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# CMCs in Europe Workshop 2025



March 31 14:00 – 20:30 | April 1 8:30 – 13:30



**KILOMETRO ROSSO INNOVATION DISTRICT**  
Gate 4 Centro delle Professioni  
Via Stezzano 87 Bergamo

We are pleased to announce the **first edition of the CMCs in Europe Workshop 2025**.

This two-day event, hosted at **Kilometro Rosso**, one of Italy’s premier innovation hubs, will focus on **Ceramic Matrix Composites (CMCs)**, offering a platform for high-level discussions and professional networking.

Organized by the **Italy Chapter of The American Ceramic Society**, the workshop aims to bring together **leading academic and industry experts from across Europe** to exchange insights, discuss the latest advancements, and share best practices, fostering valuable collaborations.

We look forward to welcoming you.

March 31, 2025 14:00 – 20.30 PM					
Topic			Title	Author	Affiliation
Intro	13.00	14.00	Registration		
	14.00	14.10	Welcome	R. Marelli	Kilometro Rosso
	14.10	14.20	Petroceramics activities	F. Giacometti	Petroceramics
	14.20	14.30	BSCCB activities	T. Holzapfel	BSCCB
	14.30	14.50	R&D on CMCs in Italy	M. Ferraris	Politecnico di Torino
	14.50	15.00	10 minutes break		
	15.00	15.20	Status of French research on CMCs	G. Vignoles	LCTS - University of Bordeaux
	15.20	15.40	German activities in the field of Ceramic Matrix Composites	D. Koch	University of Augsburg
	15.40	16.00	R&D on CMCs in UK	J. Binner	University of Birmingham
	16.00	16.30	Coffee and networking		
Non-oxides	16.30	16.50	C/C-SiC Sandwich Structure for Optical Bench	B. Heidenreich	DLR
	16.50	17.10	Machining of CMCs: Challenges, Tool Strategies, and Process Optimization in terms of Precision and Efficiency	S. Locher	Hufschmied Z. GmbH
	17.10	17.20	10 minutes break		
	17.20	17.40	Contribution to requirements for aerospace and propulsion	M. Bouchez	MBDA France
	17.40	18.00	Additive Manufacturing of CMCs	E. Saiz	Imperial College
Poster	18:00-20:30		Poster session + Networking Dinner + Feedback on the event		

**DISAT-Department of Applied Science and Technology at Politecnico di Torino**, Italy, is kindly acknowledged for the support given to this event.

April 1, 2025 9:00 - 13.30					
Topic			Title	Author	Affiliation
	8.15	8.40	Registration		
SiC/SiC	8.50	9.10	Latest developments in CMCs for aerospace	G. García Luna	Rolls Royce
	9.10	9.30	SiC-based Ceramic Matrix Composite behavior enhancement for Gas Turbines Hot Sections	N. Eberling-Fux	Safran Ceramics
	9.30	9.50	On the benefits of heterogenies in armour ceramics on their ballistic performances	P. Forquin	University Grenoble Alpes
	9.50	10.00	10 min break		
	10.00	10.20	In situ generated Yb2Si2O7 environmental barrier coatings suitable for applications in gas turbines	S. Schafföner	University of Bayreuth, Chair of Ceramic Materials Engineering
	10.20	10.40	Pushing the limits of the MW-CVI technology for the production of large SiC/SiC tubular-shaped samples	R. D'Ambrosio	Istituto per i Processi Chimico-Fisici, CNR
	10.40	11.10	Coffee and networking		
Oxide/oxide	11.10	11.30	Oxide/Oxide CMCs current status, challenges and future perspectives	Y. Akram	Petroceramics
	11.30	11.50	Oxide CMC and fibres made in Germany	A. Rüdinger	Fraunhofer ISC Centre HTL
	11.50	12.10	Relationships between processing route and mechanical properties of OCMCs	T. Cutard	Institut Clément Ader - Albi
	12.10	12.20	10 min break		
	12.20	12.40	High performance oxide CMCs by wet infiltration process	M. Fersini	Salentec Srl
	12.40	13.00	Sandwich structures with ceramic matrix composites	M.Singlard/E. Perret (tbd)	IRT St-Exupéry, Bordeaux
	13.00	13.30	Closing remarks		

## Posters

Author	Affiliation	Poster title
M. Ferraris	Politecnico di Torino	J-TECH@PoliTO Advanced joining technologies at Politecnico di Torino
C. Malinverni	Politecnico di Torino	Performance of SiC/SiC joints and their compatibility with metallic phase change materials
A.Schneller	Universität Augsburg, Institute for Materials Resource Management	Approach and status of the development of Sustainable CMC
V. Casalegno	Politecnico di Torino	Surface modification of ceramics and CMCs to improve joint performances
R. Giometti / A. De Marzi	Università di Padova	Tbd
G. Annino	Istituto per i Processi Chimico-Fisici, CNR	Infiltration and joining techniques at MW-CVI lab of IPCF-CNR in Pisa – Recent developments
F. Wich	University of Bayreuth - Ceramic Materials Engineering	Corrosion resistant full-ceramic friction pairings based on CMC – 3 <sup>rd</sup> -body formation and tribological properties
T. Tran	Darmstadt University of Applied Sciences	Numerical studies of compression failure in Triply periodic minimal surface-based metal-ceramic composite
S.Locher	Hufschmied Z. GmbH	Efficient and precise machining of CMCs
L.Thibaut	Université Grenoble Alpes, 3SR laboratory	Experimental characterization of heterogeneous ceramic by shockless plate impact
N. Langhof	University of Bayreuth - Ceramic Materials Engineering	Correlation of the fiber volume content with the thermomechanical properties of C/C-SiC
C. Prentice	Archer Technocoat Ltd.	Tbd
F. Wich	University of Bayreuth - Ceramic Materials Engineering	Crack formation during pyrolysis for non-oxide CMC - In-situ experiments and phase field modelling
J.Schmidt	Fraunhofer ISC – HTL, Bayreuth	Silicon melt infiltration into non-oxide fibres and preforms
V. V. Deshpande	University of Applied Sciences Darmstadt	Microstructure failure modes in uniaxial compression of porous ceramics
P. A. Happ	University of Applied Sciences Darmstadt	Numerical Studies and Optimization of Particle Reinforced Composites

## Contacts:



alessandro.dezanet.ext@leonardo.com

monica.ferraris@polito.it