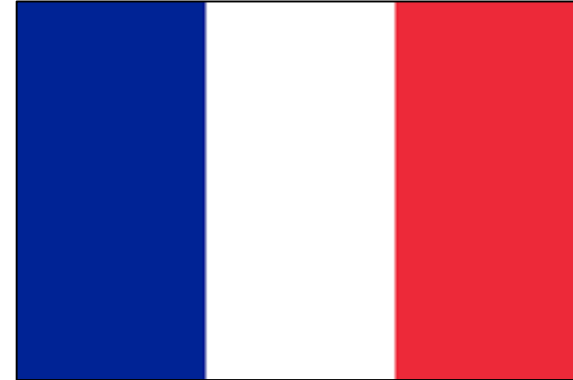
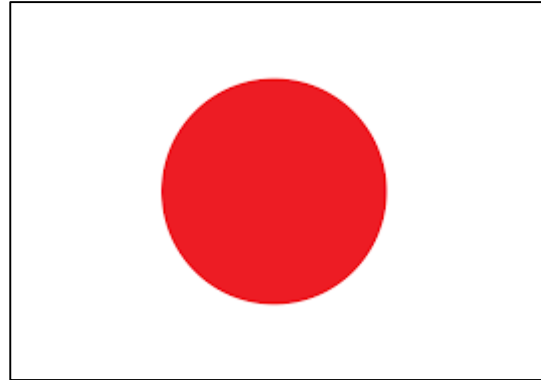


WELCOME TO JFCA IN FRANCE



AN EXPANDING WORLDWIDE NETWORK

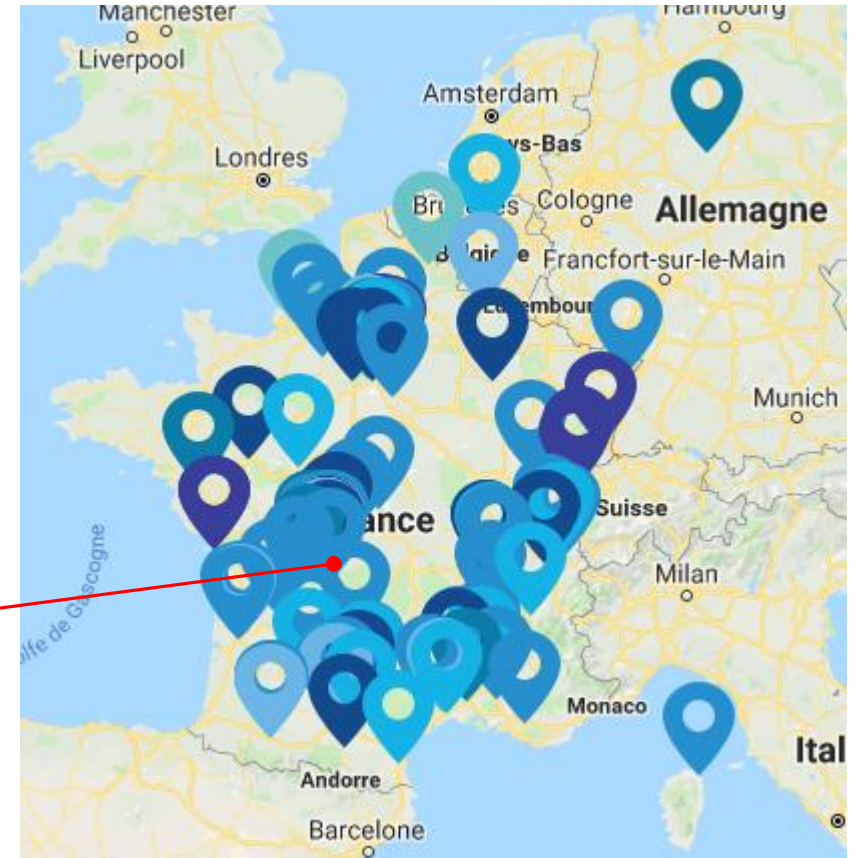
140 ACTIVE MEMBERS / 7 COUNTRIES

France, Norway, Belgium, Germany, Italy, Portugal, Switzerland

- Industrial companies
- Research & technology organisations
- Training centers

MEMBERS' ACTIVITIES

- Producers of raw materials
- Ceramic manufacturers
- Equipment suppliers
- Surface treatments
- Ceramics machining
- Characterization / engineering
- Companies using ceramics



