# 2nd Asia-Pacific Combustion Institute Summer School – Fundamental  Combustion Problems in Outdoor Fires (APCISS-2)

**December 4, 2022 - December 9, 2022**

In constantly changing environments, large wildland fires and structural fires of ample ranges of severity put largely at-risk entire communities, and cause significant losses. In this regard, the communities in the Asia-Pacific (AP) region have a major role to play in the development of local solutions to these problems, by advancing the general understanding of the problem and collaborating in the creation and implementation of science-based policies that aid in the prevention and mitigation of these events. The bonds between researchers in the AP are becoming stronger, and long-standing collaboration addressing different topics related to combustion and fires are growing. A significant obstacle for the advancement of fire safety is the lack of fundamental knowledge of the physical and chemical processes that control fire dynamics. Combustion is at the core of the problem, and unfortunately the number of trained professionals working on different aspects of combustion is insufficient to cover all the needs and challenges faced by the AP economies. Within this context, the training of the next generation of fire safety scientists and practitioners based on a strong fundamental understanding of combustion will be key to overcoming these hurdles.

**School objective:**

The main goal of the ***APCISS-2*** is to introduce the AP combustion and fire safety community to fundamental combustion problems, focusing particularly in the application of combustion and fire science to outdoor fires. Throughout the planning and development of the school special emphasis will be given to outdoor fires, connecting combustion theory with real fire scenarios and applications.

**Target audience:**

APCISS-2 will bring together graduate students, post-doctoral fellows, early-career researchers, academics and practicing engineers working in fire science. It is expected that the school will provide an instance to build and reinforce collaborations between different academic and non-academic institutions.

**Application process:**

Applications should be made online through the APCISS-2 website (<https://apciss.cl/2022/?page_id=129>). Students will be considered for scholarship awards if their applications are received before September 30, 2022.

**The school program:**

The school activities will take place in person on December 4 - 9, 2022 in the coastal cities of Valparaíso and Viña del Mar, Chile. Following its predecessor, APCISS-2 will have a theoretical track and a practical track. The theoretical track will consist of an introduction to fundamental combustion aspects, focusing particularly in theoretical aspects relevant to fire science. The practical track will have a more specific focus on applications of fire science to outdoor fires, considering a broad range of lectures related to fire safety topics.

For more information, please refer to the APCISS-2 website ([www.apciss.cl](http://www.apciss.cl)) or see the attached flyer with the preliminary program.