

PRELIMINARY SCHEDULE



11 - 13 October 2023
Green aluminium for
transportation and
infrastructure

Québec City

Organization partners



INALCO 2023: SCHEDULE AT A GLANCE

Keynotes	Technical sessions: Desing and metal forming	Technical sessions: Welding and joining	Technical sessions: Surface treatment	Technical sessions: Alloys	Technical sessions: Environmental impact
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	Session time	ROOM RIO TINTO	ROOM ALOUETTE	ROOM WSP
DAY 1: Wednesday Oct. 11 th	08:45	Conference opening - Host sponsor presentation		
	09:00	Keynote 1: Harry Kaladis The Future of Responsible Aluminium: Connecting the entire value chain		
	09:40	Break		
	09:50	Design and metal forming-1	Welding and joining-1	Alloys-1
	10:50	Coffee break		
	11:10	Design and metal forming-2	Welding and joining-2	Surface treatment-1
	12:10	Lunch		
	13:15	REGAL Students Posters Session		
	14:30	Keynote 2: Philippe Gosselin New aluminium-scandium alloy for high-performance alpine skis		
	15:10	Break		
	15:20	Design and metal forming-3	Welding and joining-3	Environmental impact-1
	16:20	Break		
	16:30	Design and metal forming-4	Welding and joining-4	Environmental impact-2
	18:30	Welcome cocktail		
DAY 2: Thursday Oct. 12 th	08:30	Design and metal forming-5	Welding and joining-5	Alloys 2
	09:30	Coffee break		
	09:50	Keynote 3: Benoit Cusson 10 Modern Applications and Construction Details for Aluminium Bridges		
	10:30	Keynote 4: Geir Ringen & Trond Furu Aluminium long span suspension bridges - ambitions, opportunities and challenges		
	11:10	Break		
	11:20	Design and metal forming-6	Welding and joining-6	Alloys 3
	12:20	Lunch: Round table		
	13:50	REGAL Poster competition finalists' presentations		
	14:50	Break		
	15:00	Keynote 5: Denis Mazerolle Super high-purity aluminium		
	15:40	Break		
	15:50	Design and metal forming-7	Surface treatment-2	Alloys 4
	17:30	REGAL student poster competition awards ceremony		
	19:00	Gala dinner - Guest speaker: Aluminium in a circular economy Rosa Galvez		
DAY 3: Friday Oct. 13 th	08:30	Keynote 6: Vincent Christ ELYSIS a Key Player in the Aluminum Decarbonization		
	09:10	Keynote 7: Laurent Chappuis Aluminium Auto Body Sheet in North America after the 2015-Ford F-150		
	09:50	Coffee break		
	10:10	Design and metal forming-8	Welding and joining-7	
	11:30	Closing address		

