July 21-26, 2024, Vancouver Convention Centre, Vancouver, British Columbia, Canada

## RECENT ADVANCES IN COMPUTATIONAL FRACTURE MECHANICS AND FAILURE ANALYSIS

Yoshitaka Wada<sup>\*1</sup> and Hiroshi Okada<sup>2</sup> and Xiaosheng Gao<sup>3</sup> and Toshio Nagashima<sup>4</sup> and Ayhan Ince<sup>5</sup> and Adrian Loghin<sup>6</sup>

<sup>1</sup>Kindai University
<sup>2</sup>Tokyo University of Science
<sup>3</sup>Acron University
<sup>4</sup>Sophia University
<sup>5</sup>Concordia University
<sup>6</sup>Simmetrix Inc.

## MINISYMPOSIUM

This mini-symposium deals with the state-of-the-art computational modelling methods applied to fracture mechanics and failure analysis. Applications of computational methodologies, such as, FEM, X-FEM, G-FEM, S-FEM, BEM, IGA, Peridynamics and other advanced numerical techniques will be discussed in the mini- symposium to advance a comprehensive understanding of cutting-edge methodologies and simulations. Fields of interests span a wide range of areas, such as aerospace, automobile, naval architecture, nuclear power, mechanical/civil engineering, and other structural applications. Outcomes of both the applied and fundamental research are warmly welcome to enrich the knowledge exchange within the mini-symposium.