





International Congress & Exhibition

NeMMo 2024

New Materials for future Mobility































JOIN NEMMO 2024 AND SHARE YOUR EXPERT INSIGHTS ON NEW MATERIALS FOR MOBILITY

face these big challenges!

With the support of:











And the French Car Industry:











LANGUAGE OF THE CONGRESS

Slides and conference's language will be in English.

Mobility has always evolved to connect new technologies with new societal demands. The current environmental concerns fuel a transformation as never before, with new modes of transport, new energies, new uses, new regulations, etc. Join NeMMo 2024, to make sure you are, or will be, ready to

Co-organized by SIA & SFIP, NeMMo is back on July 3 & 4, 2024 for two days of discussions and conferences, around an exhibition. It will allow to meet these expectations and imagine the future of mobility.

For its 3rd edition, NeMMo will be held in the magnificent, newly restored Convent des Jacobins in Rennes.

From materials to processes through engineering, NeMMo's Congress addresses the whole scope of solutions dedicated to the positive impacts of materials (metals, polymers, minerals) for a sustainable, electrified, autonomous and connected mobility.

This annual congress encourages exchange between mobility specialists and materials communities, including sustainability and circular economy topics, and showcases innovative products, applications and manufacturing achievements.

Be part of these challenges, let's meet at NeMMo 2024!

