CONTENTS - VOLUME 5

PREFACE

KEYNOTES	
Aging and work: problems and solutions for promoting the work ability Juhani Ilmarinen	3
Human factors in multimedia production Halimahtun Mohd Khalid	17
Psychosocial aspects of working with video display terminals (VDT's) and employee physical and mental health Michael J. Smith	23
1 HUMAN-COMPUTER INTERACTION	
1.1 WORK STATION DESIGN	
Supporting the forearms on the table top when doing VDU work. A laboratory and field study Aarås A, Ro O	29
A questionnaire survey of cathode ray tube versus flat panel display user Abe S, Sotoyama M, Jonai H, Villanueva MBG, Saito S	32
A challenge to eye-level, perpendicular-to-gaze, monitor placement Ankrum DR	35
The influences of the height of the VDU screen, and the position of the back rest on the neck muscle load and the position of the head Hautekiet M, Hermans V, Spaepen AJ, Snijders K	38
Fixation disparity as a function of prism load and viewing distance at visual display units (VDU) Jaschinski W	41
Visual comfort at the VDU workplace and oculomotor parameters as a function of vertical inclination of gaze direction Jaschinski W, Heuer H, Kylian H, Koitcheva V	44
Developing and evaluating force sensing mice for use in epidemiological studies Johnson P, Rempel D, Hagberg M	47
Gaze inclination and health in VDU-operators Lie I, Fostervold KI, Aarås A, Larsen S	50
Reliability and senstivity of methods to quantify muscle load during keyboard work Martin B, Rempel D, Sudarsan P, Dennerlein J, Jacobson M, Gerard M, Armstrong T	53

Visual ergonomics problems in VDT workplaces and analysis of vertical gaze direction Saito S, Sotoyama M	56
Improvement in visual comfort of VDT workers from the aspects of vertical gaze direction and tear volume Sotoyama M, Abe S, Jonai H, Villanueva MBG, Saito S	59
Development of a prevention action plan for workplaces equipped with computer displays: a global two-way approach Taverniers W	62
Six month keyboard intervention study in computer users with hand symptoms: typing performance and user preference Tittiranonda P, Burastero S, Rempel D	65
CRT and LCD TFT screens at computer work stands: visual fatigue and environmental luminance Wolska A, Switula M	68
Device modeling and HCI: modifications for rapid-aimed movement Zellers SM, Buck JR	71
1.2 INTERFACE AND SOFTWARE DESIGN	
Interruptions in the computer aided office work: implications to user interface design Burmistrov I, Leonova A	77
Impact of the user interface on the ergonomic assessment of software Çakir AE	80
Software characteristics and stress/strain – correlations between dialogue principles and self-reported stress/strain Çakir AE	83
Describing inertia in interface navigation Caldwell BS	86
Affordable virtual reality in ergonomics - some examples Davies RC	89
Ergonomic software analysis of a text editor Dutra ARA, Gonçalves CFF, dos Santos N, Fialho FAP	92
Instrumental utility and usability of the data processing in work office Ferreira MC, Weill-Fassina A	95
Usability study of the PIT (Portable Information Terminal) platform Hosono N, Suzuki K, Tomita Y	98
A schema-based software design for interactive computer systems Kotani K, Tsuchiya K, Horii K, Kitamura Y	101
Using task analysis to inform requirements analysis of a computer system – a practical example Mills S	104
Toward inspiring creative thinking: intelligent support for brainstorming Mori H, Kinoe Y	107

