Hall No.2X Program (S4&S6)

Time	Event	Presenter
Stage I, Chaired by: JIANG Zhengwu, Joao Castro-Gomez		
8:30-8:48	In-situ preparation of nano $CaCO_3$ seeding in cement paste	ZHOU Xiangming
8:48-9:06	Synergistic $CaCO_3$ polymorph regulation and ultrasonic dispersion for enhanced mineral carbonation: Overcoming core-shell mass transfer limitations	CHANG Jun
9:06-9:24	Durability of GGBS with alkaline earth activators in saline environments	YI Yaolin
9:24-9:42	Nano $CaCO_3$ seeding for improving LC^3 performance through in-situ carbonation	HOU Pengkun
9:42-10:00	Impact of chromium ion solid solution behavior on carbonation reactivity and hardening characteristics in low calcium carbonatable binder	ZHU Jianping
10:00-10:12	Microstructure of carbonated calcium silicate and its correlation to mechanical properties	LIU Zhichao
10:12-10:30	Coffee/Tea Break	
Stage II, Chaired by: ZHOU Xiangming, CHANG Jun		
10:30-10:48	Carbon-Negative building materials production by CO_2 mineralization of alkaline industrial residues: Design, reaction mechanism, and industrial applications	JIANG Zhengwu
10:48-11:06	Supercritical CO_2 carbonation hardening: Bioinspired waste-based binders for circular cement	Joao Castro-Gomez
11:06-11:24	Modification of LDH to enhance chloride ion binding ability and early age strength of cement-based materials	GAO Xiaojian
11:24-11:42	Research and development of high-performance preparation technology for carbon sequestration building materials	FANG Jingrui
11:42-11:54	CO_2-utilized engineered marble material: A novel approach for passive radiative cooling	YANG Lu
11:54-12:06	Enhanced carbon sequestration and homogeneity in carbonatable concrete using artificial aggregates with high-connectivity pores	LIU Yunpeng
12:06-13:30	Lunch	
Stage III, Chaired by: GAO Xiaojian, FAN Daorong		
13:30-13:48	Accelerated carbonation of phosphorous slag driven by grinding force	HE Xingyang
13:48-14:06	Fundamental research and production demonstration of solid waste-based building materials for carbon sequestration	GUAN Xuemao (LIU Songhui)
14:06-14:24	Advanced carbonation technologies for solid wastes	SHEN Peiliang
14:24-14:36	Carbonation of C-S-H	TANG Shengwen
14:36-14:48	Carbonation reactivity of synthetic $CaO{\cdot}Al_2O_3{\cdot}SiO_2$ glasses	LI Chen
14:48-15:00	Proposal of a new pre-treatment method on accelerated carbonation of hardened cement paste	CHENG Luge
15:00-15:12	Research and practice on the absorbing of carbon dioxide in ready-mixed concrete mixing	WANG Hui
15:12-15:24	Development and performance evaluation of cement-based composites modified by novel magneto-responsive polymer latex	LU Zichen
15:24-15:36	Stabilization of metastable calcium carbonate polymorphs on the surface of recycled cement paste particles	ZHOU Qingsong
15:36-15:48	Pilot-scale carbonation of recycled aggregates using industrial flue gas: From laboratory to factory trials	WANG Dianchao
15:48-16:00	Coffee/Tea Break	
Stage IV, Chaired by: HAO Tingyu, CHEN Zheng		
16:00-16:18	The first industrial demonstration of large-scale cement Oxy-Fuel combustion technology integrated with carbon capture	PENG Xueping
16:18-16:36	Cement-based photothermal metamaterials	SHE Wei
16:36-16:54	Decarbonizing cement production: A perspective on emerging methodologies and technological pathways	LUO Jingshan
16:54-17:06	Technical research on low-carbon cement clinker calcination with hydrogen energy coupled with alternative fuels	FAN Daorong
17:06-17:18	CNTs synthesis from cement plant CO_2 via molten salt electrochemistry for enhanced cement-based materials	FAN Zeyu
17:18-17:30	Multiple solid waste-based building material products prepared via accelerated carbonation	LUO Jingjing

Cont'd Hall No.2X Program (S4&S6)

Time	Event	Presenter
17:30-17:42	The research progress on NH_3-SCR technology and its application in cement industry	ZHANG Leyu

Hall No.2Y Program (S2)