SCIENTIFIC COMMITTEE

Philippe ANTOINE ARCELORMITTAL

Gildas BUREAU STELLANTIS

Frédéric CHARON

SIA

Yvan CHASTEL GROUPE RENAULT

Amaury CORNILLEAU

GPA

Jean-Yves DACLIN PLASTICS EUROPE

Laurence DUFRANCATEL FORVIA / MATERI'ACT

Jean-Yves FRASSON

CELANESE

Laurent GERVAT GROUPE RENAULT

Alain GIOCOSA

SFIF

Patricia KRAWCZAK
IMT NORD EUROPE

Pascal LAMESLE

IRT M2P

Gérard LIRAUT GROUPE RENAULT

Thierry ORSAT MICHELIN

Pierre PRONOST OP MOBILITY

Olivier REBUFFET CONSTELLIUM



PROGRAMME NeMMo WEDNESDAY 3 JULY 2024

08:45	>	WELCOME COFFEE					
09:20		WELCOME INTRODUCTION Chairpersons: SFIP & SIA					
09:30	>	Keynote - Automotive regulatory developments & impact on materials Jean-François DEFER, Regulation & Homologation VP - RENAULT GROUP					
10:00	>	Keynote - ID4 Mobility: Ecosystem & innovations projects for future mobility Vincent Chaillou - ID4 Mobility					
10:30	>	Presentation of exhibiting companies "2 minutes/ 2 slides"					
11:00	>	COFFEE BREAK					
		SESSION MULTI-MATERIALS JOINING Chairpersons: Luc MARBACH - SIA, Gérard LIRAUT - SF	FIP				
11:45	>	Screening of automotive multi-material joining processes with aeronautical industry applications in view Romeu GOMES, <i>Nicolas KOHOUT</i> - IRT M2P					
12:10	>	Sustainable approach to lightweight assembly for today's mobility demands Martin RHEME - MM-WELDING					
12:35	>	Assembly of composite reinforcement in BiW Thierry RENAULT - FORVIA, Antoine DE FONTGALLAND - IRT-JULES VERNE & Marie AUGEREAU - STELLANTIS					
13:00	>	LUNCH					
		SESSION INTERIOR COMFORT					
		Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA	SESSION METAL SUSTAINABILITY Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL				
15:00	,	Chairpersons: Laurent Gervat - RENAULT GROUP	Chairpersons: Yvan Chastel - RENAULT GROUP				
15:00		Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA Why & how to subtitute metal & rubber with innovative engineering polymers to improve better NVH performances of electrical vehicles?	Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL Steel from thyssenkrupp Steel Europe - Sustainable in Production and Application				
	,	Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA Why & how to subtitute metal & rubber with innovative engineering polymers to improve better NVH performances of electrical vehicles? Laurent LEFEBVRE & Mattia SULMONI - CELANESE Thermoplastic elastomers, a more sustainable approach to anti-vibration components Kepa ZULUETA, Aizeti BURGOA - LEARTIKER S. COOP.	Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL Steel from thyssenkrupp Steel Europe - Sustainable in Production and Application Amalia KOLETTI - THYSSENKRUPP STEEL EUROPE Transforming vehicle manufacturing and contribution to simplification operations with cost and sustainable effective steel solutions for E Mobility				
15:25	,	Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA Why & how to subtitute metal & rubber with innovative engineering polymers to improve better NVH performances of electrical vehicles? Laurent LEFEBVRE & Mattia SULMONI - CELANESE Thermoplastic elastomers, a more sustainable approach to anti-vibration components Kepa ZULUETA, Aizeti BURGOA - LEARTIKER S. COOP. Anas MUJTABA - CELANESE New aesthetic and sustainable surfaces for future mobility interiors	Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL Steel from thyssenkrupp Steel Europe - Sustainable in Production and Application Amalia KOLETTI - THYSSENKRUPP STEEL EUROPE Transforming vehicle manufacturing and contribution to simplification operations with cost and sustainable effective steel solutions for E Mobility Nabil MENEGADY & Dan HASENPOUTH - ARCELORMITTAL Wrought aluminium is ready for automotive circularity				