A neuro-fuzzy approach for adaptable user interface implemented in the information system of Bulgarian parliament Nikov A, Delichev S, Stoeva S	110
A practical model of user-centred information systems development	113
Smith A, Dunckley L Using TQM techniques to improve interface design and usability: the LUCID method Smith A, Dunckley L	116
Task appropriateness as a feature of interactive business transactions Stary C, Totter A	119
Evaluation of HCl quality based on appropriateness of presented information Suzuki S, Yazu Y, Ninomija SP	122
Study on mental model formation process for problem solving Yamamoto S, Koyazu T	125
A motivation oriented human interface Yokota K, Nagata M	128
Cognitive ergonomics in human-computer interaction – principles and evaluation Åborg C, Sandblad B	131
1.3 MISCELLANEOUS	
Perception of virtual conference: the role of ergonomists Ahasan R, Sen RN, Ukkola K, Kisko K	135
Effects of icon usage and color on manipulating hypertext documents Aksehirli Z, Cilingir C	138
A pilot study of a method for determining wrist contact pressure while keying Albin TJ	141
Psychological aspects of human computer interaction Arestova O	143
Disorders of the motor system among persons working at computer VDUs: the results of a poll conducted among representatives of several professions Bielski J, Romankow J, Zeyland AM	146
Survey of VDT users from an on-site occupational vision clinic Burastero S, Wei E, Tittiranonda P, Lo C, Bommarito P	149
Creation of a working group to design an interface: the role of the ergonomist Castaing M-F	152
Ergonomic influence on the design of an interface access to coverbal gesture data bases Castaing M-F, Hurault-Plantet M	155
The state of the s	158
Visual lobe and lateral masking Courtney AJ, Lai APY	100
Study of the relative dexterity of fingers for keying tasks da Costa LG	161
The impact of new technologies and graphic softwares on information design jobs de Moraes A, Padovani S, Mendes C	164

Psychophysiological approach of stress-strain processes in subjects working with visual screens	167
Deliu N, Contulescu A, Purice M, Tat M, Licurici M, Litescu E, Herlea E, Setrarescu V	
The influence of the otolithic input on the quick phase and spontaneous saccade orientation Draicchio F, Leonardis C, Pettorossi VE	170
How do children watch TV program? Fukuda R, Hattori K, Fukuda T	173
How efficient are VDT combined works to maintain high awaking levels? - Influence on change of task Funada MF, Ninomija SP, Soo CY	176
Obtaining and analyzing multi-media data to identify and define requirements in human systems Gallaway GR	179
Ergonomic conditions and subjective complaints in videoterminal users Gomzi M, Zavalic M, Bogadi-Šare A	182
A fundamental study on work feelings of VDT workers during paced and unpaced tasks Horie Y	185
Development of the checklist for a VDT usability testing // // /	188
Does computer operation cause fatigue? Kamienska-Zyla M, Prync-Skotniczny K	191
Intelligent support for discovering latent relationships among ideas: a methodology based on genetic programming Kinoe Y, Mori H, Sugita N, Hayashi Y	193
Chit do	
Comparison of different viewing angles during vigilance task with large-sized (LS)	196
Komine N, Togami H, Akatsu J, Takahashi Y, Hashimoto M, Miyake S, Kumashiro M	
How to create a good VD workplace in compliance with the EU directive Kukkonen R, Lehtelä J	199
Eye-controlled pointing device using the line-of-sight and the intentional blink Lee KT, Park JH, Park KS	202
Ergonomics evaluation of a computerized administrative workstation in an attorney's Mariño S	205
Visual complex organized pattern (the pattern interface) as a means of interaction between person and computer Molotova A, Ekonomova T	208
Website design audit Murthy MR, Sarac A	211
Jsing ergonomics in creating the human-machine interface Olszewski J	214
ongitudinal evaluation of system acceptance and adoption: voice mail system	217

