

EDITORIAL

Dear Readers,

The first part of the issue No. 1–2/2006 of the Journal *AUTOMATIKA* covers five papers presented at the **IEEE International Symposium on Industrial Electronics 2005** held in Dubrovnik, Croatia, 20–23 June 2005. The majority of the participants consider the symposium of Dubrovnik as an incentive forum and platform for discussions of over 300 scientists coming from over forty countries worldwide.

The first paper: **Robust Network Motion Control System Based on Disturbance Observer**, Atsushi Kato et al. propose a modified disturbance observer with Smith predictor to compensate time delay. The second paper: **Mechatronic Systems' Control Design Using Dynamic Emulation of Mechanical Loads**, in which M. Rodič et al. present rapid prototyping method for design, testing and validation of the mechatronic system propelled by electric drives (particularly for prototype testing). The third paper: **An Algorithm for Deadlock Prevention Based on Iterative Siphon Control of Petri Net**, D. Kezić et al. present a formal calculation method of a deadlock prevention supervisor by using Petri nets. The fourth paper: **Reduction of Ringing Losses in Flyback Converter by Using the RC-RCD Clamp Circuit**, M. Milanović et al. describe the use of a RC-RCD clamp circuit for damping the clamp diode's oscillation. The fifth paper: **Model Predictive Fuzzy Control of Longitudinal Ventilation System in a Road Tunnel**, S. Bogdan et al. have tested the proposed method by simulation and compared the obtained results with a method previously used in the ventilation system of the tunnel Učka, Republic of Croatia.

The second part is featuring three papers furnished directly to the editorial board:

- M. Maletić, D. Miljković: **The Acoustic Echo Cancellation Hands-Free Communicator**. This paper compares convergence properties of two FIR filter adaptation algorithms used in echo cancellation. This paper is an original scientific article.
- N. Stojković: **ADSL Analog Front End**. In this paper the Asymmetric Digital Subscriber Line (ADSL) Analog Front End (AFE) designs are described and compared. This paper is a review article.
- B. Somek, S. Fajt, A. Dembitz, M. Ivković, J. Ostojić: **Coding Strategies for Cochlear Implants**. This paper compares three different speech-coding strategies in applying cochlear implants in the correction of hearing and speech impediments in deaf persons. This contribution is a professional paper.

Subsequently you shall find our regular sections: **Meetings and Events and News and Topics**.

Editor-in-chief:
Professor Borivoje RAJKOVIĆ, PhD