

## ***International Topical Meeting on Advances in Thermal Hydraulics, ATH'20***

ATH topical meeting is the fifth in a growing series organized by the American Nuclear Society (ANS) Thermal Hydraulics Division (THD) consisting of peer-reviewed, full-length technical papers covering recent advances in thermal hydraulics for nuclear applications. After San Diego in 2012 (CA, USA), Reno in 2014 (NV, USA), New Orleans in 2016 (LA, USA) and Orlando in 2018 (FL, USA), the new edition was planned to take place in 2020 outside the United States as a standalone meeting at EDF Lab Paris-Saclay, France. Unfortunately, after a first postponing, the meeting has been finally cancelled because of the restrictions due to the COVID-19. However, thanks to the involvement of a lot of authors and to their support, we managed to issue proceedings. The additional contribution of 15 articles originally submitted to NUTHOS-13 has been added to enrich the proceedings content.

Since the first meeting in 2012, ATH series meetings are a reasonably sized meetings to present and discuss advancement in research, development, and applications of the topics mainly related to nuclear Thermal Hydraulics. The ATH'20 meeting has been organized by the Thermal Hydraulics Division (THD) of the American Nuclear Society (ANS) in cooperation with Société Française d'Énergie Nuclear (SFEN). The research and Development division of Electricité de France (EDF R&D) and, in particular, Fluid Mechanics, Energy and Environment Department (MFEE Department) have widely contributed to the meeting logistical and technical organization.

The ATH'20 proceedings consists of 89 full-length technical articles among which 79 institutions have a main author or at least a co-author. Considering only the leading institution, we have 44 contributions from Europe (France 22; Germany 5; the UK 4; Belgium and Italy 3; Switzerland 2; Czech Republic, Finland, The Netherlands, Slovenia and Russia 1); 27 from Asia (Rep. of China 19; Japan 4; Rep. of Korea 2; Israel and United Arab Emirates 1) and 18 from America (USA 16, Canada and Mexico 1). Four keynote speakers accepted to be published in the proceedings and we would like to thank them particularly: Francesco D'Auria (Univ. Pisa; Italy), Bao-Wen Yang (Delta Energy Group; Rep. China), Yann Bartosiewicz (UC Louvain; Belgium) and Antoine Gerschenfeld (CEA; France). Publication of selected papers in archival journals will also be arranged by the organizers in Journal of Nuclear Engineering and Design and Nuclear Technology.

We would like to take this opportunity to express our sincere gratitude to Elia Merzari (Penn State, USA) for his involvement in ATH'20 and his guidance. We also express our sincere thanks to the members of the Technical Program Committee, the Local Organizing Committee, SFEN and ANS teams. Without their hard work and dedication, issuing ATH'20 proceedings would not have been possible.

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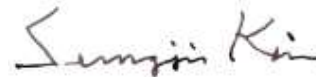
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