Adjusting CAD system knowledge to user's needs Pereira ATC, Pereira FOR	220
Maintenance and improvement of work performance in subject with significantly impaired visual acuity and/or contrast sensitivity function with the aid of special lens designs and filter-lenses Päällysaho J, Müller K	223
Optimizing feedback signals for multimedia devices: earcons vs. auditory icons vs. speech Roberts LA, Sikora CA	224
Ergonomic project of VDUs work station/ results Santos V, Chaves JMMF, Pavão JCM, Conçalves I, Fragoso PI	227
A study on workstation design in relation to use of video display terminals in a few newspaper establishments in India Saxena SK	230
Exploration of prediction evaluation techniques Schuhmacher VRN, Parizotto R, Boldo EL, Faust R, de Abreu Cybis W	233
An ergonomics approach to computerization at Mayo Stenstrom J	236
Human selective visual behavior for stimuli allocated symmetrically on the screen Togami H, Kumashiro M	239
"5S" new implementation model in a non-manufacturing organisation Varvakis Rados GJ, Queiroz AH, Campos LMS, Silva DA, Selig PM, Possamai O, Salm FJ	242
Assessment of stress factors at workplaces Wichtl M	245
DIVIUS – a visual interface to a pictorial database Woodcock A, Scrivener SAR, Landsdale MW	248
2 STRESS AND MENTAL LOAD	sychologics State LK C
2.1 MENTAL LOAD	
Analysis of cognitive demands of the activities of nurse Benito GV, Gontijo LA, Jarufe MS	253
Binary choice secondary task as a measure of mental workload Culic M	256
Comparison of self-assessment using SWAT and ISA with post-exercise NASA-TLX and objective performance decrement using speech recognition and keyboard control David H, Pledger S	259
Assessment of task-specific element-2: the case of computer engineers (The summary on advantage and disadvantage of occupation-general approach and task-specific approach) Fujigaki Y	262
Study of the fluctuation in degree of work precision according to time lapse	265

An experimental study aiming at the quantification of mental workload (MWL) by multi-parameters Hirayanagi K, Iwasaki K, Sasaki T, Yajima K	268
Assessment of occupation-general aspects #1: job stress questionnaires developed in the U.S. and their application to Japanese employees Kawakami N, Roberts CR, Haratani T	271
Assessment of occupation general aspect 2: examples of European questionnaires Lindström K	274
Assessment on occupation-general aspects 3: physiological measures Ohsuga M, Terashita H, Shimono F	277
Mental workload measured by binary choice secondary task Radovic Z, Culic M	280
Dissociation between task demands and mental effort Veltman HA, Gaillard AWK	283
2.2 STRESS AND WELL-BEING	
Methodology for evaluating the quality of life related to worker's health Alvarez BR, Duarte MFdS, Lima DGd	289
The moderating role of social support in work stress Cieslak R, Widerszal-Bazyl M	292
Psychosocial factors at work, musculoskeletal complaints, stress symptoms and muscle activity among office employees Eklöf M, Jorulf L, Kadefors R, Sandsjö L	295
The regional safety rep as outsider – a healthy anomaly in the Swedish system of industrial relations Frick K	298
Psychological well-being and symptoms among compositors Jensen LK, Christiansen JM, Eenberg W	301
Personality, job strain and musculoskeletal symptoms Johansson Hanse J	304
Muscular tension, psychosocial factors and shoulder-neck pain. An intervention project in a group of white collar workers Jorulf L, Eklöf M, Kadefors R, Sandsjö L, Vainikainen A	307
Musculoskeletal symptoms: relationships to sense of coherence, life style, and socioeconomic conditions Larsson G, Kallenberg K	310
The health and work conditions of bus drivers experienced in Tallinn Riisalo R, Rjazanov V, Moks M	313
A study on the relationship among job stress, job cognition and health level Saito M, Shimizu R, Yamaga Y, Seki H	315
Sense of competence and sense of coherence as health resources in computer professionals Toppinen S, Kalimo R	318

