



MINISYMPOSIUM “TURBULENCE”

Organizer: Prof. Dr. Đorđe Čantrak

University of Belgrade, Faculty of Mechanical Engineering, Hydraulic Machinery and Energy Systems Department
e-mail: djcantrak@mas.bg.ac.rs

Abstract:

Turbulence workshop is held at the University of Belgrade, Faculty of Mechanical Engineering in 2015, and since 2017, is held every second year as a part of the International Congress of the Serbian Society of Mechanics as a Minisymposium “Turbulence”. It is now well recognized in the scientific community worldwide. It is, also, established a practice of the introductory lecture held by the well-known scientists. One of the main objectives of the Minisymposium is to provide a meeting point for scientists to present and discuss recent advances in the field of turbulence and related topics.

Bicentenary of Navier-Stokes equations, governing mathematical formulation of the fluid mechanics, has arrived. This is an additional reason to meet new ideas in turbulence research.

This year is 120 years since the Andrey Nikolayevich Kolmogorov (Андрей Николаевич Колмогоров, 1903-1987.) is born. “He was one of the developers of probability theory. He later used this work to study the motion of the planets and the turbulent flow of air from a jet engine.” His work influenced turbulence research tremendously.

Turbulence challenges scientists worldwide. Flows in turbomachinery, energy, ventilation and air-conditioning, combustion, transportation and production systems, medical flows, magnetohydrodynamics, Earth, atmospheric and cosmic flows are in the scope of turbulence researchers. Novel theoretical approaches, laboratory and in-situ measurement and calibration techniques, as well as turbulent models and solving strategies, are constantly developed. Papers considering turbulence theory, experimental, as well as numerical results are welcome for the Minisymposium. We hope to have fruitful and inspiring discussions between academia and engineers on these topics.