LIMOGES A LONG HISTORY OF CERAMICS

18th century to 1970s
The porcelain industry

1767: Kaolin Discovery

10,000 workers in 1891
at the apogee

Decline from early 1900
due to strong worldwide
competition

From early 1980s
Towards technical ceramics

1979: Engineering college

1981: 1st lab dedicated to
technical ceramics

Technology transfer centers

1984: Ceramic processes

1998: Surface Treatments

From 2005
Sector of excellence

2005: Creation of the ceramic
competitiveness cluster (PEC)

2010: All research activities
in a single building (CEC)

2018: All research under a
single banner = **IRCER lab**

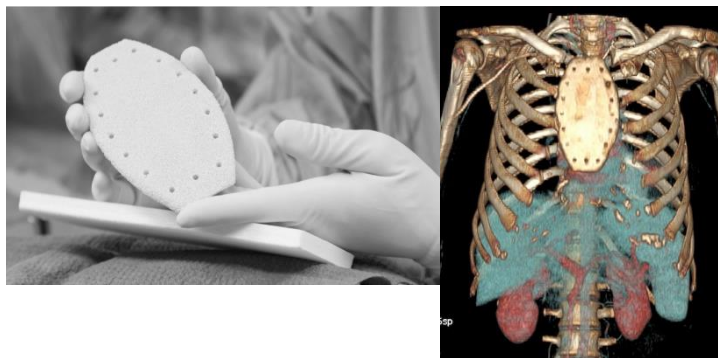
LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE : 300 PERSONS IN RESEARCH, TRAINING & TRANSFER FOR CERAMICS



LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE : 300 PERSONS IN RESEARCH, TRAINING & TRANSFER



Biotech company – 50 persons
Listed on stock market
Material science for health
Implanted in 7 countries



LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE : 300 PERSONS IN RESEARCH, TRAINING & TRANSFER



3DCeram a unique know-how for ceramic 3D:

- 2005: Start of **On demand production**
- 2010: 3DCeram made his first Printer Ceramaker
- 2015: Marketing and sales of **C900**,
- 2016: world wide representation
- 2017: Sinto (Japan) is our new major shareolder
- 2018 : Complete automated turn key line 3DCERAM 4.0, and **hybride printer (multi materials)**.
- 2019: New printers C100 and C3600

LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE : 300 PERSONS IN RESEARCH, TRAINING & TRANSFER



Centre de transfert de technologies céramiques

Since 1984, 23 people
R&D, analysis, scaling up
Fablab, formation
On ceramic processes

Projects on
aerospace/defense
ICT, ...



LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE : 300 PERSONS IN RESEARCH, TRAINING & TRANSFER

oerlikon
balzers

Since 1989 – 40 people
PVD films
Automotive sport
application and R&D
support of Oerlikon group



LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE : 300 PERSONS IN RESEARCH, TRAINING & TRANSFER

irCer

institut de recherche
sur les céramiques

Mixed Research Unit



Material science & process
engineering laboratory
200 persons – 4M€ budget – 80%
dedicated to industry
4 domains of research :
-Ceramic processes
-Plasma & laser processes
-Multiscale structural organization
-Ceramics under environmental
stresses

LIMOGES: INNOVATION IN CERAMICS

ESTER TECHNOPOLE: 300 PERSONS IN RESEARCH, TRAINING & TRANSFER

- 🌐 European Cluster of Ceramics
- 🌐 Laboratory : IRCER
- 🌐 Technical centers : CTTC, CITRA, CTMNC
- 🌐 Training : ENSIL-ENSCI
- 🌐 Incubator
- 🌐 Start-ups et industrials : Cerinnov, Ceradrop, I.Ceram, Oerlikon Balzers, Imerys ...



