

parallel plates are given, the cases of steady flow through channels of simple geometry are systematically researched.

Tuckerman and Pease [2] and by Jun and Kim [3] describe interdependencies between dissipation and electric equipment operating modes for heat sinking in the VLSI and valveless pumping of viscous liquids accordingly. Both works focus on viscous dissipation in microchannels. Those works involve measuring of temperature, viscosity, and speed of laminar flows via microchannels.

So, the most results of research of dissipation in industry are in the field of liquid flows in microchannels or high velocity flows. There are no any published works on its effects on technological modes of electric equipment. Theoretical ground for energy optimization of liquid processing industries is almost absent.

Thus, in this work we propose to fill the gap in microchannel research by analyzing dependencies between dissipative processes in macrochannels and energy consumption and productivity of liquid processing equipment of chemical and food industry. Having that as theoretical framework, it is planned to create recommendations for regulating processing equipment's modes of operation and energy consumption according to observable physical characteristics of processed liquids.

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## **LANDSCAPE DESIGN**

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Landscape design is the process of planning and arranging outdoor spaces to create functional, aesthetic, and sustainable environments. Whether for a backyard, public park, or commercial property, good landscape design enhances natural beauty while meeting the practical needs of the space. Landscape design, landscape architecture, and landscape art are arts that combine three areas:

- 1 - Architecture, construction and design
- 2 - Botany and plant growing,
- 3 - Art design and culture.

Landscape design is a universal discipline. The main task of landscape design is to create harmony, beauty in combination with the convenience of using the infrastructure of buildings, smoothing out the conflict between urbanization forms and nature.

Landscape design theorists define it as the art of creating a full-fledged external space. Landscape art in its understanding is one of the types of art that exists on a par with others (painting, sculpture, music) and represents "a special form of social consciousness and human activity, which combines artistic knowledge of life with creativity according to the Laws of Beauty." The basic elements on which landscape design projects are built appear to be relief, water, flat structures, vertical structures and vegetation. All these elements are designed taking into account the climate of the area where the project is being implemented.

Since ancient times, gardens have been a traditional form of organizing the surrounding space with the help of green spaces. The profession of a landscape designer was very respectable, because these specialists created gardens and parks for the most influential people. The castles of nobles, the palaces of kings, and other noble and rich people were always surrounded by parks, which showed the world examples of architecture and garden art. This art was especially developed in the countries of the East. Then gardening as an art spread almost everywhere.

In addition to functional solutions, the landscape designer also develops:

- a main plan
- a dendroplan (growing the trees )
- functional zoning schemes
- 3D visualization of the project
- technical seatings (for example, an arbor , “green wall” or other objects)
- specifications of materials
- costoris.

Specialists and designers of Magic Garden, for example, prove that landscape design is the culmination of a multifaceted, deep process: from determining the properties of the soil to planning the smallest details of the garden, such as the order of flowering of each flower and its shade.

To sum up, landscape design is a blend of creativity, science, and environmental responsibility. Whether designing a private garden or a large public space, thoughtful planning and sustainable practices can create beautiful and functional landscapes that stand the test of time.

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