Day 1, Wednesday Oct. 11th

DAY 1: AM	START TIME		TITLE	SPEAKER
	08:45		Conference opening - Host sponsor presentation	
	09:00	Keynote	The Future of Responsible Aluminium: Connecting the entire value chain	Harry Kaladis
	09:40-09:50		Break	
	09:50-10:50		Technical session : Design and metal forming-1	
	09:50	D1-1	Texture and Mechanical Properties of Extruded AA6063 Aluminum Alloy	Clément Pot
	10:10	D1-2	Effect of unidirectional and cross-rolling on the texture evolution of AA6082	Majid Yzadani
	10:30	D1-3	Direct resistance heating of aluminum sheets for rapid super-plastic forming	Valentin Maynard
	09:50-10:50		Technical session: Welding and joining-1	
	09:50	W1-1	Metal fused filament fabrication of aluminum alloy AlSi10Mg	Emilio Galindo
	10:10	W1-2	Additive Manufacturing in Construction – Implementing Powder-Bed Fusion of Metals using a Laser (PBF-LB/M) and Shape Optimization into the Construction Design Process	Johannes Diller
	10:30	W1-3	Wire arc additive manufacturing of aluminium alloys	Julie Lévesque
	09:50-10:50		Technical session: Alloys-1	
	09:50	A1-1	Effects of Ni Content and Alloying Elements on Electrical Conductivity, Mechanical Properties, and Hot Tearing Susceptibility of Al-Ni based Alloys	Farnaz Yavari
	10:10	A1-2	Comparative microstructural study of cold sprayed coatings using pure aluminum and aluminum alloys powders	Mohamed Rachik
	10:30	A1-3	Networking	
	10:50-11:10		Coffee break	
	11:10-12:10		Technical session : Design and metal forming-2	
	11:10	D2-1	Modelling induction heating of aluminium sheets for hot stamping	Alexandre Gariépy
	11:30	D2-2	Selection and characterization of a flexible seal to alloy sheet flow during thermoforming	Ahmed Gnenna
	11:50	D2-3	Friction models for a better prediction of machining performance of Aluminum Alloys parts	Sandrine Anicette Tcheuhebou Tina
	11:10-12:10		Technical session: Welding and joining-2	
	11:10	W2-1	Fatigue Testing and Modelling of Flare Bevel Groove Welded Aluminum Joints for Pedestrian Bridge Applications	Scott Walbridge
	11:30	W2-2	Evaluation of small-scale thin wall AlSi7Mg alloy LPBF coupons under alternate cyclic bending fatigue regime	Muralidharan Kumar
	11:50	W2-3	Experimental and Theoretical Research on Welded Aluminium K-Joints	Semso Kalac
	11:10-12:10		Technical session: Surface treatment-1	
	11:10	S1-1	Why surface treatment must be an integral part of manufacturing? - An overview	Saleema Noormohammed
	11:30	S1-2	A short review on antibacterial aluminum surfaces	Dilip Sarkar
	11:50	S1-3	The benefits of using functional Coatings to Improve Performance of Components in Conventional Mobility and E-Mobility	Mahdi Amiriyani
	12:10-13:15		Lunch	

Day 1, Wednesday Oct. 11th

DAY 1: PM	START TIME		TITLE	SPEAKER	
	13:15-14:30		REGAL Students Posters Session		
	14:30	Keynote	New aluminium-scandium alloy for high-performance alpine skis	Philippe Gosselin	
	15:10-15:20		Break		
	15:20-16:20		Technical session : Design and metal forming-3		
	15:20	D3-1	Structural folding for architectural applications	Andrei Nejur	
	15:40	D3-2	Experimental investigation on the mechanical characteristics of a novel hybrid densified wood filled aluminum tube dowel for timber connections	Marc Oudjene	
	16:00	D3-3	Torsional Strength of Aluminum Shapes - Circular and Rectangular Solids	Ronald Ziemian	
	15:20-16:20		Technical session: Welding and joining-3		
	15:20	W3-1	Surface roughness studies on F357 aluminum alloy fabricated using laser powder bed fusion process	Jaskaranpal Singh Dhillon	
	15:40	W3-2	Accelerated Optimization of Laser Cutting Parameters using a machine learning approach	Volkher Onuseit	
	16:00	W3-3	Mechanical property criterion based on hot crack index on autogenous laser welds of various high-strength aluminium alloys	François Nadeau	
	15:20-16:20		Technical session: Environmental impact-1		
	15:20	E1-1	Opportunities for adding recycled content to primary aluminium products	Francis Breton, Agathe Tshipama	
	15:40	E1-2	Ecodesign and life cycle analysis of a refrigerated van	Rodrick Lévesque	
	16:00	E1-3	Life Cycle Cost Assessment of an Existing All-aluminum Bridge: Comparison of two deck options	Thomas Fortin	
	16:20-16:30		Break		
	16:30	17:30	Technical session : Design and metal forming-4		
	16:30	D4-1	Optimal extrusion shape for fabricating aluminum bridge deck using assembly-based FSW with bobbin tool	Amar Djedid	
	16:50	D4-2	Evaluation of the biomechanical-based walking load models for vibration prediction of lightweight aluminum footbridges	Elyar Ghaffarian Dallali	
	17:10	D4-3	An optimization-based case-study of aluminum pedestrian bridge decks	Peter Nilsson Strand	
	16:30		17:30	Technical session: Welding and joining-4	
	16:30	W4-1	Weldability and Mechanical Properties of Fe/Al Dissimilar Joints made by Resistance Spot Weld Bonding	Shoma Sakurai	
	16:50	W4-2	Experimental investigation of the effect of different static mechanical properties and inclined welding on the fatigue strength of welded aluminum details	Christina Radlbeck	
	17:10	W4-3	Friction stir welding parameters development of AA6061-T6 extruded alloy using a bobbin tool	Kenza M.S Tinguery	
	16:30-17:30		Technical session: Environmental impact-2		
	16:30	E2-1	Life Cycle Assessment along aluminium value chain : review of several environmental studies from bauxite mining to aluminium recycling, by AluQuébec and Groupe AGÉCO	Alban Pilard	
	16:50	E2-3	Techno-economic assessment of aluminum as a clean energy carrier	Pascal Boudreau	
17:10	E2-3	Dynamic Monitoring of Aluminum Companies' Carbon Footprint	Florent Bourgouin		
18:30-20:00		Welcome cocktail			

