14th International Conference on Fracture

Rhodes, Greece • June 18-23, 2017

THE 14TH INTERNATIONAL CONFERENCE ON **FRACTURE (ICF14)** will be held on the island of Rhodes, Greece, June, 18-23, 2017. ICF14 is organized by Chair Professor Dr. Emmanuel Gdoutos and a working team with the International Congress on Fracture (ICF). ICF14 will be a forum of university, industry and government interaction and exchange of ideas in an area of scientific and technological importance.

ICF sends the very warmest welcome to our global community of scientists, technologists, engineers and others working in the very diverse and wide-ranging field of fracture. ICF was founded in 1969 at ICF2 in Brighton, England, by Founder President Professor Takeo Yokobori with origins at ICF1 in Sendai, Japan in 1965.

The International Congress on Fracture (ICF) is today the premier international body for the promotion of industrial, experimental and theoretical research, education and worldwide cooperation among scientists and engineers concerned with the mechanics and mechanisms of fracture, fatigue and safer design of materials, components, structures, and systems. The objectives of the Congress are:

- foster research in the mechanics and phenomena of fracture, fatigue, and strength of materials for development of materials which are more failure resistant than the conventional materials
- develop design and assessment methods of components, structures and systems with structural integrity
- promote international co-operation among scientists and engineers in the field
- integrate the many disciplines involved in such research and to provide means whereby results of such efforts may be publicly communicated.

Fracture, fatigue and the integrity of materials and structures are of critical significance in the development of civilization, and lay the foundation for the improvements in different arenas of science and technology. We have

made much progress, including standard methods that have been established for characterizing fracture properties of materials, fracture mechanics-based reliability assessments of structural integrity have been embedded into industrial design and defects assessments in practice. This has spurred activity in structural health monitoring and materials development.

While these major accomplishments have improved the reliability of our infrastructure in power-generation, transportation, engineering systems, mining, earthquake engineering, etc., researchers in the field are now tackling many new problems from bio-medicine to geophysics, from nano/atomic to macro scales, from physical to holistic and system modeling, from basic science to applied engineering.

The International Congress on Fracture devotes itself to promoting communication and cooperation among the researchers in fracture all around the world and the quadrennial International Conferences on Fracture play a significant role. The ICF14 team has endeavored for years to make this conference a successful continuation of the honored tradition and, at the same time, to create a dynamic and innovative conference which stretches the boundaries of the exciting disciplines for the new era.

We can see that ICF14 covers almost all active research fields in the fracture fields and aims at probing into the role of fracture in the most advanced academic developments. We appreciate the endeavor of the ICF14 in providing us a wonderful platform for exchange and collaboration, and I am sure that the conference will offer all delegates a wealth of information and many opportunities for discussions.

In 776 B.C., Greece initiated the Olympic Games. We will meet on the historic island in Greece in June, 2017. Like the slogan of 2008 Olympic Game said, "One World, One Dream!" In today's fracture community, we shall try our best to realize a brilliant dream. Let us continue the quest for new heights in this fascinating and diverse field. Let us embrace the 14th ICF in Rhodes, Greece with new research results. Seeing you at the beautiful and historic island of Rhodes in June 2017.