Time	Events	Presenter
Stage I, Chaired by: LI Yue, Payam Shafigh		
8:30-8:48	Towards near-zero carbon fully recycled concrete: Concept and design	XIAO Jianzhuang
8:48-9:06	Durability of 100% recycled aggregate concrete in marine environments: Frame structures performance	ZHAO Yuxi
9:06-9:24	Mechanism and mitigation of alkali-silica reaction in alkali-activated materials	ZHANG Yamei（Wang Wei）
9:24-9:36	Green and low-carbon production technology of precast concrete elements: From design of multi-energy complementary curing system to optimization of concrete mixture proportion and steam curing regime	ZHANG Tongsheng
9:36-9:48	Tensile and flexrual performances of pre-cracked UHPC under the coupled actions of sustained loading and corrosive media	YAO Yiming
9:48-10:00	Investigation on surface nanostrengthening of carbonated SCMs blended cement via sequential in-situ mineralization	WU Cong
10:00-10:12	Minute-long creep and creep recovery of early-age cementitious materials under different compressive stress levels	LIANG Siming
10:12-10:30	Coffee/Tea Break	
Stage II, Chaired by: ZHAO Yuxi, CHEN Qing		
10:30-10:48	Deterioration of concrete mechanical properties and reinforcement corrosion in high-altitude and complex mountains	LI Yue
10:48-11:06	Structural lightweight aggregate concrete: A concrete for sustainable construction	Payam Shafigh
11:06-11:18	Bioinspired mineralized double-walled microcapsules for performance enhancement in self-healing cementitious materials	WANG Xianfeng
11:18-11:30	Three-dimensional characterization of driving-induced cracks in coastal PHC pipe piles using industrial CT and chloride transport under initial damage	ZHU Wen
11:30-11:42	Design and preparation of metal-organic ftamework and its imorovement on the performance of cement based materials	LIU Xiao
11:42-11:54	Hybrid-fiber modified high-volume fly ash ECC: Regulation mechanism from rheology to microstructure	WANG Zhenbo
11:54-12:06	Study of mechanical properties and hydration process of solid waste-based ultra-high performance concrete	MU Xinli
12:06-13:30	Lunch	
Stage III, Chaired by: LIU Juanhong, ZHU Jianping		
13:30-13:48	Key technologies and engineering applications for enhancing crack resistance and durability in high dam concrete structures	LI Wenwei
13:48-14:06	Investigation into the material design and performance characteristics of carbonate-aluminate cement-based concrete	DONG Biqin
14:06-14:24	The critical role of global construction chemicals company to contribute the global sustainability in concrete industries	Justin Kim
14:24-14:36	Research on the preparation of engineered cementitious composites (ECC) using iron tailings sand	FENG Xiaoxin
14:36-14:48	Investigation into crack-resistant property of face slab concrete for high face rockfill dams in cold and arid region	DONG Yun
14:48-15:00	Pavement performance of a novel solid waste base utilizing iron tailings	ZHANG Lina
15:00-15:12	Damage mechanism and improvement technologies of structural concrete exposed to thermal fatigue cycles	YANG Zhiqiang
15:12-15:24	Influence of NaCl on the ice formation process in mortar based on LF-NMR	Tian Yupeng
15:24-15:36	Evolutions of phase assemblage and microstructure of the surface layer of seawater sea-sand concrete incorporating SCMs in real marine environment	FENG Guangyan
15:36-15:48	The ultra-early age cement paste creep model based on variable-order fractional derivatives	JIA Yali
15:48-16:00	Coffee/Tea Break	
Stage IV, Chaired by: Justin Kim, ZHAO Qingxin		
16:00-16:18	Applied research and industrialization of metal tailings-based solid waste cementitious materials in civil and mining engineering	LIU Juanhong

Cont'd Hall No.2Y Program (S2)

Time	Events	Presenter
16:18-16:36	Fatigue damage mechanism and service life improvement technology of high-speed railway ballastless track concrete	LI Huajian
16:36-16:48	Influence of biochar on the rheology and early hydration of 3D printed concrete	CHEN Tiefeng
16:48-17:00	Creep behavior of internally-cured UHPC with porous lightweight aggregate or calcined bauxite aggregate	LIU Yalin
17:00-17:12	Mechanical and autogenous shrinkage properties of uhpc made with crushed fine and coarse aggregates	ZHU Jiang
17:12-17:24	Sulfate resistance optimization of supersulfated and portland slag cement in ternary slag-anhydrite-clinker system	SUN Huaqiang
17:24-17:36	Chloride binding of barium-containing zeolite corrosion inhibitor in Portland cement mortar	LIU Xiaohai
17:36-17:48	A framework for durable design of marine concrete structures integrating material composition and environmental factors	FENG Taotao

Hall No.2Z Program (S3)

