# **ICSID 2021**

# University of Zagreb Faculty of Mechanical Engineering and Naval Architecture

# 5th International Conference on Structural Integrity and Durability

Dubrovnik, Croatia, September 7 – 10, 2021

2

# **Summer School**

Fatigue and Fracture Modeling and Analysis Dubrovnik, Croatia, September 6 – 7, 2021









## **ISCID 2021**

The objective of the ICSID 2021 conference is to bring together scientists and engineers from around the world to discuss how to characterize, analyze, predict and asses the fatigue and fracture of structural materials and components. The ICSID 2021 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.

Being globally hit by the COVID19, the ICSID 2021 Conference will be organized in a "**Hybrid Mode**", i.e, a combination of on–site and online presentation in order to guarantee the maximum safety and conveniences for participants.

## **MAIN TOPICS**

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

# **GENERAL INFORMATION**

#### **CONFERENCE VENUE**

Centre for Advanced Academic Studies Don Frana Bulića 4, 20000 Dubrovnik, Croatia Url: www.caas.unizg.hr

#### **IMPORTANT DATES**

Abstract submission	further possible on a case by case basis	
Notification on abstract	within one week after receipt of abstract	
Early registration	August 1, 2021	
Submission of full paper (d	optional) September 30, 2021	

#### **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	Pa	vment	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	ZABAHR2X
Purpose of bank transfer	ICSID 2021 LastName FirstName

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

## **ICSID 2021 – CONFERENCE**

Participants	Before Aug 1, 2021	After Aug 1, 2021
Regular delegate	€ 500	€ 600
Student delegate	€ 400	€ 500
Acc. persons	€ 150	€ 200
Online particpants	€ 300	€ 350

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 2021 – SUMMER SCHOOL**

Participation fee	Before Aug 1, 2021	After Aug 1, 2021
Student (Summer School)	€ 200	€ 250
Student, Regular Online (Summer School)	€70	€ 100
Student (ICSID 2021 + Summer School)	€ 550	€ 650
Student Online (ICSID 2021 + Summer School)	€ 350	€ 370
Regular (ICSID 2021 + Summer School)	€ 650	€ 750
Regular Online (ICSID 2021 + Summer School)	€ 450	€ 500

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 scientiesrs and experts will give lectures on experimental and numerical techniques for modelling, analysis and assessment of damaged components and structures.

# **CONTACT**

 Prof. dr. sc. Željko Božić
 Phone: + 385 1 6168536

 ICSID 2021 Chair
 Mobile: + 385 98 1863915

 zeljko.bozic@fsb.hr
 Fax: + 385 1 6156940

Faculty of Mechanical Engineering and Naval Architecture

Ivana Lučića 5, 10000 Zagreb, Croatia