15:25	· ·	Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA Why & how to subtitute metal & rubber with innovative engineering polymers to improve better NVH performances of electrical vehicles? Laurent LEFEBVRE & Mattia SULMONI - CELANESE Thermoplastic elastomers, a more sustainable approach to anti-vibration components Kepa ZULUETA, Aizeti BURGOA - LEARTIKER S. COOP. Anas MUJTABA - CELANESE New aesthetic and sustainable surfaces for future mobility interiors Christophe BRUNARD - FORVIA	Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL Steel from thyssenkrupp Steel Europe - Sustainable in Production and Application Amalia KOLETTI - THYSSENKRUPP STEEL EUROPE Transforming vehicle manufacturing and contribution to simplification operations with cost and sustainable effective steel solutions for E Mobility Nabil MENEGADY & Dan HASENPOUTH - ARCELORMITTAL Wrought aluminium is ready for automotive circularity Carla BARBATTI & Jocelyne LIST, Fanny Mas - CONSTELLIUM Metal Sustainability, two case studies: ongoing activities on secondary aluminium & perspectives; comparison between cold formed MS1500 and Hot formed Steel Jean LAMONTANARA - MA GRUPPO CLN				
15:25 15:50 16:15	· ·	Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA Why & how to subtitute metal & rubber with innovative engineering polymers to improve better NVH performances of electrical vehicles? Laurent LEFEBVRE & Mattia SULMONI - CELANESE Thermoplastic elastomers, a more sustainable approach to anti-vibration components Kepa ZULUETA, Aizeti BURGOA - LEARTIKER S. COOP. Anas MUJTABA - CELANESE New aesthetic and sustainable surfaces for future mobility interiors Christophe BRUNARD - FORVIA Materials for Innovative Automotive Heating Solutions Guido ALESSI - ALPER & Andree MAINDOK - CELANESE Keynote - Critical raw-materials in Automotive: regulati strategic minerals	Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL Steel from thyssenkrupp Steel Europe - Sustainable in Production and Application Amalia KOLETTI - THYSSENKRUPP STEEL EUROPE Transforming vehicle manufacturing and contribution to simplification operations with cost and sustainable effective steel solutions for E Mobility Nabil MENEGADY & Dan HASENPOUTH - ARCELORMITTAL Wrought aluminium is ready for automotive circularity Carla BARBATTI & Jocelyne LIST, Fanny Mas - CONSTELLIUM Metal Sustainability, two case studies: ongoing activities on secondary aluminium & perspectives; comparison between cold formed MS1500 and Hot formed Steel Jean LAMONTANARA - MA GRUPPO CLN				
15:25 15:50 16:15	· · · · · · · · · · · · · · · · · · ·	Chairpersons: Laurent Gervat - RENAULT GROUP Moez BEN AHMED - GPA Why & how to subtitute metal & rubber with innovative engineering polymers to improve better NVH performances of electrical vehicles? Laurent LEFEBVRE & Mattia SULMONI - CELANESE Thermoplastic elastomers, a more sustainable approach to anti-vibration components Kepa ZULUETA, Aizeti BURGOA - LEARTIKER S. COOP. Anas MUJTABA - CELANESE New aesthetic and sustainable surfaces for future mobility interiors Christophe BRUNARD - FORVIA Materials for Innovative Automotive Heating Solutions Guido ALESSI - ALPER & Andree MAINDOK - CELANESE Keynote - Critical raw-materials in Automotive: regulati strategic minerals Gaëtan LEFEBVRE - OFREMI & Gildas BUREAU - STELLANTIS	Chairpersons: Yvan Chastel - RENAULT GROUP Philippe Antoine - ARCELORMITTAL Steel from thyssenkrupp Steel Europe - Sustainable in Production and Application Amalia KOLETTI - THYSSENKRUPP STEEL EUROPE Transforming vehicle manufacturing and contribution to simplification operations with cost and sustainable effective steel solutions for E Mobility Nabil MENEGADY & Dan HASENPOUTH - ARCELORMITTAL Wrought aluminium is ready for automotive circularity Carla BARBATTI & Jocelyne LIST, Fanny Mas - CONSTELLIUM Metal Sustainability, two case studies: ongoing activities on secondary aluminium & perspectives; comparison between cold formed MS1500 and Hot formed Steel Jean LAMONTANARA - MA GRUPPO CLN ons, supply-chain and sharing lesson learned on some				