INALCO 2023 : Day 2, Thursday Oct. 12th

DAY 2: AM	START TIME		TITLE	SPEAKER
	08:30		Conference opening	
	08:30-09:30		Technical session : Design and metal forming-5	
	08:30	D5-1	The Second Generation EC9	Alberto Mandara
	08:50	D5-2	Large-scale fatigue experiments on friction stir welded aluminum bridge deck specimens	Mahmoud Trimech
	09:10	D5-3	Seismic design of aluminium structures in the second generation of Eurocode 8	Raffaele Landolfo
	08:30-09:30		Technical session: Welding and joining-5	
	08:30	W5-1	The effect of environmental condition on the mechanical behaviour of Al 5052-H36 adhesively bonded joints	Marzieh Nodeh
	08:50	W5-2	Numerical and analytical investigations of Additive Friction Extrusion Deposition	Max Hossfeld
	09:10	W5-3	Dissimilar Joining of High Strength Steel and Aluminum Alloy using Resistance Spot Welding with Die and Punch Shaped Electrodes	Muneyoshi Iyota
	08:30-09:30		Technical session: Alloys-2	
	08:30	A2-1	Effect of Annealing Temperature on the Microstructure, Mechanical Properties, and Electrical Conductivity of 4xxx Series Al-based Alloy	Mohammad K.-Pireyousefan
	08:50	A2-2	Effects of Alloying Elements Content on Structural Properties of AlMgSiCu Alloy	Osman Halil Celik
	09:10	A2-3	Modeling Precipitation Effects on Mechanical Characteristics of Al-Cu Alloy	Seyed Sajjad Jamal
	09:30-09:50		Coffee break	
	09:50	Keynote	10 Modern Applications and Construction Details for Aluminium Bridges	Benoit Cusson
	10:30	Keynote	Aluminium long span suspension bridges - ambitions, opportunities and challenges	Geir Ringen & Trond Furu
	11:10-11:20		Break	
	11:20-12:20		Technical session : Design and metal forming-6	
	11:20	D6-1	Aluminum Beams with Composite Thermal Barriers: Recent Analysis Developments	James LaBelle
	11:40	D6-2	Cyber-physical production system applied to the hot-forming of AA7075 B-pillars pre-assembled using friction stir welding	Mohamad Idriss
	12:00	D6-3	Preparation of 6xxx series aluminium eco-alloys for the extrusion process	Sonia Boczka
	11:20-12:20		Technical session: Welding and joining-6	
	11:20	W6-1	Numerical Prediction of the Fatigue Life of Complex Riveted Structures	Francis Corriveau
	11:40	W6-2	Mechanical Properties of Resistance Spot Welded Joints of Aluminum Castings and Wrought Alloys	Takeshi Matsukage
	12:00	W6-3	Test of slip-critical connection system with embedded nuts for aluminium bridge application	Benoit Cusson
	11:20-12:20		Technical session: Alloys-3	
	11:20	A3-1	Effects of An Oscillating Load on Superplastic Deformation and Microstructure of AA5083 Sheet Specimens	Leo Kiawi
	11:40	A3-2	Tensile properties of the subsurface and center regions of AA6111 DC cast ingot in semisolid state and their hot tearing susceptibility	Mohamed Qassem
	12:00	A3-3	Microstructure evolution in a 6082 alloy under pulsed magnet field melt treatment	Xinyu Bao
	12:20-13:50		Lunch: Pannel	

