1. Record Nr. UNINA9910557615203321 Autore Semenov Yuriy Titolo Fluid/Structure Interactions Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022 Pubbl/distr/stampa Descrizione fisica 1 online resource (240 p.) History of engineering & technology Soggetti Technology: general issues Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Sommario/riassunto This Special Issue contains 12 papers devoted to fluid/structure interaction (FSI) problems. The main feature of the problems is an interface on which consistent boundary conditions for both the liquid and the solid regions are formulated. The presented studies cover a wide range of problems and methods for their solution, including problems of weak, or one-way interaction, in which the effect of interface deformation on the fluid flow can be neglected, as well as problems of the strong interaction, for which the interface change affects both the flow and the structure behaviour. The interest in FSI problems is very great due to their practical importance. Recent developments in engineering have led to advanced formulations of FSI problems. Some of them could not be formulated several years ago. The presented papers demonstrate progress in both numerical algorithms, mathematical apparatus and advanced computational

techniques. In this issue, we have tried to collect different FSI problems,

techniques and, of course, new results, which can provide an insight

new mathematical and numerical approaches, new numerical

into FSI processes.