

Dear Colleagues,

We cordially invite you to take part and submit an abstract to the **TC5 Minisymposium:**
“Fracture and Structural Transformations under High Rate and Impact Loading”

organized by ESIS Technical Committee 5 “Dynamics of fracture and structural transformations” of the European Structural Integrity Society within the framework of the 22nd European Conference on Fracture - ECF22 to be held in Belgrade, Serbia, 26-31 August 2018 (see <http://www.ecf22.rs/>).

The deadline for abstract submission is 31 January 2018.

The aim of this Symposium is to bring together specialists in dynamic fracture mechanics and integrity of structures subjected to high-rate dynamic loading conditions with particular attention to multiscale nature of dynamic fracture, performance of materials subjected to extreme loading conditions, experimental techniques to study high-rate fracture and deformation and structural transformations under highly transient loading. The idea is to discuss the latest developments and trends in the field.

The topics of the Symposium include, but are not limited to, the following:

- Experimental studies of dynamic fracture
- Approaches/criteria applied for prediction of fracture, irreversible deformations, and structural transformations under dynamic loading conditions
- Numerical simulations of dynamic fracture and structural transformations
- Hierarchy of scale levels and multiscale models of dynamic fracture
- Engineering applications in the field
- Extreme states of materials and structures, seismic resistance
- Dynamics of fracture via atomistic simulations
- Fundamentals of new engineering standards for dynamic testing of materials
- Dynamic fracture of composites and heterogeneous materials
- Dynamics of fracture in crystals

A selection of papers presented at this Symposium will be published in a Special Issue of associated ESIS journals.

IMPORTANT:

1) When submitting your abstract to ECF22 please mention the name of Symposium - **“Fracture and Structural Transformations under High Rate and Impact Loading”**.

2) Please inform us about your submission/intention to submit so that we could plan Symposium’s sessions.

With best regards

Yuri Petrov and Vadim Silberschmidt

ESIS TC5 Chairs