

ACCESS TO POITIERS & FUTUROSCOPE

BY TRAIN:

Poitiers is at **90 minutes from Paris** by TGV (high speed train) with 2 stations: TGV Station on Futuroscope area and Poitiers railway station from 8 km to Futuroscope. Departure to Montparnasse station (Paris centre) or the TGV station of Charles de Gaulle Airport (4 links per day – 2h30)

BY THE ROAD:

Motorway A10, exit n°28– 200 miles from Paris

BY PLANE:

The airport of Poitiers-Biard is 10 km from Futuroscope and has daily national connections with Lyon (hub for connexion with European destinations). It has also international links with London (direct 1h flight).



ACCOMMODATION:

Two hotels with **560 rooms** are located in the close vicinity of the Convention Centre and about **900 rooms** within a walking distance of 10 minutes: The Plaza Hotel (265 room), Alteora Hotel (295 rooms)



A number of rooms of various categories at special rates will be booked in the Futuroscope area and downtown Poitiers

(Ranging from 50 to 150 € approx.).

There will be a possibility to extend the stay in the area (Loire Valley, La Rochelle and the Atlantic Coast, Bordeaux and the vineyards...) by the adjacent weekends.

VENUE

Since it opened in 1987, The Futuroscope Park has received almost 30 million visitors, making it the second largest attractions park in France. There are over 20 theme-based attraction areas spread across 60 hectares and a combined hotel capacity of 1,500 rooms throughout the Futuroscope site.



Futuroscope Technology Park is a 200-hectare technology complex a unique site of outstanding regional development, a centre of work and learning for 15,000 employees and researchers combining training centres, laboratories, over 160 businesses, an international convention centre.

FUTUROSCOPE CONVENTION CENTER

The Conference Centre, set up on-site in the technological complex, offers:

- A large amphitheater (1150)
- A medium amphitheater (300 seats)
- A small amphitheater (150 seats)
- An exhibition space of up to 2,200 square meters
- 17 meeting rooms
- A catering area



THE 12TH INTERNATIONAL FATIGUE CONGRESS FATIGUE 2018

May 28th, June 1st, 2018 Poitiers,
France

First Announcement

Congress Secretariat:
SF2M

28 rue Saint Dominique, F-75007 PARIS

Tel: +33 (0)1 46 33 08 00

Mail: fatigue2018@sf2m.fr

www.fatigue2018.com



SF2M
Société Française de
Métallurgie et de Matériaux

**Fatigue
Committee**

With the support of:



INVITATION

We are extremely pleased to announce the 12th International Fatigue Congress which will be held in **Poitiers, France** from **May, 27th to June, 1st 2018**.

On the occasion of its return in Europe, the Congress will be hosted for the first time in France, and more precisely on the Futuroscope area located in the "Grand Poitiers" metropolitan area.

This venue, with its unique mixture of cultural heritage and modernity, will constitute a memorable experience for all attendees.

The Organizing Committee will also help delegates who wish to extend their stay by proposing tours with many outstanding attractions (Chateaux of the Loire Valley, Atlantic Coast, vineyards...)

The Fatigue 2018 Congress will be the twelfth in a series of major international conferences held since 1981. This series aims to provide a discussion forum for both fundamental aspects and practical applications of fatigue, covering all aspects of fatigue, all type of materials, and all fields of interest (transportation, energy, electronics, civil engineering, medicine...). More precisely, potential authors are invited to submit an abstract to the conference secretariat before the deadline in one of the following topics:

GENERAL TOPICS

- Cyclic deformation mechanisms and cyclic stress-strain behavior
- Crack initiation process and first stages of crack propagation
- Fatigue life: tests and prediction
- Growth of short and long cracks - Crack growth thresholds
- Low Cycle Fatigue
- Very High Cycle Fatigue

INNOVATIVE APPROACHES

- Advanced experimental methods to characterize deformation and damage processes
- Development of new models and numerical simulation approaches
- 3D approach of fatigue damage

SPECIFIC DOMAINS

- Corrosion Fatigue & Environmental effects
- Thermo-Mechanical Fatigue
- Creep-Fatigue interactions
- Multi-axial, variable and complex loadings
- Influence of processing (casting, forging, additive manufacturing...)
- Residual stresses in Fatigue
- Fretting and Contact Fatigue
- Influence of surface treatments, films and coatings
- Fatigue of weld joints
- Fatigue at very high temperatures
- Fatigue of ultrafine grain materials
- Vibrations
- Long term durability - aging effects
- Fatigue of Structures
- In service fatigue failure

THEORETICAL & NUMERICAL APPROACHES

- Fatigue behaviour modelling and simulation
- Fatigue life prediction
- Statistical approach of the durability
- Damage evaluation and Fatigue design
- Integrated Computational Materials Engineering
- Life extension

FATIGUE OF NON-METALLIC MATERIALS

- Polymers and Composites
- Semi-conductors and Ceramics
- Concretes
- Biomaterials
- Hybrids and architected materials

INDUSTRIAL CASE STUDIES

- Transportation (automotive, aeronautics, naval...)
- Energy production
- Civil engineering
- Biomedical fields
- Electronic devices

COMMITTEES

CONGRESS CHAIR

Gilbert HÉNAFF (Chair)
Catherine GARDIN
Yves NADOT
Christine SARRAZIN-BAUDOUX
Patrick VILLECHAISE (Co-Chair)

IFC STEERING COMMITTEE

A. F. BLOM
G. CLARK
S. W. JOHNSON
L. KUNZ
R. O. RITCHIE
K. TANAKA
X. R. WU

LOCAL ORGANIZING COMMITTEE

SF2M Fatigue technical committee

An international scientific committee will be presented in the next announcement

CONFERENCE FEES

THE CONFERENCE FEE OF APPROX. 750 € WILL COVER:

- Conference proceedings (Final programme, Book of abstracts)
- Welcome reception
- Coffee breaks
- Lunch (Mon, Tue, Wed, Thu, Fri)
- Conference dinner

Discount fees for students

IMPORTANT DATES

Abstract submission: **September 2017**

Notification of acceptance: **December 2017**

Full papers: **March 2018**

PROCEEDINGS

Authors will have the possibility to publish their work. The papers will be peer-reviewed and published in *MATEC Web of Conferences* (open access)

LANGUAGE

English is the official language of the Congress and must be used for abstracts, papers and presentations.