

# ICSID 2018

## 2nd International Conference on Structural Integrity and Durability

Fatigue and Fracture – Experiments, Theory and Applications  
Dubrovnik, Croatia, October 2 – 5, 2018

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## Summer School

Fatigue and Fracture Modeling and Analysis  
Dubrovnik, Croatia, October 1 – 2, 2018



University of Zagreb  
Faculty of Mechanical Engineering  
and Naval Architecture



## ISCID 2018

The objective of the ICSID 2018 conference is to bring together scientists and engineers from around the world to discuss how to characterize, analyze, predict and assess the fatigue and fracture of structural materials and components. The ICSID 2018 intends to be a forum for discussion of the present and future trends in experimental, theoretical and applied fracture mechanics, fatigue, structural integrity assessment, failure analysis, and other important topics in the field.

## MAIN TOPICS

- Models, criteria and methods in fracture mechanics
- Fatigue and fracture simulation and testing at all length scales
- Structural integrity assessment
- Durability and life extension of structures and components
- Low, medium and high cycle fatigue
- Finite elements methods and their application
- Damage mechanics and models
- Microstructure scale computational modeling
- Macro scale fatigue prognosis techniques
- Multiscale materials modeling
- Mixed-mode and multiaxial fatigue and fracture
- Cyclic deformation and crack initiation
- Residual stress effects
- Fretting fatigue and wear
- Fatigue crack path prediction
- Fatigue and fracture of weldments, welded components, joints and adhesives
- Fracture and failure criteria
- Analytical Models
- Probabilistic Fracture Mechanics
- Corrosion, environmentally enhanced degradation and cracking, corrosion fatigue
- Fracture and damage of cementitious materials
- Fatigue and fracture of polymers, elastomers, composites and biomaterials
- Reliability and integrity of engineering structures
- Failure of nanomaterials and nanostructures
- Failure investigation and analysis
- Non-destructive evaluation (NDE)
- Advanced testing and evaluation techniques
- Surface treatment and failure resistance improvement
- Databases, expert systems and software
- Applications to components and structures
- Structural integrity of 3D-printed structures

## GENERAL INFORMATION

### CONFERENCE VENUE

Centre for Advanced Academic Studies  
Don Frana Bulića 4, 20000 Dubrovnik, Croatia  
Url: [www.caas.unizg.hr](http://www.caas.unizg.hr)

### IMPORTANT DATES

Abstract submission	Further possible on a case by case basis
Notification on abstract	15 days after receipt of abstract
Early registration	July 31, 2018
Submission of full paper (optional)	July 31, 2018

### CONFERENCE CHAIR

**Željko Božić**  
University of Zagreb  
Faculty of Mechanical Engineering and Naval Architecture  
Department of Aeronautical Engineering

### CONFERENCE CO-CHAIR

**Siegfried Schmauder**  
University of Stuttgart  
Institute for Materials Testing, Materials  
Science and Strength of Materials (IMWF)

### REGISTRATION

Payment details:

Account holder	Faculty of Mechanical Engineering and Naval Architecture, University of Zagreb
Address	I. Lučića 5, 10000 Zagreb, Croatia
VAT number	HR22910368449
Bank	Zagrebačka banka
Bank address	Trg bana J. Jelačića 10, 10000 Zagreb, Croatia
Account number	1101346933
IBAN	HR4723600001101346933
SWIFT	ZABHR2X
Purpose of bank transfer	ICSID 2018 LastName FirstName

It will be also possible to pay on-site, at the conference registration desk (cash).

## ICSID 2018 – CONFERENCE

Participants	Before July 31, 2018	After July 31, 2018
Regular delegate	€ 500	€ 600
Student delegate	€ 400	€ 500
Acc. persons	€ 150	€ 200

ESIS members discount: € 50

The above listed prices include VAT (25 %).

The conference registration fees include: book of abstracts, electronic media with conference proceedings, coffee breaks, lunches, conference dinner and social program, admission to all scientific sessions.

## ICSID 2018 – SUMMER SCHOOL

Participation fee	Before July 31, 2018	After July 31, 2018
Student (Summer School)	€ 300	€ 350
Student (ICSID 2018 + Summer School)	€ 550	€ 650
Regular (ICSID 2018 + Summer School)	€ 650	€ 750

ESIS members discount: € 50

The above listed prices include VAT (25 %).

The Summer School provides an opportunity for scientists, researchers and engineers from academia and industry to get acquainted with fundamental aspects of fracture mechanics, recent trends in practical applications of fatigue and fracture models, and advanced approaches such as multiscale materials modelling. Leading scientists and experts will give lectures on experimental and numerical techniques for modelling, analysis and assessment of damaged components and structures.

## CONTACT

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