Time	Events	Presenter
Stage I, Chaired by: WEI Jiangxiong, WANG Chong		
8:30-8:48	Electromagnetic protecting cementitious material and structure	MA Guowei
8:48-9:06	Microbial-synergistic carbon-fixing steel slag cementitious material	QIAN Chunxiang
9:06-9:24	Ultra-high strength and ultra-high ductility fiber-reinforced cementitious composites	DAI Jianguo
9:24-9:36	Marine organism-inspired functional adhesive protective materials	ZHANG Jiawen
9:36-9:48	Performance and mechanism of multi-functional/ultra-high performance seawater and sea sand concrete for marine infrastructure	DONG Sufen
9:48-10:00	The barrier performance of self-hardening vertical barrier materials for Cr (VI)	HUANG Xiao
10:00-10:12	Mechanism and micromechanical model of shrinkage and creep of high-strength lightweight aggregate concrete (HSLWAC) using solid waste-based lightweight aggregate	SUN Yijia
10:12-10:30	Coffee/Tea Break	
Stage II, Chaired by: QIAN Chunxiang, GE Zhi		
10:30-10:48	Formation mechanic and modelling of multi-scale non-uniform stress/strain and cracking in cement and concrete	WEI Jiangxiong
10:48-11:06	Structure design of electromagnetic wave absorbing functional building materials	XIE Shuai
11:06-11:18	Multiscale macro-cellulose fibers reinforced UHPC by synergistic optimization of workability, strength and volume stability	CHEN Yuxuan
11:18-11:30	Magneto-induced distribution of steel fibers in 3D printing concrete	JIAO Dengwu
11:30-11:42	Transformation of C-S-H in UHPC under sustained sub-elevated temperature	FU Tengfei
11:42-11:54	Effect of graphene oxide on performance and microstructure of composite foamed gypsum-cement sound-absorbing materials	LIU Junchao
11:54-12:06	Design and service performance of multi-binder repair materials under combined effects of loading and seawater wet-dry cycles	HUANG Haoliang
12:06-13:30	Lunch	
Stage III, Chaired by: ZHANG Yunsheng, LI Hui		
13:30-13:48	Optimized distribution of nano-Fe_3O_4 electromagnetic wave absorbers in cement-based materials via high-stability foam loadings	YU Qijun
13:48-14:06	Application of slag sulphoaluminate cement in an expressway construction	HAO Tingyu
14:06-14:24	Key cement-based materials of high-speed railway ballastless track	ZENG Xiaohui
14:24-14:36	Preparation and multi-fluid transport performance of oil adsorbing cement-based functional materials	WANG Dongli
14:36-14:48	Effect of pH-responsive self-healing agent on cementitious materials and their healing behavior	ZHANG Shiping
14:48-15:00	Effect of composite mineral capsules on the self-healing performance of marine concrete	LI Jinglu
15:00-15:12	Early-age performance of fast-setting concrete for digital casting	TAO Yaxin
15:12-15:24	Alkali-activated fly ash composite $NaNO_3$ thermal energy storage materials: Preparation and high-temperature stability	ZHENG Wukui
15:24-15:36	Evaluating fire resistance of calcium sulfoaluminate cement-based lightweight mortar: A comparative analysis of raw and expanded vermiculite	KOUADJO TCHEKWAGEP
15:36-15:48	Preparation and performance of cement-based materials with dynamically regulated electromagnetic wave absorption properties	BIAN Pengfei
15:48-16:00	Coffee/Tea Break	
Stage IV, Chaired by: ZENG Xiaohui, LIU Qingfeng		
16:00-16:18	Multi-scale fiber reinforced cementitious composites: Performance and modeling	FENG Peng
16:18-16:36	Research on surface densification technology of cement-based materials based on the ultrasonic effect	WANG Chong
16:36-16:48	Research on the softening constitutive relationship of the NC-UHPC interface	ZHAO Xiaoyu
16:48-17:00	The microwave absorption effect and thermal energy conversion ability of magnetite concrete application in microwave deicing	QIU Heping
17:00-17:12	Key Technologies for Structural Energy Storage in Cement-Based Supercapacitors	ZHANG Rui
17:12-17:24	Enhancing mechanical performance and microstructure of 3D-Printed UHP-SHCC by nozzle thickness optimization	SUN Yan
17:24-17:36	Optimal design of structural parameters and microwave absorbing properties of cement-based pyramid-shaped configuration	WU Zihao

Hall No.5A Program (S5+S7)

Time	Events	Presenter
Stage I, Chaired by: LONG Wujian, YUAN Qiang		
8:30-8:48	Intelligent design and exploration of civil engineering materials	TAN Yiqiu
8:48-9:06	Virtual process engineering and its application in the cement industry	GE Wei
9:06-9:24	Multi-scale modeling on fiber reinforced concrete	HOU Dongshuai
9:24-9:36	A 3D mesoscale numerical investigation of the fracture damage process in steel fiber-reinforced concrete	CHEN Qing
9:36-9:48	Microscopic moisture absorption process and progressive damage analysis of concrete based on two-phase fluid solid method	JIANG Wei
9:48-10:00	Quantitative characterization of the relationship between ITZ percolation and particle characteristics in granular concrete systems	LIN Jianjun
10:00-10:12	Research on performance prediction model and optimization design of cement-based materials	XU Chengwen
10:12-10:30	Coffee/Tea Break	
Stage II, Chaired by: GE Wei, WANG Lin		
10:30-10:48	Multi-objective intelligent design of concrete via knowledge sharing across heterogeneous datasets	YUAN Qiang
10:48-11:06	AI-driven intelligence in high-performance cementitious materials design and control	LONG Wujian
11:06-11:18	Experimentally validated multi-scale fracture modeling scheme for cementitious material	ZHANG Hongzhi
11:18-11:30	Material design and properties study of seawater sea sand ultra-high performance concrete	ZHANG Wei
11:30-11:42	A possible method to identify cations in LDHs by implementing phate algorithm on SEM-EDS hypermaps	XUE Caihong
11:42-11:54	Green and low-carbon cement grinding technology and equipment	GAO Lin
11:54-12:06	Wettability control of C–S–H surfaces by silane coatings: Insights from molecular dynamics	ZHU Xiaodong
12:06-13:30	Lunch	
Stage III, Chaired by: ZHANG Hongzhi, HU Zhangli		
13:30-13:48	A novel probabilistic approach for sustainable concrete design with explainable transformer autoML	WANG Yuanfeng
13:48-14:06	Artificial intelligence based reverse modeling of cement hydration	WANG Lin
14:06-14:24	Digital research and development of cement-based materials	YE Jiayuan
14:24-14:36	Research and development of multi-level comprehensive utilization technologies and equipment for coal gangue and their industrial applications	GAO Min
14:36-14:48	Dynamic simulation research and analysis of efficient cooling fo cement clinker	CHEN Baoxin
14:48-15:00	High-efficiency preparation technology and equipment for recycled fine aggregate from demolished concrete	NI Mingxing
15:00-15:12	Realistic and efficient mesostructure modelling of cementitious composites based on spherical wavelet and SDF theory	GAO Peng
15:12-15:24	Research on the digital empowerment pathway for the full life cycle of cement industry equipment	CHU Biao
15:24-15:36	Practice of energy efficiency improvement for pyro-system of the 10000 t/d production line	MA Jiaomei
15:36-15:48	Research on low-carbon preparation technology of sludge-based derived fuel for cement kilns	LI NING
15:48-16:00	Coffee/Tea Break	
Stage IV, Chaired by: GUO Suihua, YU cheng		
16:00-16:18	Graded separate grinding technology for low carbon cement	NIE Wenhai
16:18-16:30	Engineering the future-CBMI's pathto net-zero	WANG Bin
16:30-16:42	Enhanced multiphysics simulation of rotary kiln processes with temperature-driven liquid phase formation	YU Zhengdong