ACTIVITIES OF OUR MEMBERS

STRATEGICAL MARKETS



Luxury & Creation



Health, Environment & Housing



Energy & Transport



Electronics & Photonics

KEY TECHNOLOGICAL DOMAINS



Factory of the future



Surface treatments

STRATEGICAL MARKETS



Luxury & Creation

Jewelry, cosmetics, tableware, architecture

 **3DCERAM**
Global Advanced Ceramics



 **MERIGOUS**
Limoges



NANOE



Health, Environment & Housing



Energy & Transport



Electronics & Photonics

Briquèterie of Nagen



LUXERAM



BERNARDAUD



STRATEGICAL MARKETS



Luxury & Creation



Health, Environment & Housing

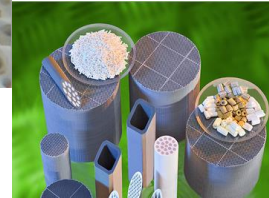
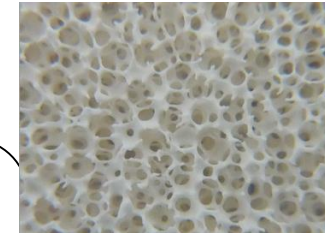
Orthopedic implants, dentistry, food, waste and output flux treatments, construction, refractories, Tiles and Bricks.....



Energy & Transport



Electronics & Photonics



Bodycote



STRATEGICAL MARKETS



Luxury & Creation



Health, Environment & Housing



Energy & Transport

Nuclear energy, renewable energies, industrial processes, aeronautics and aerospace



Electronics & Photonics



Cell3Ditor

EUROPEAN PROJECT
ON SOFC



STRATEGICAL MARKETS



Luxury & Creation



Health, Environment & Housing

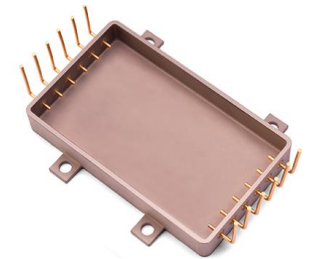
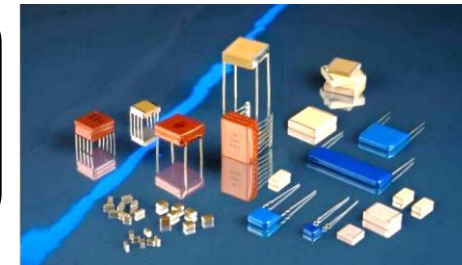


Energy & Transport



Electronics & Photonics

Sensors, printed electronics, passive components, optical fibers



KEY TECHNOLOGICAL DOMAINS



Factory of the future



Surface treatments



oerlikon
balzers



THE CLUSTER'S TEAM



œerlikon
balzers

Chairman, Eric Males
Aeronautics Expert,
OERLIKON BALZERS GROUP



Vice Chairman,
Marc Montaudon
CEO SAFRAN CERAMICS



Vice Chairman,
Dr. Fabrice Rossignol
DEPUTY DIRECTOR IRCER



General Manager
Dr. Florine Boule



INNOVATION



COMMUNICATION



ADMINISTRATIVE



Project officer
Alexandra
Beaudrouet



European
Projects officer
Dr. Sophie
Comte



Project Officer -
Occitania
Florent Begey



International
mission officer
Mélanie Thellier



Communication
Manager
Mathilde Forestier



Administrative
officer
Valérie Le Pennec



Luxury &
Creation



Health,
Environment
Housing



Transport & Energy



Electronics &
Photonics



Events organization,
communication,
Ceramic Network,
Dissemination events.



Administrative /
comptability

SERVICES OF OUR CLUSTER

FOR INNOVATION

- Expertise and support for R&D projects
- Mounting of projects / financing
- Survey reports & access to the survey platform MyTwip®
- Technical sessions & workshops
- Workgroups (aeronautics & space / tiles & bricks)

SERVICES OF OUR CLUSTER

FOR BUSINESS

- Identification of 300 contacts per year during business fairs, available on MyTwip®
- Network animation : technical sessions,
- **Ceramic Network, next edition 10&11 June 2020 in Limoges**
- Organization of collective booth in international fairs
400 sqm **Ceramitec in 2018**

**CERAMIC
NETWORK**
Pôle Européen de la Céramique



SERVICES OF OUR CLUSTER



FOR COMMUNICATION

- Presentation of our members and projects dissemination
- Website cerameurop.com and social media
- Promotion of the ceramic sector on business fairs
- Organisation of technical events (training, workshop, fairs)
- Through international collaboration (European projects)

WHAT IS THE FRENCH CERAMIC CLUSTER?

The unique competitiveness cluster dedicated to ceramics since 2005. Based in Limoges, the cluster is recognized as a reference expert in France in the field of ceramics. It unites 125 members around ceramic activities: research laboratories, training centres, transfer centres and industrial companies.