2.3 PSYCHOPHYSIOLOGICAL MEASUREMENTS

Sustained attention of railway traffic safety personnel in information overload and underload situations Akila R, Portin R, Revonsuo A, Paakkulainen H, Päällysaho J, Müller K	323
Individual differences observed among experts engaging in vigilant tasks at a simulated nuclear power plant control room Akita M, Miyahara S	326
Neurosensorial changes related to peculiarities of work as basis for ergonomical design Anghel I, Anghel M, Derevenco P, Tigan S, Tatar I	329
Temporal structures of man-machine interactions: psychophysiological investigations Boucsein W	332
A case study on the biopsychic effect of stress in telephone operators Bridi VL, Casas LAA, Fialho FAP	335
Cardiovascular changes during some types of occupational stress Derevenco P, Anghel I	338
Psychophysiological correlates of human errors Göbel M, Suzuki S, Luczak H	341
The critical flicker fusion test meaningful index for the industrial fatigue research? Hasegawa T, Kumashiro M	344
Dual-channel sensory mechanism of stimulus discrimination Izmailov CA, Shekhter ED	347
Some empirical findings on heart period variability as measure of mental effort in human computer interaction Izsó L, Wiethoff M	350
Stress in the decision making on ship maneuvering Kobayashi H, Murayama Y, Kato K, Shigeta S, Endo M	353
Consideration of long-term CFF changes in the result analysis and CFF methodology Luczak A, Sobolewski A	356
Operator performance efficiency prognostication Medenkov AA	359
Qualitative study of the stress in graduation students Merino E, Simões M, Veras M, Franco E, Patricio Z	362
Psychophysiological responses to a coolant level control task Miyake S, Osaki H, Ikeda K, Kubota R, Miyakawa T, Furuta T	365
Concepts of mental workload in psychophysiological research Sammer G	368
Workload and EEG-dynamics Sammer G	371
Psychological and medical aspects of human-operator activity reliability prediction Shlaen P, Lvov V, Gutyanskij G	374
Electro-physiological signals: indicators of mental fatigue and strain Shmilovitz O, Glusman JG, Cassuto Y	377

Anticipation Stern JA, Sirevaag EJ, Wang L, Rohrbaugh JW	380
Research on emotional parameter of EEG measurement in human sensibility ergonomics Whang MC, Cho HK, Kim CJ	383
Evaluation of mental concentration using eye fixation related potential Yagi A, Takeda Y, Konishi H	386
3 AGING	danedaya light soli 1 lehec
3.1 AGING AND WORK	
Age-oriented personnel policy: the state of the art in the Netherlands Andries F	391
Effects of production changes on work strain among young and old workers in a food factory Arola H, Nygård C-H, Huhtala H, Manka M-L	394
The Mahis-program: Work ability promotion as a function of a company Asikainen P, Palolahti T	397
Work environment, global self-rated health, and early retirement Borg V, Burr H, Christensen H, the EGA Study Group	400
Organizational learning – a strategy for development of work? Bottrup P	403
Injury risk profile and aging among Québec firefighters Cloutier E, Champoux D	406
Training for older workers: government sponsored local training provision in Britain Collis C, Mallier T, Smith-Canham J	409
Association between diastolic blood pressure and cumulative work time as a measure of aging related to work Cordeiro R	412
The aging of working-age population in Brazil Ferreira Levy MS, Pagliaro H	415
Is the combination of organizational and environmental stressors contributing to the aging process? Fischer FM, Morata T, Krieg E, Zavariz C, Colacioppo S, Fiorini AC, Gozzoli L, Padrão MA, Wallingford K, Lieber RR, César CLG, Montini A, Ventura G	418
How can the science of ergonomics better help older workers choose their optimum career? Getty RL, Getty JM	421
Changes in blood pressure and perceived work stress: a longitudinal study Goedhard WJA	424
Metaknowledge in X-ray operators: an exploratory study Gonon O. Baracat B. Marquié JC	427