Con'd Hall No.5A Program (Post-Graduate Student)

Time	Events	Presenter
Post-Graduate Flash Talk Session		
16:45-16:50	Mitigating sulfate-induced crystallization damage in alkali-activated slag cement using organic phosphonates	Lyu Zhaoqiu
16:50-16:55	A cement-free binder developed from phosphate-activated basic oxygen furnace (BOF) slag	TANG Yanjie
16:55-17:00	Effects of alkali dosage on chloride binding behavior in alkali-activated slag	BAI Xue
17:00-17:05	Chiral modulation of hydration microstructure for enhanced cement by L-(+)-tartaric acid	LU Borui
17:05-17:10	Preparation and performance optimization of ternary cements containing calcined coal gangue and limestone	WU Yu
17:10-17:15	Probe into the substitution preference of zinc ions and the mechanism of its influence on the carbonation properties of low calcium carbonatable binder	CAO Jingyu
17:15-17:20	Preparation of supplementary cementitious material by thermochemical activation low-grade sand washing sludge	DAI Shuo
17:20-17:25	Effect of silica fume on the adhesion ability and leaching of cellulose ether in ceramic tile adhesive	LIU Shaorui
17:25-17:30	Effect of slag and EVA on the interface microstructure and bond strength of tile adhesives after water immersion	ZHOU Lianzhu
17:30-17:35	Mechanistic insights into the synergistic modification of recycled aggregates and cement hydration via acetic acid and silica fume	ZHANG Qingsong
17:35-17:40	Expanded titanium-bearing blast furnace slag phase change aggregate: preparation, performance and phase change energy storage mortar application	MAO Ning
17:40-17:45	A clinker phases dataset for digitalization and data-driven cement design: Synthesis, hydration, and cementitious properties	ZHAI Munan
17:45-17:50	Nano $CaCO_3$ seeding for improving LC^3 performance through in-situ carbonation	NIU Zhonghao
17:50-17:55	Synergistic effect of fly ash and seawater on the hydration of calcium sulfoaluminate (CSA) cement	FENG Man
17:55-18:00	Beanpod-inspired in-situ structural regulation strategy for suppressing the aggregation of layered graphene oxide towards cementitious composites	MA Kai
18:00-18:05	Salt freeze-thaw resistance of polyvinyl alcohol (PVA) modified mortar: The role of molecular structure	DENG Qian

Hall No.5B Program (S1)

