









# CROATIAN ACADEMY OF ENGINEERING (HATZ)

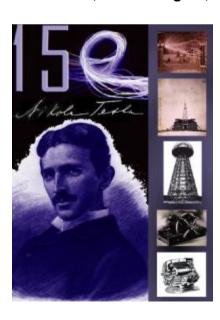
under Auspices of the CROATIAN PARLIAMENT

is organizing

INTERNATIONAL
SCIENTIFIC AND PROFESSIONAL MEETING

# "THE LIFE AND WORK OF NIKOLA TESLA"

on June 28 and 29, 2006 in Zagreb, Croatia



On the occasions of «2006 – The Year of Nikola Tesla» and

150th Anniversary of his birth

# **NIKOLA TESLA (1856 – 1943)**



As a visionary and a scientist, Nikola Tesla was a man heading before his, and, probably, before our time. His ideal was to serve the entire mankind. He was born on July 10, 1856 in Smiljan, near Gospić,

Croatia, and died on January 7, 1943 in New York, USA, He finished High school in Gospić and Karlovac and studied in Graz and Prague. He spent a part of his life working in Budapest and 43 years in the USA. He obtained his Honorary Ph.D. title at the University of Zagreb in 1926 with recommendation of the Faculty of Technology, University of Zagreb, S.C.S. Monarchy. On August 6, 1926 Prof. Milan Čalogović presented him his Honorary Ph.D. in New York. The unit for magnetic induction tesla (T) was named after Nikola Tesla in 1960 and one of the craters on the Moon was also named after him. From 1969 the image of Nikola Tesla is on the Rector's Chain of the University of Zagreb along with the images of Ruđer Bošković, Dragutin Gorjanović Kramberger, Ivan Gundulić, Ivan Mažuranić, Bishop Josip Juraj Strossmayer and others. He had 700 inventions and approximately 250 of them were patented. At the time of his death he was a person with the highest number of registered patents in the USA.

Detailed information, programme and registration:

# http://www.hatz.hr/TESLA

# Technically co-sponsored by:

**CAETS** (International Council of Academies of Engineering and Technological Sciences) **Euro-CASE** (European Council of Applied Sciences and Engineering)

IEEE History Center (Institute of Electrical and Electronics Engineers - History Center)
IEEE Croatia Section

**IEEE Region 8** 

## Coorganizers of the Meeting

Ministry of Science, Education and Sports RC Faculty of Electrical Engineering and Computing, University of Zagreb Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, University of Split

Hrvatska elektroprivreda, Inc.

Ericsson Nikola Tesla, Inc.

Energy Institute Hrvoje Požar

KONČAR Group, Inc.

Technical Museum, Zagreb

Croatian Association of Engineers (HIS)

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<u>Temporary Programme</u>			
June 27, 2006, Tuesday - afternoon			
	14:00 - 19:00	Registration - (Croatian Academy of Engineering - HATZ, 28 Kačić St.)	
	19:00 - 21:00	Welcome Party - (Technical Museum Zagreb, 18 Savska St.)	
June 28, 2006, Wednesday – morning (Concert Hall "Vatroslav Lisinski", 4 Stjepan Radić Sq., Zagreb)			
	08:00 - 09:00	Registration	
	09:00 - 09:45	Opening Ceremony	
	09:45 - 10:30	"Nikola Tesla: scientist, engineer, inventor" - H.K. Forsen, Ph.D. – National Academy of Engineering, USA	
	10:30 - 10:45	"Ericsson Nikola Tesla: Following Tesla's Vision" - Carl-Henric Svanberg, President and CEO Ericsson, Sweden	
	10:45 - 11:15	"Tesla's time and application of his achievements in the future" - K. R. Richter, Ph.D., Prof.Emer., Technical University of Graz, Austria, Hon. Mem. of the HATZ	
	11:15 - 11:45	"Some recent recognition of pioneering role of Nikola Tesla in the development of Radio" - A. Marinčić, Ph.D. – Serbian Academy of Sciences and Arts, Serbia and Montenegro	
	11:45 - 12:00	Coffee break	
	12:00 - 12:15	"Nikola Tesla and KONČAR - Group" - S. Car, Ph.D KONČAR - Electrotechnical Institute, Inc.	
	12:15 - 12:30	"Development and connection of	

large energetic systems " - lvica

Toljan, M.Sc. - HEP, Inc. - CIGRÉ

"Development of the Electric Power

MOVIE produced by HEP, Inc.