Make - Use - Recycle

At BASF, we believe in a sustainable future with plastics. We're working with customers and partners around the world to advance new technologies that enable design for circularity, reduce CO₂ emissions, and give plastic waste a new life. Together, we want to improve the ways plastics solutions to close the loop. What are we waiting for? Let's make that journey go faster.

plastics.basf.com

PROGRAMME NeMMo THURSDAY 4 JULY 2024

		TROOKAMME NEMMO THE			
08:30	>	WELCOME COFFEE			
		SESSION INNOVATIVE POLYMER SOLUTIONS Chairpersons: Jean-Yves Frasson - CELANESE Maurice Carfantan - STELLANTIS	SESSION BODY-IN-WHITE SOLUTIONS Chairpersons: Gildas Bureau - STELLANTIS Olivier Rebuffet - CONSTELLIUM		
09:00	>	Long-term creep of a polyamide fuel tank subjected to hydrostatic pressure Laurent GERVAT, Pierre FURTWENGLER - RENAULT GROUP, Lucien LAIARINANDRASANA - MINES DE PARIS, Tom ENGELS, Bert KEESTRA - DSM	Metal additive manufacturing for body structure reinforcement Stéphane LOYER - STELLANTIS, Yannick VILLENEUVE - INSTITUT MAUPERTUIS & Philippe GELENNE - ESI GROUP		
09:25	>	New Generation High Pressure Vessels based on Thermoplastic Composite (Type IV-b) Mickaël DROZD & Jérémy VIALE - CETIM	Process/Product development of aluminium gigacasting parts for underbody Franck GATE - RENAULT GROUP		
09:50	>	Factors influencing impact performance of large thermoplastic-based exterior front panels Aurélie BERGERON - OP MOBILITY & Ronald VAN DER WALD - SABIC	Gigacasting usecases in vehicle body structure Valentin Zaccardo A2MAC1		
10:15	>	COFFEE BREAK			
		SESSION NEW POLYMERS FOR ENVIRONMENT Chairpersons: Laurence DUFRANCATEL - FORVIA/ MATERI'ACT	SESSION METAL JOINING Chairpersons: Thierry Orsat - MICHELIN Nathalie Bouad - SIA		
11:00	>	Innovative compounds for electronics (from 5G to conductivity) Fabien RESWEBER - MITSUBISHI CHEMICAL GROUP	Challenges and Opportunities of Aluminium Intensive Body-in-White, focus on material and joining selection Olivier REBUFFET & Sylvain BEUCHER - ALUMOBILITY		
11:25	>	Expand your ideas - Ultramid® Expand Polyamide based particle foam by BASF Patrick SPIES René HOLSCHUH - BASF SE	Advancing Sustainable Mobility: A Collaborative Project in High-Pressure Aluminum Die Castings for Shock Towers with ERWin Technology Caroline TANO - STELLANTIS, Nicolas KOHOUT - IRT M2P & Maxime GROJEAN - GAMING ENGINEERING		
11:50	>	Polyamide the material of choice for fuel cell cooling loop François POTIER - DOMO	Innovative approaches for multi material assemblies of Al alloys on steels David MERCS - LISI AUTOMOTIVE		
12:15	>	LUNCH			
		SESSION NEW POLYMERS FOR ENVIRONMENT Chairpersons: Laurence DUFRANCATEL - FORVIA/ MATERI'ACT & Pierre PRONOST OP MOBILITY	SESSION ELECTRIFICATION Chairpersons: Thierry Orsat - MICHELIN Nathalie Bouad - SIA		
14:00	>	Biobased and recycled raw materials in the formulation of elastomers Loïc PICARD - HUTCHINSON	Fire resistance performance of steel solutions for battery housing Tarek KRIM & Didier VERCHERE - ARCELORMITTAL		
14:25	>	VALEO Thermal Systems in automotive: "Evolution in plastic material choice integrating recycled and bio-sourced materials Alcina TANGHE & Peggy HAVET - VALEO THERMAL SYSTEMS	New Materials and components for e-Mobility Eric NIVET & Jeremy VIALE - CETIM		
		CLOSING SESSION Chairpersons: SFIP & SIA			
14:55	>	Driving Automotive Innovation and Sustainable Mobility Chirag RATWANI & Dexter JOHNSON - THE GRAPHENE COUN			
15:20	>	A comprehensive review of bio-inspired surface transfer technologies in mechanical metamaterials for transportation applications Abderrahmane AYADI - IMT NORD EUROPE			
15:45	,	CONCLUSION			
16:00	>	END OF THE CONGRESS			



JOIN US FOR A SPECIAL SOCIAL EVENT AND COCKTAIL DINNER!

17:15

Start the evening by a cocktail in the exhibition

Want to enjoy all the exhibitors of the congress? On the 1st day, at the end of the conferences, join us for a dedicated time with the exhibitors before leaving for the visit & dinner.



Come and discover the historic beauties of Rennes...

THE TOUR OF THE HISTORIC CENTRE

Are you ready to journey back in time?

From the ancient **Couvent des Jacobins** convent through the cobbled lanes lined with colourful half-timbered houses, your walk will take you through severalcenturies. You will go throughthe Portes Mordelaises gate and its small castle with two towers, typical of medieval defensive estates, before reaching the **Town Hall (Place de la Mairie)**, its place and that of the Parlement of Brittany, which dates back to the era of Gabriel, architect to King Louis XV.



...Before enjoying a cocktail dinner Place de la Mairie

COCKTAIL DINNER AT THE "PICCADILY" - PLACE DE LA MAIRIE

From the first rays of sunshine, the Picca's large terrace, in front of the gallery's arcades and facing the bustling square, is one of the most popular spots in Rennes.









PICCADILLY

Place de la Mairie 35000 Rennes

The restaurant is at the corner with Rue de Coetquen.

EXHIBITION & ADVERTISING

During the congress, an exhibition will be held.

All breaks will take place in the exhibition allowing attendees and exhibitors to exchange in a friendly atmosphere.

In addition, we offer exhibitors the opportunity to make a speech in the plenary room before the break of the 1st day: "2min/2slides".