Time	Events	Presenter
Stage I, Chaired by: ZHANG Wensheng, LI Zhuguo		
8:30-8:48	The effect of alkali in cement on the hydration and performance of Portland cement	YAN Peiyu
8:48-9:06	Composition and performance mapping of new generation cement clinkers: the role of clinkering fuel and implications on raw meal optimisation	Samuel Adu-Amankwah
9:06-9:24	Recent advances for sulphosilicate cement clinker: From fundamental research to industrial application	Ren Xuehong
9:24-9:36	The effect of SO_3 content in clinker with fluorine on clinker characteristics and limestone-blended cement properties	Reishi Ozaki
9:36-9:48	Research on highly active cement clinker	LIU Yanjun
9:48-10:00	Effect of C\$$H_2$ on the hydration performance mechanism of C_4A_3\$ at low temperature	LI Min
10:00-10:12	Insights into hydration characteristics of ternesite: regulation mechanisms via structural and hydration medium modification	LIU Lei
10:12-10:30	Coffee/Tea Break	
Stage II, Chaired by: MA Suhua, Samuel Adu-Amankawh		
10:30-10:48	The synergistic effect of water and lattice oxygen on CO_2 mineralization in calcium silicate	LI Neng
10:48-11:06	Low-carbon cement with recycled building materials	LI Jiabin
11:06-11:18	Low carbon binder derived from phosphogypsum and slag	TANG Pei
11:18-11:30	Synergistic carbonation of gypsum-based solid wastes and red mud towards cement clinker preparation	HU Yueyang
11:30-11:42	A novel sintering technique to control cement's water-soluble Chromium (VI) release: steel slag fusion adhering calcined gradient clinker	ZHAO Deqiang
11:42-11:54	Enhancing the carbonation resistance of supersulfated with nano SiO_2 and silica fume	CHEN Heng
11:54-12:06	Effect of silicon carbide fineness on hydration and hardening properties of gypsum-based composites	ZHI Zhenzhen
12:06-13:30	Lunch	
Stage III, Chaired by: YAN Peiyu, LI Neng		
13:30-13:48	Incorporation of inert wastes as fillers in geopolymer synthesis	LI Zhuguo
13:48-14:06	Ecological design theory and low-carbon production/high efficient application practices for cement	CUI Suping
14:06-14:24	Feasibility of preparing carbonated fly ash as supplementary cementitious material	GE Zhi
14:24-14:36	Regulation mechanism of mineral alkaline activators on hydration and hardening properties of sulfate-slag cementitious materials	WANG Jixiang
14:36-14:48	Workability and strength of alkali-activated ground granulated blast furnace slag-steel slag PHC	CHEN Shujie
14:48-15:00	Structure and pozzolanic reactivity of kaolinitic clay co-calcined with limestone or Na_2SO_4 studied by ^{23}Na, ^{27}Al, ^{29}Si NMR spectroscopy	NIE Shuai
15:00-15:12	Effects of hematite and brucite additions on fresh- and hardened-state properties of metakaolin-based geopolymer cements	REN Jie
15:12-15:24	Study on the shrinkage performance of cement pastes with bio-based chemical admixtures	LAI Guanghong
15:24-15:36	Effects of sucrose on evolution of calcium silicate hydrate under hydrothermal conditions	ZHAO Zhiguang
15:36-15:48	Utilization of tuff micro powder in UHPC with high volume fraction by two step activation	MA Rui
15:48-16:00	Coffee/Tea Break	
Stage IV, Chaired by: ZHANG Tongsheng, WANG Jianfeng		
16:00-16:12	Preparation of low carbon cementitious materials by non-ferrous metallurgical solid waste and its application in mine filling	LIU Wenhuan
16:12-16:24	Raman spectroscopy and its application in civil engineering	MI Tangwei
16:24-16:36	Enhancement of glass powder on residual strain in fatigue-loaded concrete	WANG Qing
16:36-16:48	The effects of functional group’s grafting position in PCE on its dispersibility and mechanism	LI Bin
16:48-17:00	Influence and mechanism research of hydration heat inhibitor on low-heat Portland cement	QIAN Chen

Con'd Hall No.5B Program (Post-Graduate Student)

Time	Events	Presenter
Post-Graduate Flash Talk Session		
17:00-17:05	The role of casting defects in the degradation of UHPC-NC interface bond performance	JIANG Zhimei
17:05-17:10	Shear damage evolution of grooved UHPC-NC interfaces under salt freeze-thaw cycles	YU Kun
17:10-17:15	High strength hydrogel-cement composite for rapid repair of concrete cracks	LI Baiyu
17:15-17:20	Research on low-carbonization and workability of magnesium phosphate composite materials	SUN Jia
17:20-17:25	Thermal conductivity enhancement of alkali-excited fly ash composite phase change material $NaNO_3$ heat storage material	GOU Yujin
17:25-17:30	High-performance cement-based supercapacitors for self-powered buildings	XUE Hao
17:30-17:35	Atomic-Level ordered assembly of poorly-crystalline C-S-H Nanophases	ZHAI Yan
17:35-17:40	Efficient carbon sequestration of calcium carbide slag based on additive regulation	LIU Zhiyan
17:40-17:45	Molecular insights into the chloride ion adsorption in alkali-activated material: The effects of C/S and A/S	ZHANG Yifan
17:45-17:50	Insights into the creep behavior of calcium aluminosilicate hydrate gels by molecular dynamics	YU Liang(HUST)
17:50-17:55	Meso-scale modeling of chloride transport in alkali-activated concrete	LIU Yu
17:55-18:00	Theoretical model of effective elastic moduli of composites considering the inclusion shape, size, and volume fraction	LIU Xuqian

Hall No.5C Program (S1+S8)