System in Croatia"

RECEPTION

12:30 - 12:45

12:45 - 13:45

### THE VISIONS AND WORK OF NIKOLA TESLA: **TODAY AND TOMORROW**

June 28, 2006, Wednesday (Ministry of Economy, Labour and Entrepreneurship of the Republic of Croatia, 78 Vukovar St., Zagreb)

### **PATENTS**

- Milović T · NIKOLA TESLA'S PATENTS ESSENCE OF PATENT 14:30 PROTECTION SHOWN IN THE EXAMPLE OF NIKOLA TESLA'S **PATENTS**
- Sekso Telento. A.: CROATIAN VIEW ON QUARREL TESLA -15:00 FERRARIS AND ROLE OF PATENTS IN IT
- Moser, J.: TESLA'S PATENTS IN THE FIELD OF ELECTRIC POWER
- Petković, T.: TESLA'S INVENTIONS IN THE FIELDS OF PHYSICS AND ELECTROTECHNICS AND HIS ENGINEER INTUITIONS
- 16:00 Valenta, A.: TESLA'S WORKS ABOUT TESLA IN CROATIAN LIBRARIES, SEARCHABLE VIA ONLINE CATALOGUE
- Discussion 16:20
- COFFEE BREAK 16:40

### ELECTRIC MACHINES AND DRIVES and POWER SYSTEMS AND TRANSMISSION

- 17:00 Mrvoš, D.: THERMO-MAGNETIC MOTOR
- Sekso Telento, A.: THE "BATTLE OF CURRENTS" FROM 17:20 **EDISON AND TESLA TILL NOW**
- Majstrović, M., Majstrović, G., Bajs, D., Sarajčev, P.: VOLTAGE AND CURRENT ANALYSIS OF PHASE DISCONNECTION OF DOUBLE CIRCUIT OVERHEAD LINE
- Kuzmanović, B., Ferković, L.: MELTING AND HEATING OF METALS 18:00 IN ELECTROMAGNETIC FIELD
- Meyl, K.: REPRODUCTION OF THE SCALAR WAVE EFFECTS OF TESLA'S WARDENCLYFFE TOWER
- 18:40 Discussion

### June 29, 2006, Thursday

### COMMUNICATIONS

- Huljenić, D., Dešić, S.: NIKOLA TESLA FROM THE ASPECT OF COMMUNICATION
- Dešić, S., Huljenić, D., Vrlika, V.: INNOVATION MANAGEMENT AS A BASE FOR SUCCESSFUL DEVELOPMENT
- 09:30 Podhradsky, P.: EVOLUTION TRENDS OF THE CONVERGED NETWORKS AND NEXT GENERATION NETWORKS
- 09:45 Poljak, D., Dorić, V., Blažević, Z.: MODELINF OF TESLA'S TRANSMITTER USING THE ANTENNA THEORY APPROACH
- Miličić, P.: THE FUNDAMENTAL SYSTEM OF RADIO COMMUNICATION - INVENTION OF RADIO
- Zovko Cihlar, B.: FROM TESLA'S INVENTIONS IN THE FIELD OF RADIOCOMMUNICATIONS TO DIGITAL BROADCASTING FOR **MULTIMEDIA SERVICES**
- Blažević, Z., Poljak, D., Cvetković, M.: SOME NOTES ON TRANSMISSION LINE REPRESENTATIONS OF TESLA'S **TRANSMITTERS**
- Hadžialić, M., Hadžiahmetović, N., Ahić-Đokić, M.: AN ASPECT OF RADIO CHANNEL MODELING SUITABLE FOR ESTIMATION OF FADING PARAMETERS
- Mustafić, A., Behlilović, N., Hadžialić, M., Vučinić A.: APPLICATION OF ADVANCED ENCRYPTION STANDARD IN VIRTUAL PRIVATE NETWORKS IMPLEMENTATION
- Hadžialić, M., Behlilović, A., Sarailić, A., Begović, P.: INFLUENCE OF PATH LOSS MODELS ON ERROR PROBABILITY IN GAMMA SHADOWED NAKAGAMI-M FADING CHANNEL
- Discussion 11:30
- 11:45 COFFEE BREAK

### FREE TOPICS

- Jakobović, Z:: TESLA'S HF CURRENTS IN ELECTROTHERAPY 12:00
- Martinis, M.: TESLA AND MEDICINE 12:20
- Musić, M., Ahić Džokić, M., Mušić, O.: MODULATION OF **ULTRASONIC SIGNAL IN VORTEX STREET OF FLUID**
- Moser, J.: COLORADO SPRINGS NOTES OF NIKOLA TESLA Filipi, M.: NIKOLA TESLA AND THE SOCIAL ENVIRONMENT 13:20
- IN WHICH HE LIVED
- 13:40 Discussion
- 15:00 Departure for Smiljan by bus, visit to the birth house of Nikola Tesla