The ergonomics of clothing for the disabled and elderly Harwood RJ, Wyatt J	430
Assessment of performance and psychophysiological reactions in a VDT-based task environment for the aged	433
Hashimoto M, Takahashi Y, Miyake S, Komine N, Kumashiro M, Ogata H	an and investigation
Development of work methods and tools for ageing professional cleaners Hopsu L, Louhevaara V	436
Effects of a work-site physical exercise intervention on the physical fitness and well-being of professional cleaners Hopsu L, Louhevaara V, Korhonen O	439
Improving cooperation at work between generations Huuhtanen P, Ahola K, Leino T	442
Effects on work interest, work ability and health by an ergonomic and health training program for elderly urban transport drivers in Munich Karazman R, Geissler H, Kloimüller I, Karazman-Moravetz I	445
Job re-design needs for aged workers	448
Kawakami M, Inoue F, Ohkubo T, Ueno T	
Recent and ongoing activities to promote work and health among the older workforce in Sweden	451
Kilbom Å, Hultgren D	
How do stress impacts change with aging in the profession of bus drivers? Results from a questionnaire survey on 'health and competition' among bus drivers in a public transport system¹ in 1996 Kloimüller I, Karazman R, Geissler H	454
How can work adaptability be predicted for aged workers?	457
Kumashiro M	
Physical condition, work demand, and implications for aging workers: development of assessment tools Lai J, Chen J, Tsai M, Lee H	460
	400
Age and work on assembly lines: studies and actions in an automobile construction plant Laville A, Sailly M, Volkoff S	463
Controlling changes in steelworks among elderly steelworkers Leino T	466
Work, age and stress in the metal industry Leppänen A, Elo A-L, Martikainen R	469
Work ability of middle-aged Finnish construction workers – a follow-up study in 1991-1995	472
Liira J, Matikainen E, Rytkönen H, Mutanen P, Leino-Arjas P, Juntunen J	
Systems ergonomics for innovation and quality Lino L	474
Ergonomic interventions and the Work ability index Louhevaara V, Hopsu L, Pohjonen T, Punakallio A	477
FinnAge – Respect for the Ageing Programme 1990-1996: a brief summary Louhevaara V, Ilmarinen J	480

Heat tolerance of different age groups of men with and without protective clothing Marszalek A, Smolander J, Soltynski K, Sobolewski A	483
Study on cardiorespiratory capacity of aged workers and its relation with work ability Mianzhen W, Yajia L, Zhiming W, Chenlie Z, Ilmarinen J, Klockars M, Tuomi K, Shen N	486
Muscular capacity in older workers Monod H, Vandewalle H	489
Ageing: working capacity and job pattern in informal sectors Nag PK, Nag A	492
A study of the recreational activity in the aged generation – The influence of the habits and the personality Nishiguchi H, Saito M	495
Work ability index related to age, disorders and ergonomics Noronen R, Soininen H, Louhevaara V	498
Health and quality of life at work in the perspective of retirement Paraguay AIBB, Cardoso DM, Zanon MAC	501
Comfort and discomfort at work: the nurturing and pampering paradigm Paul RD, Helander M, Morrow J, Zhang L	504
Ergonomics and out-patient basis to elderly people: balance and gait problems associated with falling Pinto MR, Caterina G, De Medici S, Napoli C	507
Exercise and health promotion among home care personnel Pohjonen T, Punakallio A, Louhevaara V	510
Work ability and physical fitness of fire fighters in different age groups Punakallio A, Louhevaara V, Lusa-Moser S, Korhonen O	513
The effect of age on subjective assessment of work environment Räsänen T, Laitinen H, Rasa P-L	516
"Productive Ageing – development of personnel over 40" in the Austrian Bank GiroCredit Schrierl R, Selbmann H	519
Aging and productivity: basic concepts Shephard RJ	523
Aging and productivity: some physiological issues Shephard RJ	526
Worksite health promotion and the older worker Shephard RJ	529
Home as a work environment – the quality factors of the physical work environment of home care and home nursing personnel Sipiläinen P, Kylmäaho E	532
Effect of a 6-month resistance training program on lumbar extension strength and perceived lifting capacity in fire-fighters Smolander J, Pollock ML, Proebsting C, Garzarella L, Brechue W, Foley M, Carpenter D	535
The changes in policemen's physical activity and physical fitness – a 15-year follow-up Sörensen L, Smolander J, Louhevaara V, Korhonen O, Oja P	538