Time	Events	Presenter
Stage I, Chaired by: YAN Haochun, WEI Ya		
8:30-8:48	Cement hydration in the presence of chemical admixtures with emphasis of the precipitation of hydration products	KONG Xiangming
8:48-9:06	Study on the hardening mechanism of natural hydraulic lime (NHL) under hydration and carbonation	WANG Dongmin
9:06-9:24	Proposal on structure model of C-S-H basing on nano characterization	SHEN Weiguo
9:24-9:36	A new path to regulate the mechanical properties of low-carbon and waste-friendly cementitious materials	WANG Jianfeng
9:36-9:48	Green binder from valorized MSWI fly ash and GGBS: mechanical and environmental performance and reaction mechanisms	LIU Ze
9:48-10:00	Synergism of cement hydration and carbonation in the presence of CO_2 absorbed alkanolamine	LIU Hui
10:00-10:12	Steel slag: a sustainable material for overcoming the long-term strength degradation of calcium sulfoaluminate cement	LIAO Yishun
10:12-10:30	Coffee/Tea Break	
Stage II, Chaired by: ZHOU Chunsheng, SHEN Lin		
10:30-10:48	Preparation and properties of low-carbon cementitious materials with full solid wastes activated by alkali-salt composite	LI Hui
10:48-11:06	Effect of $CaSO_4$ on the formation and reactivity of Ye'elimite in CSA clinker	ZHOU Jian
11:06-11:18	Technology for building materials utilization of low-strength and low-activity waste residue	MA Juntao
11:18-11:30	Tannic acid–driven performance regulation in recycled concrete powder cement based materials	WANG Dan
11:30-11:42	Effects of coal gangue activation methods on the composition of geopolymers	WANG Jinbang
11:42-11:54	Sorption behavior and immobilization mechanism of Pb(II) and Zn(II) on C-S-H gels: implications on the heavy metals migration in cement waste forms	GUO Binglin
11:54-12:06	Effect of the synergistic action of polycarboxylate superplasticizer and sodium gluconate on the workability of LC^3 system	SONG Yi
12:06-13:30	Lunch	
Stage III, Chaired by: KONG Xiangming, XIE Ning		
13:30-13:48	Innovation and application of China's concrete standard system	LENG Faguang
13:48-14:06	Large-scale applications and standardization of cement-free alkali-activated concrete with optimized cost and performances	SHEN Lin
14:06-14:24	Characterizing microcreep behavior of cementitious materials: A comparative study of berkovich and flat-tip indentation	WEI Ya
14:24-14:36	Synergistic Cryo-EM/MD investigation of atomic-scale drying shrinkage mechanisms in C-(A)-S-H gel interlayer pores	WANG Tiao
14:36-14:48	Carbonation hardening of magnesia under ambient conditions	LI Zhen
14:48-15:00	A new Avrami-based exponential model for predicting fiber-reinforced polymer bar service life	WANG Tuanjie
15:00-15:12	In situ air-coupled nonlinear ultrasonic technique for determining multiple parameters of cracks during self-healing process in asphalt mixture	LI Long
15:12-15:24	Effect of natural carbonation on the phase composition and microstructure of natural hydraulic lime-based materials modified by metakaolin	ZHANG Dajiang
15:24-15:36	Microstructure and micromechanical properties of magnesium phosphate cement	ZHANG Guosheng
15:36-15:48	Development of automated microscopy system for belite using AI and image processing	Ryo Kaneda
15:48-16:00	Coffee/Tea Break	
Stage IV, Chaired by: SHEN Weiguo, LIU Xiao		
16:00-16:18	Effects of market-oriented carbon pricing mechanisms on cement enterprises	YAN Haochun
16:18-16:30	Ultrasonic transmission mechanism and compaction evaluation of CFST structures under high-altitude conditions	CHEN Zheng
16:30-16:42	Investigation into the physical sources of drying shrinkage through ^1H NMR	ZHOU Chunsheng
16:42-16:54	Mechanism of pore structure on carbonation properties of cement with high carbon fixation capacity	LUO Kai

Con'd Hall No.5C Program (Post-Graduate Student)

Time	Events	Presenter
Post-Graduate Flash Talk Session		
16:55-17:00	The effectof NaOH on the synthesis andtransformation of ettringite underhiah temperature environment	ZHANG Xiang
17:00-17:05	The time-dependent behaviors of ultra-high performance geopolymer concrete (UHPGC) for marine infrastructure	WANG Dongyu
17:05-17:10	Evolution and deterioration mechanism of mechanical properties of mature concrete under long-term low vacuum condition	WANG Xiaolong
17:10-17:15	Mechanistic insights into the enforced carbonation behavior of aluminate phases in cement clinker	MA Zihan
17:15-17:20	Element-mediated phase transformation mechanisms in steel slag-based foamed ceramics	MA Minglong
17:20-17:25	Carbonation mechanism of ternesite: The particle size effect	YU Liang (UJN)
17:25-17:30	Effects of carbonation curing on the mechanical and microscopic properties of potassium magnesium phosphate cement	LIU Qing
17:30-17:35	CPFD Numerical Simulation of Coal-Hydrogen Co-Firing in Cement Precalciner	LUAN Zhengbin
17:35-17:40	A superhydrophobic mortar with ultra-robustness for self-cleaning, anti-icing, and anti-corrosion	ZHOU Peng
17:40-17:45	The effect of carbonation under different relative humidity on the pore structure change in OPC and LC^3 systems	YANG Zhenli
17:45-17:50	Effect of triethanolamine on the properties and hydration of fly ash-based geopolymer foam	GAO Mingkang
17:50-17:55	The effect of aluminum dihydrogen phosphate on the properties of magnesium phosphate cement	GAN Xingyu
17:55-18:00	Study on the retardation mechanism of tannic acid on tricalcium silicate hydration based on multiscale analysis	WANG Zhanpeng
18:00-18:05	Study of alkali metal doping on sintering behavior, exact form and doping preference of sulphosilicate cement clinker	DONG Dong

Hall No.5D Program (Post-Graduate Student)

