

IDAR2017: international conference on D-amino acids research - Varese (10-13 July 2017)

The University of Insubria in Varese will host the third edition of the International D-Amino Acid Conference (IDAR2017) from 10 to 13 July 2017. This important event is organized for the first time in Europe after the two previous editions held in Japan. Three years after the last congress held in the charming Utsunomiya city, many scientists from different European and non-European countries (the large delegation of Japanese scientists, historically involved in D-amino acid research, will be joined by researchers from the United States, Canada, Israel, China, Taiwan, etc.) will have the opportunity to discuss and share the latest developments in scientific research on D-amino acids.

In contrast to L-amino acids, which are indispensable molecules in Nature for their fundamental role as proteins constituent and as intermediates of many metabolic processes, D-amino acids have long been considered non-natural molecules and lacking a biological role in eukaryotes. From the '90s, the development of analytical techniques that efficiently separate L- from D-amino acids have led to evidence that even D-amino acids are present in many biological tissues and fluids of higher organisms, where they play important biological functions.

This international congress, chaired by Loredano Pollegioni (University of Insubria), Jean-Pierre Mothet (CNRS Marseille) and Alessandro Usiello (University of Campania), will allow addressing the most recent scientific advances related to D-amino acids, free or peptide-bound. In fact, it will be discussed the involvement of these molecules in the physiological processes affecting the peripheral organs and the mammalian nervous system, including their relevance for the pathophysiology and treatments of several human diseases (D-amino acids are related to schizophrenia, Alzheimer's disease, neuropathic pain, ALS, infections, etc.). In addition, new analytical methods for measuring these molecules and their potential applications in biotechnology (e.g., as drug components or in biofilm dissolution) will be assessed.