241 LABELLED PROJECTS 125 MEMBERS 6 BILLION REVENUE

DISCOVER OUR MEMBERS

View the map

30 JAN
Journée Expert :
Fabrication Additive
Céramique
Cette journée a pour objectif de vous présenter les différents procédés de fabrication additive de pièces 3D céramiques
[Lire la suite](#)

31 JAN
Journée technique : Les
céramiques et l'énergie
Les céramiques représentent des solutions pour un lendemain plus économique et plus écologique.
[Lire la suite](#)

NEXT EVENTS

<https://www.cerameurop.com/evenements/>

Next technical sessions / conferences :

- **24 September: multi-material national conference at R&D center of MICHELIN** (Elastopole, Materalia, Plastipolis & European cluster of ceramics) – 200 persons
- **22 October: Technical session on simulation methods for material processes** in Toulouse
- **26 November: Technical session on Additive Manufacturing performed** by CTTC in Limoges
- **In December:** welding of metal/ceramics (SOLCERA) ; microwave drying of ceramics (SAIREM)

JOURNÉE EXPERT

FABRICATION ADDITIVE #2

26 NOVEMBRE 2019
À LIMOGES

À DÉCOUVRIR

Principes, feedstocks, propriétés des pièces obtenues, conception, post-traitements.
Procédés : Binder Jetting, Robocasting (FDM), procédés jet d'encre et jet d'aérosol (AJP/IP), ADM, SLA.



PÔLE EUROPÉEN DE LA CÉRAMIQUE CTTC
Centre de transfert de technologies céramiques

NEXT EVENTS

<https://www.cerameurop.com/evenements/>

FAIRS / CONFERENCES	DATE - PLACE	TYPE
OCCITANIE INNOV	Janv – Toulouse	Salon Exposant
TECHINNOV	Fév – Paris	Convention Exposant
GLOBAL INDUSTRIE	Mars – Lyon	Salon collectif 1 adhérent
JOURNÉES ANNUELLES GFC	Mars - Montpellier	Congrès
APS MEETINGS	Mars – Lyon	Convention Exposant
PARIS SPACE WEEK	Avril – Paris	Convention Exposant
CERAMICS EXPO USA	Avril – Cleveland	Salon collectif 3 adhérents
SALON LE BOURGET	Juin – Paris	Salon Exposant
AEROSPACE MEETINGS	Juin – Paris	Convention Exposant
INTERTECH	Juil – Bordeaux	Convention Exposant + 1 adhérent
CERAMICS UK	Juil – Telford	Salon collectif
HT CMC 10th	Sept – Bordeaux	Congrès
RDV CARNOT	Oct – Paris	Convention Exposant - collectif
MEDISPACE	Déc – Bordeaux	Convention & salon Exposant
CERAMICS EXPO JAPAN	Déc - Tokyo	Salon collectif



Ceramics Expo - USA

CERAMIC NETWORK



Pôle Européen de la Céramique



10th & 11th June, 2020

Zenith of Limoges – FRANCE

<http://www.ceramic-network.fr/fr/>

Mathilde.forestier@cerameurop.com

KEEP IN TOUCH!



WWW.CERAMEUROP.COM

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+33 5 55 38 16 21

Florine.bouille@cerameurop.com



SCHEDULE OF VISITS

THURSDAY 19th OF SEPTEMBER		
TIME	LOCATION	SITE VISITOR
14:00 – 15:45	3DCERAM	M. Maxence BOURJOL, Sales Manager
16:00 – 17:00	I.CERAM	M. Guillaume LEVÊQUE, Ceramic PhD
FRIDAY 20th OF SEPTEMBER		
TIME	LOCATION	SITE VISITOR
9:45	The bus driver will pick you up in front of the BEST WESTERN RICHELIEU PLUS hotel	
10:00 - 12:00	Centre for Technology Transfer in Ceramics (CTTC)	Mme Malgorzata PIECHOWIAK M. Anthony BALLESTERO
14:00 - 15:00	OERLIKON BALZERS	M. Eric MALES, Sales Manager Western Europe Business Line Components / Aeronautic Expert
15:00 - 17:00	Research Institute of Ceramics (IRCER) Amphi 2 <ul style="list-style-type: none"> - General introduction - Visit of the premises by members of the laboratory (Geopolymers, Microscopy and XRD, Processes, Cell culture) 	M. Philippe THOMAS, Director