

**МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ
КАФЕДРА ІНОЗЕМНИХ МОВ
ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР**

**МАТЕРІАЛИ
VIII МІЖВУЗІВСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ
КОНФЕРЕНЦІЇ
ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ
КАФЕДРИ ІНОЗЕМНИХ МОВ**

“TO LIVE IN A SAFER WORLD”

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NIKOLA TESLA, A MAN WHO WAS AHEAD OF HIS TIME

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Nikola Tesla (1856-1943) is a Serbian-American scientist, inventor, and electro and mechanical engineer who provided mankind with a large number of discoveries and inventions.

Tesla is most famous for conceiving the rotating magnetic field principle and then using it to invent the induction motor together with the accompanying alternating current long-distance long-electrical transmission system. His patents and theoretical work still form the basis for modern alternating current electric power (AC) systems including the polyphase power distribution system.

Tesla was so far ahead of his time that many of his ideas are only appearing today. His legacy can be seen in everything from the invention of the induction motor, long-distance long- electrical power distribution, Tesla coil and high-frequency electricity that led to the creation of neon and fluorescent lighting, basics of radio technology, remote control, wireless communication, lasers, the facsimile machine and hundreds of other devices that are now an essential part of our everyday lives. His inventions have changed the world around us.

A new city was built for the Chicago Worlds Fair, announced as “The World of Tomorrow”, with a complex of buildings and parks. A specially constructed machine hall contained 12 of Tesla’s two-phase generators, 1000 horsepower each, working at a frequency of 60 Hz. The generators produced electricity for the operation of devices and for electric lighting at the fair. This was the opportunity to spectacularly apply Tesla’s polyphase system.

Another significant invention, a Tesla coil, a type of resonant transformer circuit was invented by Nikola Tesla around 1891. It is used to produce high voltage and high frequency alternating current electricity. Tesla used these coils to conduct innovative experiments in: electrical lighting, phosphorescence x-ray generation, high frequency alternating current phenomena, electrotherapy, transmission of electrical energy wires.

Modern engineers and researchers still have a chance to go on with the ideas inherited from Nikola Tesla.