Time	Events	Presenter
Stage I, Chaired by: SHEN Peiliang, ZHU Xiaohong		
8:30-8:35	Hydration and microstructure of C_4AF in synergistic reaction with C_3S	WANG Weilong
8:35-8:40	A novel ceramizable potassium-activated geopolymer coating with enhanced thermal insulation and post-heating mechanical properties	LI Zonggang
8:40-8:45	Hydration and mechanical properties of coral sand calcined clay cement	BAI Xiaoyu
8:45-8:50	Influence of iron oxide on the clinkerization of low-calcium carbonatable Belite-Rankinite clinker	LI Jiaxin
8:50-8:55	Improvement of high-temperature denitrification of modified coal fly ash by copper-doped for cement kiln flue gas	MENG Lingqin
8:55-9:00	Sustainable Binder Based on Hydraulic Wollastonite Using the Mechanochemical Method	LIU Yihui
9:00-9:05	Effect of different curing conditions on the properties of high-performance cement-based materials	YAN Fulu
9:05-9:10	Effect of gypsum on low-heat Portland cement early mechanical properties and hydration in the presence of DEIPA	YAO Guang
9:10-9:15	Hydration characteristics of BES sodium-activated steel slag-Portland cement composite	CHANG Lei
9:15-9:20	Alkali-treated dolomite promotes setting and strength development of geopolymers	GUI Shihai
9:20-9:25	Effect of xanthan gum concentration on the nonlinear evolution of yield stress of cement paste	CAI Huanchun
9:25-9:30	Enhancing early hydration and property of high ferrite Portland cement: Synergistic effect of C-S-H/PCE-DEIPA	LU Jinfan
9:30-9:35	Improved mechanical resistance of cement paste to cryogenic attack by incorporating nano-silica aerogels	YANG Zhendong
9:35-9:40	Dedolomitization reaction: A new pathway for producing carbonable binder	LIU Qijian
9:40-9:45	Structure of silica gel formed after the carbonation of calcium silicate minerals	ZHANG Jinhao
9:45-9:50	Effect of ZnO and CaF_2 on the coexistence of alite and ye'elimite in ABY cement clinker preparation	LI Yuwei
9:50-9:55	Quaternary phase driving the high-performance development of low-carbon clinker	Lv Minwang
9:55-10:00	Calcined clays for climate neutral ('Net Zero') cements: shear-dependent rheological behavior and application performance	WANG Xinyue
10:00-10:30	Coffee/Tea Break& Poster Communication of Stage I	
Stage II, Chaired by: LIU Ze, WANG Tiao		
10:30-10:35	Preparation of alite-belite-ye'elimite cement clinker by solid waste substitution	LIU Yao
10:35-10:40	Agitated carbonation as a novel activation method to enhance reactivity and microstructure of municipal solid waste incineration bottom ash in cement	FAN Xu
10:40-10:45	Effect of unhydrated cement in cement-based materials with low water-to-cement ratios	LI Yangrui
10:45-10:50	Stabilization of amorphous calcium carbonate (ACC) in carbonated recycled cement powder based on colophony encapsulation	HUANG Jiayu
10:50-10:55	Role of ester-modified TEA in cement system: Hydration kinetics and microstructural mechanisms	CHEN Jixi
10:55-11:00	Influence of sodium ions on the synthesis and hydration of belite-ye'elimite-ternesite clinker	CHU Jiahao
11:00-11:05	Phase-driven microstructure refinement in geopolymers enabled by copper slag-based core-shell structure	ZHANG Longfei
11:05-11:10	Dipotassium hydrogen phosphate activated Al-rich steel slag: the role of layered double hydroxides and aluminum hydrate gel	ZHU Mengyu
11:10-11:15	Kinetic simulation of NO_x reduction in cement pre-calciner environment: Synergistic effect of multi-reductant, catalytic effect of raw meal, and their reaction mechanisms	PENG Hui
11:15-11:20	Fumes suppression effect and road performance of modified asphalt investigation by halloysite nanotubes	ZHOU Shuai
11:20-11:25	Drying kinetics of cement paste and sandstone through nuclear magnetic nesonance and neutron imaging techniques	LIANG Huaming

Con'd Hall No.5D Program (Post-Graduate Student)