BOOK A BOOTH

	BASIC	SHELL	BUSINESS	PREMIUM	EXCLUSIVE	ELITE
Rates € (Exc. French VAT of 20%)	3 400 €	4 500 €	7 200 €	12 000 €	16 600 €	24 200 €
Fitted-out booth	6 sqm	9 sqm	12 sqm	18 sqm	24 sqm	30 sqm
Included badges	2	2	4	8	10	12
Dedicated space on the congress app	\checkmark	\checkmark	V	V	V	\checkmark
Logo on congress materials			V	V	V	√
Ad in digital book of conference			1	1	1	1
Ad in digital program			1/2	1/2	1	1
Advertising on the exhibitor's page (SIA's APP)				V	V	V
E-mail banner						√
Preferential location in exhibition						√
Announcement as major sponsor						√
Extra badges discount*		-10%	-20%	-30%	-40%	-40%
Extra Square Meter		500 € per square meter				

^{*} As SMEs / Universities & Labs enjoy a lower entry rate, they cannot benefit from this extra discount.

ADVERTISING "VISIBILITY

Rates € (Exc. French VAT of 20%)	BACK COVER	INSIDE	INSIDE FRONT COVER	INSIDE BACK COVER
Digital program	950 €	950 €	1 300 €	950 €
Digital Conference book	950 €	950 €	1 300 €	950 €
Advertising on the app's homepage		1	1 500 €	
Advertising on the exhibitor's page		1	000€	
Insertion of company booklet / goodies in the conference bags			1 500 €	
Lanyards		2	2 000 €	
Lunch, cocktail or Gala Dinner sponsoring*		Or	n request	

^{*}Company name & logo on all congress material as sponsor + your poster(s) next to the table(s) buffet.



