Nikola Tesla – u povodu 170. obljetnice rođenja
Nikola Tesla – on the occasion of his 170th birthday

Teslin je život sudbinski povezan s elektricitetom. Rođen je u hrvatskom mjestašcu Smiljan, kada su u noći od 9. na 10. srpnja 1856. sijevale munje i nebo parali gromovi. Uplašena primalja rekla je: bit će „dijete tame". Majka je znala: bit će „dijete svjetlosti."

Već kao dječak uočio je postojanje elektriciteta gladeći mačka. Obožavao je munje i gromove. Tijekom godina i sam ih je stvarao. Igrajući se na potocima rodnoga Smiljana, uočio je besplatnu snagu vode koja pokreće vodenična kola. Maštao je kako će jednom u Americi napraviti „veliko kolo" za slapove Niagare. Predložio je izgradnju postrojenja velikih snaga i prijenos izmjenične električne energije dalekovodima na velike udaljenosti. Prva hidroelektrana na veličanstvenim slapovima puštena je u rad 26. kolovoza 1895. u 07:30 ujutro, za potrebe lokalne idustrije. U njezinu je izgradnju uključeno trinaest patenata, od kojih je devet Teslinih. Ali prijenos električne energije do 35 km udaljenoga Buffala, dogodio se tek u noći s 15. na 16. studenoga 1896., u ponoć, u 00:01, kada je osvijetljen grad. Te je slavne dane ovjekovječio hrvatski akademski kipar Frano Kršinić. Godine 1976. izradio je jedan od najljepših Teslinih spomenika, na američkoj strani slapova Niagare.

Međutim, samo dva dana nakon puštanja u rad hidroelektrane na Niagari, 28. kolovoza 1895. u 20 sati i 20 minuta u Hrvatskoj je puštena u rad Hidroelektrana Krka (Jaruga I.). Izgrađena je na rijeci Krki, u cijelosti prema Teslinim patentima i nacrtima te višefaznom sustavu izmjenične struje. Šibenski gradonačelnik Ante Šupuk i inženjer Vjekoslav Meichsner prepoznali su genijalnost Teslinih izuma. Izgradili su prvi 11-kilometarski dalekovod do Šibenika, a u gradu instalirali uličnе svjetiljke. Tako je Šibenik s cjelovitim polifaznim elektroenergetskim sustavom postao prvi grad na svijetu s javnom rasvjetom na izmjeničnu struju. Izvorni ostatci te hidroelektrane na popisu su Međunarodnoga instituta inženjera elektrotehnike i

Tesla's life had a fateful connection to electricity. He was born in the Croatian townlet Smiljan when lightning flashed and thunder tore the sky on the night of July 9-10, 1856. The frightened midwife said he would be a "child of darkness." His mother knew he would be a "child of light."

As a boy, he experienced the existence of electricity while stroking a cat. He adored lightning and thunder. Over the years he created them himself. While playing in the streams of his native Smiljan, he noticed the free power of water that powered water wheels. He dreamed of one day building a "great wheel" for Niagara Falls in America. He proposed building a large-scale power plant and transmitting the alternating electric energy over long-distance power lines. The first hydroelectric power plant at the magnificent falls started operating on August 26, 1895, at 7:30 a.m., for the needs of local industry. Its construction involved thirteen patents, of which nine belong to Tesla. But the transmission of electricity to Buffalo, 35 km away, took place on the night of November 15-16, 1896, at midnight, at 00:01, when the city was illuminated. The Croatian academic sculptor Frano Kršinić immortalized those glorious days. In 1976 he created one of the most beautiful Tesla monuments on the American side of Niagara Falls.

However, just two days after the Niagara hydroelectric power plant was put into operation, on August 28, 1895, at 8:20 p.m., the Krka Hydroelectric Power Plant (Jaruga I) was put into operation in Croatia. It was built on the Krka River entirely according to Tesla's patents and designs and a multi-phase alternating current system. Šibenik mayor Ante Šupuk and engineer Vjekoslav Meichsner recognized the genius of Tesla's inventions. They built the first 11-kilometer power line to Šibenik and street lamps in the city. Thus, Šibenik, with its complete polyphase electric power system, became the first city in the world with street lighting on alternating current. The original remains of this hydroelectric power plant are listed by the International Institute of Electrical and Computer Engineers, IEEE, Milestone Program, as one of the world's most important innovations

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računalstva, IEEE, program Milestone, kao jedna od najvažnijih svjetskih inovacija u povijesti elektrotehnike i svečano obilježeni brončanom spomen-pločom 5. srpnja 2013. Republika Hrvatska je to postrojenje 2005. proglasila zaštićenim spomenikom industrijske arhitekture, a 28. kolovoza obilježava se kao Dan Hrvatske elektroprivrede.

