

CONTENTS

PREFACE	7
Tadeusz PUSTELNY	
1. DEPARTMENT OF OPTOELECTRONICS AT THE SILESIAN UNIVERSITY OF TECHNOLOGY – HISTORY AND TODAY	11
Kamil BARCZAK, Dominik DUDA	
2. APPLICATION OF OPTICAL SENSOR FOR MEASUREMENTS OF LIGHTNING STRIKE CURRENT	29
Romuald BOLEJKO	
3. CALCULATION OF SOUND ABSORPTION PROPERTIES OF HELMHOLTZ RESONATOR BY NUMERICAL METHODS	46
Stefan BRACHMAŃSKI	
4. TEST MATERIAL USED TO ASSESS SPEECH QUALITY IN POLAND	65
Marzena DZIDA, Edward ZOREBSKI	
5. APPLICATION OF ACOUSTIC METHOD FOR DETERMINATION OF THERMODYNAMIC PROPERTIES OF LIQUIDS	80
Stanisław GMYREK	
6. VOICED FRAME DETECTION IN AUTOMATIC SPEECH RECOGNITION ...	109
Tadeusz GUDRA	
7. RETROSPECTIVE OUTLINE OF THE ELECTROACOUSTIC SYSTEM IN THE NATIONAL MUSEUM "PANORAMA RACŁAWICKA" IN WROCŁAW (1985 – 2020)	120
Piotr KOZŁOWSKI	
8. INFLUENCE OF THE ARCHITECTURAL FINISH OF ROOMS ON THE SPEECH INTELLIGIBILITY OF VERBAL MESSAGES BROADCASTED BY THE VOICE ALARM SYSTEM	135
Bartłomiej KRUK, Maurycy J. KIN	
9. LOUD MUSIC LISTENING VS. THE PERCEPTION OF CHANGES IN PARAMETERS OF MUSICAL SIGNALS	152
Agnieszka LISOWSKA-LIS, Franciszek WITOS	
10. THE USE OF THERMOGRAPHY TO IMPROVE THE SAFETY OF USING ELECTRICAL DEVICES IN THE POWER INDUSTRY	170

Aneta OLSZEWSKA

- 11. BASIC AND ADVANCED ANALYSIS OF ACOUSTIC EMISSION SIGNALS TO DISTINGUISH SIGNALS FROM DIFFERENT SOURCES GENERATING ACOUSTIC SIGNALS IN POWER OIL TRANSFORMERS.....** 183

Krzysztof J. OPIELIŃSKI, Piotr PRUCHNICKI

- 12. ANALYSIS OF THE POSSIBILITY OF USING CODED PULSES IN ULTRASOUND TOMOGRAPHY** 213

Piotr PRUCHNICKI

- 13. CORRECTION OF ERRORS OCCURRING DURING THE DETECTION OF PULSE ARRIVAL TIME IN ULTRASOUND TOMOGRAPHY.....** 243

Barbara RUDNO-RUDZIŃSKA, Paweł DZIECHCIŃSKI, Przemysław PLASKOTA

- 14. ABSORBING PROPERTIES OF NOISE BARRIERS MEASURED BY DIFFERENT METHODS.....** 260

Krzysztof RUDNO-RUDZIŃSKI

- 15. SOUND EXPOSURE LEVELS RECORDED BY CHOPIN AIRPORT MONITORS OVER A PERIOD OF SIX YEARS.....** 280

Adam RUTKOWSKI, Adam KAWALEC

- 16. ON THE USE OF MICROWAVE SIGNALS AND ACOUSTIC EFFECTS FOR MISSILE DETECTION.....** 300

Piotr STARONIEWICZ

- 17. EFFECT OF DELIBETARE AND NON-DELIBERATE NATURAL VOICE DISGUISE ON SPEAKER RECOGNITION PERFORMANCE.....** 312

Grzegorz SZERSZEŃ, Franciszek WITOS

- 18. APPLICATION OF SELECTED ACOUSTIC EMISSION DESCRIPTORS TO IDENTIFY PARTIAL DISCHARGES.....** 326

Tomasz ŚWIETLIK

- 19. RECONSTRUCTION OF THE IMAGE OF STRUCTURE WELL REFLECTING THE ULTRASOUND WAVE BY USING DOPPLER TOMOGRAPHY METHOD.....** 345

Daniel TOKARCZYK, Marek PLUTA, Jerzy WICIAK

- 20. MECHANICAL GUITAR PLAYER, A ROBOT FOR AUTOMATIC TESTING OF STRING INSTRUMENTS PARAMETERS.....** 365

Franciszek WITOS, Agnieszka LISOWSKA-LIS

- 21. THE IDENTIFICATION OF SIGNALS AND LOCATION OF SOURCES OF PARTIAL DISCHARGES AND MAGNETIZATION PROCESSES IN OIL POWER TRANSFORMERS BY MEANS OF ACOUSTIC EMISSION METHOD.....** 387

Franciszek WITOS, Aneta OLSZEWSKA, Zbigniew OPILSKI

- 22. LOCATION OF LEAKAGE IN METAL GAS PIPELINES BY THE ACOUSTIC EMISSION METHOD USING MODELED AND NATURAL SOURCES.....** 404

- Abstract.....** 421