INALCO 2023 : Day 2, Thursday Oct. 12th

DAY 2: PM	START TIME		TITLE	SPEAKER
	13:50-14:50		REGAL Poster competition finalists' presentations	
	14:50-15:00		Break	
	15:00	Keynote	Super high-purity aluminium	Denis Mazerolle
	15:40-15:50		Break	
	15:50-17:10		Technical session : Design and metal forming-7	
	15:50	D7-1	Experimental Investigation of I-shaped Aluminium Beams	Alessandro Pisapia
	16:10	D7-2	Tests on Aluminum Sections with Simple and Complex Geometries	Prachi Verma
	16:30	D7-3	Design and optimization of aluminium member's sections for building efficient 120-160kV power transmission towers	Sanaz Chehrazad
	16:50	D7-4	Behaviour and design of I-shaped aluminium sections	Sahar Dahboul
	15:50-17:10		Technical session: Alloys-4	
	15:50	A4-1	A Short Review on Superplasticity of Aluminum Alloys	Eric Kojo Kweitsu
	16:10	A4-2	Modelling of process-microstructure-properties relationships in aluminum components with advanced microstructural characterization and machine learning	Marc-Olivier Gagné
	16:30	A4-3	Solidification Processing of Al-Ce Alloys for High-Temperature Applications	Shimaa El-Hadad
	16:50	A4-4	Alulibs - Effortless Automated Molten Metal Sampling	François Audet
	15:50-17:10		Technical session: Surface treatment-2	
	15:50	S2-1	Ecofriendly surface treatment methods in manufacturing	Saleema Noormohammed
	16:10	S2-2	Nanostructured superhydrophobic thin films against corrosion of aluminum alloys	Dilip Sarkar
	16:30	S2-3	Aluminum-polymer lightweight multi-material joints bonded with mixed adhesive	Mani Mohan Tiwari
	16:50	S2-4	High Pressure Die Casting of AlSi10Mg Alloy; How Does Rapid Solidification Influence Micro Segregation?	To come
	17:30-18:00		REGAL student poster competition awards ceremony	
	18:00-19:00		Free time	
	19:00		Gala dinner Guest speaker - Aluminium in a circular economy	Honorable Rosa Galvez

INALCO 2023 : Day 3, Friday Oct. 13th

DAY 3: AM	START TIME		TITLE	SPEAKER
	08:30		Conference opening	
	08:30	Keynote	ELYSIS a Key Player in the Aluminum Decarbonization	Vincent Christ
	09:10	Keynote	Aluminum Auto Body Sheet in North America after the 2015 Ford F-150	Laurent Chappuis
	09:50-10:10		Coffee break	
	10:10-11:30		Technical session : Design and metal forming-8	
	10:10	D8-1	Experimental research on welded aluminium column beam connection - column WEB in transverse compression component	Mladen Muhadinović
	10:30	D8-2	O.I.C.-based design of aluminum circular hollow sections under compression or bending	Liya Li
	10:50	D8-3	Local Buckling of SHS Aluminium Members under Uniform Compression	Alessandro Pisapia
	11:10	D8-4	Experimental characterization of the resistance of tubular aluminium sections	Sahar Dahboul
	10:10-11:30		Technical session: Welding and joining-7	
	10:10	W7-1	Applications of Friction Stir Welding to improve the thermal management and to reduce the cost of liquid cold plates	Kim Ouzilleau
	10:30	W7-2	Numerical analysis of the fatigue behaviour of friction stir welded joints in aluminum bridge decks	Mahmoud Trimech
	10:50	W7-3	Application of Friction Stir Welding (FSW) for the Assembly of Modular Aluminum Towers	Philippe Grandmont
	11:10	W7-4	Statistical Investigation of porosity recognition of overlap aluminum laser welding	Ahmad Aminzadeh
	11:30-11:45		Closing address	

Host sponsor

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