

CONTENTS

	Page
1. Pid controller in step-motion control for bipedal robot with elastic legs1 Tran Hoang Chinh¹, Nguyen Minh Tam¹, Le Thi Thanh Hoang¹, Nguyen Thien Van², Mircea Ivanescu³, Nguyen Van Dong Hai¹ <i>¹Ho Chi Minh City University of Technology and Education (HCMUTE), Vietnam</i> <i>²Universitatea Politehnica din Bucuresti (UPB), Romania</i> <i>³Universitatea din Craiova (UCV), Romania</i>	1
2. Image Character compression algorithm for systems using microcontroller10 Nguyen Thanh Hai, Phan Van Hoan, Nguyen Dinh Phu, Ta Xuan Vu <i>Ho Chi Minh City University of Technology and Education, Vietnam</i>	10
3. A novel offset functions design for five-level cascade inverters to reduce switching loss20 Do Duc Tri, Quach Thanh Hai <i>Ho Chi Minh City University of Technology and Education, Vietnam</i>	20
4. Low power cam memory design using power gating technique27 Dam Trong Luan, Vo Minh Huan <i>Ho Chi Minh City University of Technology and Education, Vietnam</i>	27
5. Model and control algorithm construction for rotary inverted pendulum in laboratory32 Vo Anh Khoa¹, Nguyen Minh Tam¹, Tran Vi Do¹, Nguyen Thien Van², Nguyen Van Dong Hai¹ <i>¹Ho Chi Minh City University of Technology and Education, Vietnam</i> <i>²“Politehnica” University of Bucharest, Romania</i>	32
6. Pulse-width modulation strategy for common mode voltage elimination in three-level neutral point clamped inverters with reduced common mode voltage spikes41 Pham Dang Khoa, Nguyen Van Nho <i>Ho Chi Minh City University of Technology (HCMUT), Vietnam</i>	41
7. Forecasting Vietnam’s electric load profile to 2030.....51 Nguyen Hoang Minh Vu¹, Nguyen Ngoc Au¹, Vo Viet Cuong¹, Phan Thi Thanh Binh² <i>¹Ho Chi Minh City University of Technology and Education, Vietnam</i> <i>²Ho Chi Minh City University of Technology, Vietnam</i>	51
8. Minimizing the amount of load shedding considering the primary control of generator58 Le Trong Nghia¹, Quyen Huy Anh¹, Phan Thi Thanh Binh², Nguyen Trong Tin¹ <i>¹Ho Chi Minh City University of Technology and Education, Vietnam</i> <i>²Ho Chi Minh City University of Technology, Vietnam</i>	58

9. Applying anfis to control wind generator for reducing power oscillation.....67
Nguyen Thi Mi Sa¹, Truong Dinh Nhon¹, Le Doan Thanh An²
¹*Ho Chi Minh City University of Technology and Education, Vietnam*
²*Vietnam – Singapore Vocational College, Vietnam*
10. Deal with uncertainty systems using intelligent control methods73
**Ta Van Phuong, Nguyen Quoc Tan, Nguyen Thanh Luan,
Ta Minh Giang, Ly Thanh Hung**
Ho Chi Minh City University of Technology and Education, Vietnam
11. Adaptive sliding mode control with RBF neural networks for omni-directional mobile robot.....80
**Thanh-Tung Pham¹, Chi-Ngon Nguyen², Ngo-Phong Nguyen³,
Huong Dong Van⁴, Kieu-Mai Le Thi¹, Hoang-Tam Vo¹**
¹*Vinh Long University of Technology Education, Vietnam,*
²*Can Tho University, Vietnam*
³*Ulsan National Institute of Science and Technology (UNIST), Korea*
⁴*Ho Chi Minh City University of Transportation, Vietnam*
12. Balancing control of inverted wedge system using neuro Fuzzy method88
**Nguyen Thanh Tan¹, Nguyen Minh Tam²,
Le Thi Thanh Hoang², Nguyen Van Dong Hai²**
¹*Tra Vinh University, Vietnam*
²*Ho Chi Minh City University of Technology and Education, Vietnam*