

**„Development of contemporary science buildings and their role in the urban space – examples”**

The science buildings constructed between 1995 – 2010 are the subject of the dissertation. The author understands the *science buildings* as: scientific research institutes, Research & Development buildings, buildings of R&D organizations that conduct basic and applied research, research laboratories of scientific societies, innovation centers, science centers and research centers whose mission is to facilitate and promote knowledge.

Research & Development buildings are the result of scientific development of last 40 years. The prototypes of contemporary science buildings are the research laboratories constructed along the east coast of United States from 1940's. The Salk Institute in La Jolla, California, USA , arch.: L.I.Kahn) is the most frequently cited example in world literature.

Research science buildings are highly complex structures. They represent means of innovative production and are exposed to rapid modifications. The buildings are usually located in a picturesque surroundings, often on the outskirts of cities, in close proximity to universities, science parks and groupings of modern industry. They have an influence on the quality of the built environment and they have an impact on building a knowledge society. The author regards the contemporary integration of scientific disciplines as the science convergence. The science buildings became a spatial expression of this process.

The author of the dissertation presents the evolution of science buildings and shows architectural trends in creating contemporary science buildings. The author presents as well the role of science buildings in creating the modern image of the urbanized area.

The scope of the study consisted of science buildings located primarily in the area of European cities. Buildings located in USA, Japan and Eastern countries were analyzed separately because of the different nature and scale. Buildings were analyzed at two levels: **city / region** and **functional and spatial structure**.