Time	Events	Presenter
11:25-11:30	A deep learning approach for mixture design of steel fiber reinforced concrete based on multiple performance requirements	ZHU Lingling
11:30-11:35	Oxygen vacancy-mediated carbonation mechanism of γ-dicalcium silicate: First-principles and OPES enhanced sampling insights	YUE Jiayu
11:35-11:40	The pre-acidification triggers and enhances carbon mineralization in dicalcium silicate	ZHANG Xuefeng
11:40-11:45	A three-step strategy for predicting compressive strength of carbonated compacts using small-sample dataset	SHENG Chuming
11:45-11:50	Cross-domain meta-learning for predicting concrete compressive strength in scenarios with small-sample	LEI Luo
11:50-11:55	Iron corrosion behavior governed by CO_2 curing pathway in low-alkalinity γ-C_2S binders	YANG Kuo
11:55-12:00	Which factors impact the effectiveness of polycarboxylates (PCEs) in alkali-activated slag cements?	CHEN Jiaxin
11:50-13:30	Lunch	
13:30-14:00	Poster Communication of Stage II	
Stage III, Chaired by: TANG Pei, XIE Shuai		
14:00-14:05	Corrosion behavior of Cast-in-Place piles in landfill leachate environment	WANG Yu
14:05-14:10	Numerical study on the transport performance of hardened cementitious materials based on microscopic pore structure	TONG Liangyu
14:10-14:15	The variation in internal temperature and humidity of shotcrete and its impact on strength in a dry and hot environment	ZHANG Yu
14:15-14:20	Pore reconstruction of ground granulated blast durnace slag and nano-silica modified cement-based materials under sulfate attack	ZHANG Tonghuan
14:20-14:25	Numerical modelling of multi-physics coupling for corrosion-induced cracking in reinforced concrete	GAO Panyue
14:25-14:30	Statistical evaluation the characteristics of drying non-uniform deformations in concrete based on normal distribution model	XU Yuanhang
14:30-14:35	Multiscale fracture mechanics corrosion prediction model of concrete based on Nano- and Microscale parameters from SEM and AFM PF-QNM	LIU Huifang
14:35-14:40	Calcium leaching-induced shrinkage test based on DIC method	CHU Yuting
14:40-14:45	Long-term durability and degradation mechanisms of 3D printed geopolymers (3DPG) with/without healing agents in marine environments	LIU Xinhao
14:45-14:50	Towards net zero carbon concrete: Preparation and characteristics of total Component CO_2-sequestration Concrete	HE Jianhui
14:50-14:55	Interfacial property improvement of 3D printed concrete via Micro-Region vibration	ZHEN Houru
14:55-15:00	Study on the performance of cement–sodium silicate double slurry grouted stone under different sea regions	DAI Hang
15:00-15:05	Characterization of fiber distribution uniformity in steel fiber-reinforced concrete (SFRC) based on microwave-induced heating during casting	ZHAO Lulu
15:05-15:10	Effect of coupling agent on the mechanical properties of Polyurethane/water glass composites	WANG Xunzhi
15:10-15:15	Active magnetorheology control of cementitious materials for 3D printing	ZHANG Yiyuan
15:15-15:20	Low-carbon bioinspired cement-based batteries for self-powered buildings	CAI Qiang
15:20-15:25	Study on the hydrophobic functionalization mechanism and durability of cement-based composites modified by lauric acid self-assembly	WANG Jiahui
15:25-15:30	Thermal insulation and energy saving properties of new TiO_2/ cement aerogel composites	FANG Can
15:30-16:00	Coffee/Tea Break & Poster Communication of Stage III	
Stage IV, Chaired by: ZHENG Wukui, ZHANG Lina		
16:00-16:05	A carbon sequestered superhydrophobic mortar with enhanced anti-chloride ions penetration and frost resistance	WANG Cong
16:05-16:10	Surface whitening mechanism of calcium aluminate cement-based mortar under hydration-carbonation coupling effect	ZHANG Zhengle

Con'd Hall No.5D Program (Post-Graduate Student)

Time	Events	Presenter
16:10-16:15	Optimized Ca/Si ratio design for ultra-high strength carbon mineralization materials: crystal grain size enhancement	SUN Yibo
16:15-16:20	Understanding the influence of CO_2 injection on cement hydration kinetics: The stage-specific effects	LI Chunjin
16:20-16:25	Regulating mechanism of ammonium salt on mechanical and microstructural properties of γ-C_2S binder via CO_2 curing	RONG Pengjie
16:25-16:30	Effects of chloride and sulfate ions on the carbonation behaviors of calcium silicate hydrate (C-S-H)	QIN Huyong
16:30-16:35	Densification regulation strategies and corrosion resistance performance of carbonated coatings on steel surface	XIA Zhaohua
16:35-16:40	Gel pore water historical change in carbonating C-S-H resulted in the spatial $CaCO_3$ distribution under different CO_2 concentrations	Ryusei Igami
16:40-16:45	Low-carbon preparation and performance enhancement of recycled concrete powder-based artificial aggregates	TAO Shuqing
16:45-16:50	Effect of different hydration–carbonation processes on the reaction degree of cement	GUO Zhao
16:50-16:55	Enhanced carbonation hardening of merwinite (C_3MS_2) through sodium hexametaphosphate modification	LIANG Xiaoshuang
16:55-17:00	Effect of carbonation curing conditions on the properties of acrylamide-modified magnesium slag	LI Jingxian
17:00-17:05	Preparation and application of cement based materials in sub-zero temperature environments	LIU Chongyang
17:05-17:10	An ultra-wideband electromagnetic shielding concrete based on multi-scale conductive fillers	WANG Yingxiang
17:10-17:15	Analysis of pore formation and performance effects of superabsorbent polymers with varying compositions in cement paste	WANG Mingwei
17:15-17:20	Unraveling the multiscale enhancement mechanism of nano-Al_2O_3 on subzero-prepared alkali-activated slag paste	XU Jin
17:20-17:25	Influence of ultra-high temperature sintered ceramsite on the mechanical and workability properties of lightweight concrete	ZHANG Weihao
17:15-17:45	Poster Communication of Stage IV	