REGISTRATION FORM

IN BLOCK CAPITALS

International Congress and Exhibition NeMMo - July 3 & 4, 2024 - Ref: 2024-02

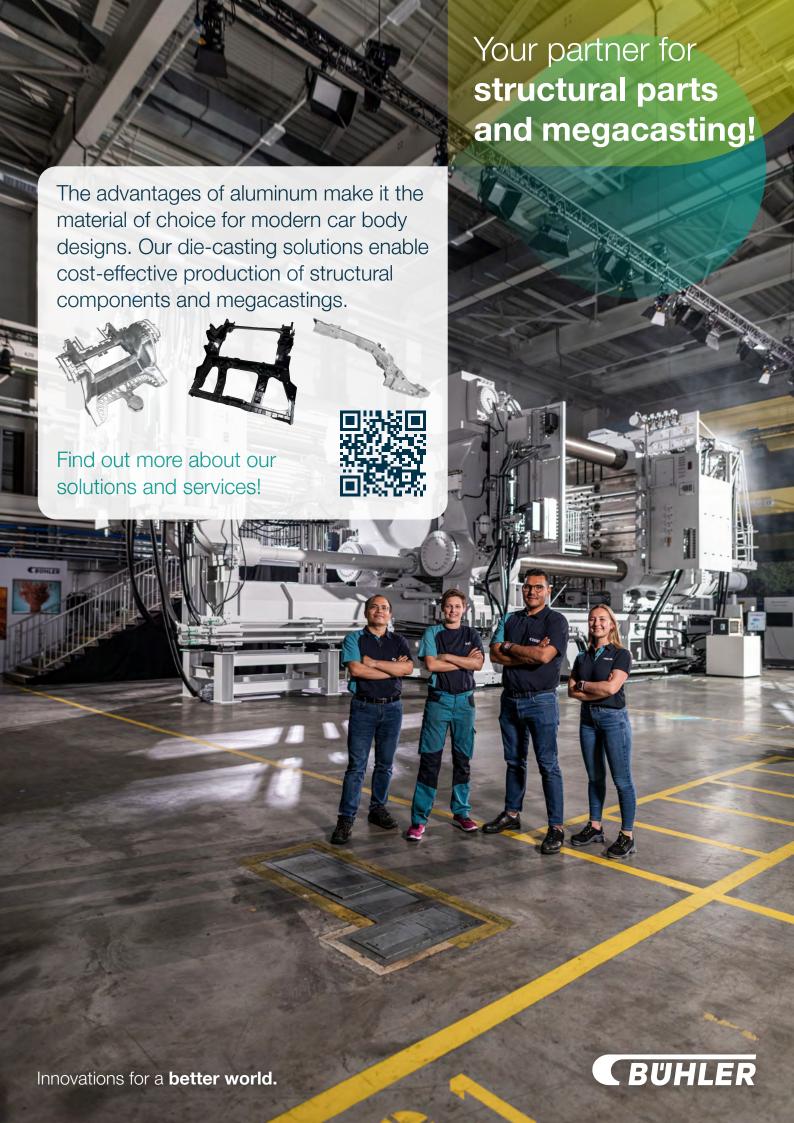
Register directly on line: www.sia.fr

M ^{rs} M ^r				
Family name :	Fi	rst Name:		
Company:	Do	Department:		
Position:				
Adress:				
Post code:	City:	C	ountry:	
Tel	Mobile:	E	mail	
VAT Number				
REGISTRATION FEES				
 1176 € TTC (980 € HT) - SIA 1308 € TTC (1090 € HT) - N 720 € TTC (670 € HT) - Co- 0 € - Speaker***, Exhibitor, S 0 € - Package prime SFIP *2 co-authors max 	Ion members authors*, small firms (< 100 people* Steering Committee atories must bot come under the control			er of SIA Expert
SOCIAL EVENT				
	ne Guided City Tour – included in the ne Cocktail Dinner – included in the i			
I have food intolerances (please	specify):			
PAYMENT Please precise the	e invoice address			
Post code	City		Country	
	able to: "Société des Ingénieurs de l		, , , , , , , , , , , , , , , , , , , ,	
O By bank transfer in Euros ma IBAN: FR76 30003 03290 00	ade payable to: "Société des Ingénieo 0020040139 58 - BIC - Adresse SW y name and reference: 2024-02	ırs de l'Automobile		e a copy)
O By credit card	American Express	ODiners	O Visa	Curocard Mastercard
I hereby				
Authorise the organisers to char	ge my credit card to the amount of .	€		
On my Card n°		Ехрі	ration date	
3 or 4 digit CVV or CVC number	(on back or front of credit card)			
Cardholder's name				
Date & signature:		Company	stamp:	

REGISTRATION CONDITIONS

- Registration fees include participation in the conference, abstracts book, refreshment breaks, lunches, visit and dinner on 03/07/2024. Where it is not possible to send the payment together with the form, each registration should be accompanied by an official purchase order. Failing reception of an official purchase order or payment on the day of the congress, we regret that you will not be allowed entry to the congress.
- When we have received the registration form, we will send you a confirmation message and an invoice. Please indicate the accounts department address when necessary.
 Cancellation charges will apply as follows: Up to 4 weeks before the event starts = 30% of the registration fees plus any bank transfer fee incurred by SIA / Less than 4 weeks
- before the event starts = without refund but you can nominate a substitute.

 Please check the GTC on the SIA website: https://www.sia.fr/medias/files/Evenements/sia_cgv_2020/siaevents_terms_and_conditions_2020.pdf



CONGRESS VENUE

LE COUVENT DES JACOBINS CENTRE DES CONGRÈS DE RENNES

MÉTROPOLE



Le Couvent des Jacobins

Centre des Congrès de Rennes Métropole 20, Place Sainte-Anne 35000 Rennes

ACCESS



By train & Metro

Rennes Train station, the Couvent des Jacobins is a 27 mn walk away.

From the train station you can also take the metro line A and stop at Sainte Anne station.

Please note that, on the 3^{rd} of July, the first train from Paris arrives at 8:15 am should you wish to arrive the day of the event make sure to book your ticket well in advance.

ACCOMODATION

Book your hotel in Rennes directly on the dedicated platform:





By car



High speed motorways A81.

Pay parking near the congress centre: **Parking HOCHE** Place Hoche, 35000 Rennes

Access map: https://www.c-park.fr/parking/parking-hoche



By plane

1 hour from Paris CDG

Daily direct flights from the major cities of France and Europe.

Direct flights

1 hour 30 minutes from many major European cities.

A shuttle service connects the airport and the city centre.