Najstarija hidroelektrana, tzv. Munjara, u kontinentalnom dijelu Hrvatske je u gradu Ozlju na rijeci Kupi, izgrađena 1908. u zdanju neogotičke arhitekture Hermana Bolléa u kojemu i danas kontinuirano radi. Od 2007. zaštićeno je kulturno dobro Republike Hrvatske.

Globalna elektrifikacija učinila je svoje i stoga „zdravo za gotovo" Tesla pripada čovječanstvu, kao nijedna druga osoba u povijesti uopće. Tim se više nametnula obveza Uredništva da tom istom svijetu podastre činjenice koje povezuju Nikolu Teslu i Lijepu Našu.

Cijeli je svezak časopisa od 392 stranice koncipiran u tri dijela. U prvome su radovi koji prikazuju Tesline veze s Hrvatskom: **Tesla i njegovo doba** *te* **Obrazovni sustav u vrijeme školovanja Nikole Tesle u Hrvatskoj** *na primjeru Rakovačke gimnazije koju je pohađao i Nikola Tesla. Predstavljeni su nastavni planovi i programi, brojne električne naprave i instrumenti kojima je pokuse izvodio Teslin profesor Martin Sekulić. Nikola Tesla maturirao je 24. srpnja 1873. u dobi od 17 godina. To je njegova jedina svjedodžba o nekom završenom školovanju, s kojom je krenuo u osvajanje svijeta.*

Hrvatska akademija znanosti i umjetnosti dodijelila je Nikoli Tesli 17. prosinca 1896. počasno članstvo u svojim redovima, a Sveučilište u Zagrebu 2. lipnja 1926. počasni doktorat.

„Američki" dio časopisa sadrži dva članka koji se, unatoč svoje tematske različitosti, međusobno dopunjuju.

U trećemu su dijelu časopisa predstavljene hrvatske udruge koje njeguju lik i djelo Nikole Tesle.

in the history of electrical engineering and were ceremonially marked with a bronze memorial plaque on July 5, 2013. The Republic of Croatia declared this facility a protected monument of industrial architecture in 2005 and August 28 is marked as the Day of the Croatian Electric Power Industry.

The oldest hydroelectric power plant, the so-called Munjara, in the continental part of Croatia in the town of Ozalj on the Kupa River, was built in 1908 in a building of neo-Gothic architecture by Herman Bollé and is still in continuous operation today. Since 2007, it has been a protected cultural property of the Republic of Croatia.

Global electrification has taken its toll and therefore Tesla "for granted" belongs to humanity, like no other person in history at all. This makes the Editorial Board's obligation to present to that same world the facts which connect Nikola Tesla and Our Beautiful Country, Lijepa Naša, all the more compelling.

The entire 392-page volume of the journal Prirodoslovlje is divided into three parts. The first contains papers that present Tesla's connections with Croatia: **Tesla and his era** *and the* **Education system during Nikola Tesla's schooling in Croatia***, on the example of The Imperial and Royal Grammar School (Realschule) in Rakovac, which Nikola Tesla also attended. The curricula and programs, numerous electrical devices and instruments with which Tesla's professor Martin Sekulić conducted experiments are presented. Nikola Tesla graduated on July 24, 1873, at the age of 17. This was his only certificate of completion of any education, with which he set out to conquer the world.*

The Croatian Academy of Sciences and Arts awarded Nikola Tesla honorary membership in its ranks on December 17, 1896, and the University of Zagreb awarded him an honorary doctorate on June 2, 1926.

The "American" part of the journal contains two articles which, despite their thematic differences, complement each other.

The third part of the journal presents Croatian associations that cherish the image and work of Nikola Tesla.



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