei Li	Harbin Engineering University, China

N-P-14	Electrochemical behavior of magnesium on W and Ni electrodes in eutectic LiCl-KCl melts	Wei Han	Harbin Engineering University, China
N-P-15	Electrochemical extraction of Er(III) from LiCl-KCl melts and thermodynamic properties of Cu-Er intermetallic compounds	Yingcai Wang	Harbin Engineering University, China
A-P-1	Surface properties of coconut shell activated carbon and adsorptivity of the activated carbon for K^+ in aluminum electrolyte modified by high temperature treatment	Jianfeng Hou	Northeastern University, China
A-P-2	A laboratory study of anodic slots effects on bubble behavior and cell voltage using a transparent electrolysis cell	Zhibin Zhao	Northeastern University, China
A-P-3	Numerical simulation of flash vaporization in alumina production	Chao Lv	Northeastern University, China
A-P-4	Extracting MgO from the carbon-reduced slag of nickel laterite ores in molten sodium hydroxide	Tiepeng Li	University of Science and Technology Beijing, China
A-P-5	Production of Ti sponge form aluminothermic reduction of $KTiF_6$	Bo Li	Northeastern University, China
A-P-6	Thermal-electric field optimization of 600kA prebaked anode aluminum reduction cell	Yungang Ban	N.E.U Engineering & Research Institute Co.Ltd, China
A-P-7	Numerical simulation of thermoelectric field of an aluminum reduction cell with a slotted cathode carbon block	Wenju Tao	Northeastern University, China