A consideration on variations step height of the staircase causing stumbling in skill to ascend and descend Takeda M, Hayashi Y, Tanii K	541
The REBUS study: physical work load between 18 and 58 years of age – does it change? Torgén M, Kilbom Å	544
Tactile coding designs for the visually disabled persons (case study) Uchimura Y, Watanabe H	547
Thermal comfort responses of male and female subjects with and without physical disabilities Webb L, Parsons K	550
The work ability of Tallinn policemen Vilkis A, Kahn H	553
The sixty-year-old female worker as user of new technology Virokannas H, Rahkonen M, Luoma I, Sorvari M	555
Job analysis of common municipal occupations Yajia L, Zhiming W, Mianzhen W, Chenglie Z, Ilmarinen J, Klockars M, Tuomi K, Shen N	558
Personal factors, diseases and work ability of aged workers Zhiming W, Yajia L, Mianzhen W, Chenlie Z, Ilmarinen J, Klockars M, Tuomi K, Shen N	561
3.2 AGING AND ERGONOMICS IN THE LIVING ENVIRONMENT	A Chaganev Moss O ent's A sheet nev
Psychosocial perspective of older people in the developing countries Ahasan MR, Sen RN, Khaleque A, Sadeque S	567
A collaboration model in interiors involving the elderly Demirbilek O, Demirkan H	570
Project of a survey on different elderly populations to collect data for ergonomic applications Fubini E, Rabino Massa E, Berra A, Boetsch G	573
To fall but not to break – safety pants Heikinheimo R, Jäntti P, Aho H, Mäki-Jokela P	576
Difficulties for elderly people caused by age-related yellowing vision Ishihara K, Ishihara S, Nagamachi M, Osaki H	579
Ultrasonic urination sensor for home use Kodama H, Kuchinomachi Y, Yamauchi Y, Hieda I, Sato S, Tekeichi H, Matsumoto H	582
Anthropometry of the elderly Australian Kothiyal K, Tettey S	585
A comparison of visual search characteristics in old people under 75 in early old age and those over 75 in late old age Kuba Y, Kuchinomachi Y, Kumada T, Kurakata K, Fujimoto H	588
The relationship between the usability of daily electric appliances and the deterioration in cognitive function of old people Kuchinomachi Y, Kuba Y, Kumada T, Takeichi K	591

Biomechanics of slips and falls in the elderly Lockhart T, Woldstad J, Smith J, Park S, Burchfield D	594
Adapted technology for senior citizens Martin H, Raabe S	597
The everyday activities and mobility of elderly people: needs and hindrances Mollenkopf H	600
Supportive living environments for people with dementia: introducing a multimedia-PC application Pieper R	603
Automatic NextInfo® phone service for the elderly Pirinen M, Hautala T, Määttä T, Saajanto E, Väyrynen S, Virokannas H Different aspects of being elderly in residential wet spaces Sagdic Y, Demirkan H	606 609
Design-relevant functional capacities of the elderly, assessed in the Delft Gerontechnology project Steenbekkers LPA, Dirken JM, van Beijsterveldt CEM	612
Color temperature of light source and discomfort glare of elderly people Takeichi K, Sagawa K, Kuchinomachi Y, Kanaya S, Uematsu M, Koide K	615
Experiences with elderly panels in the design process van Berlo A	618
The Dutch Senior Label: a way to comfortable housing for everyone van Berlo A	621
Gerontechnology: mobility and accessibility in later life Vercruyssen M	624
Welfare cluster on the area of ageing and technology in the Finnish Laboratory of Applied Ergonomics Virokannas H, Tornberg V, Väyrynen S, Malm L, Leinonen T, Kirvesoja H, Pirinen M, Holappa T, Alatalo M, Koski K, Kisko K	627
Multiple criteria evaluation model with weighting factors for chairs Väyrynen S, Kirvesoja H, Kangas E	630
A suitable prescriptive exercise program for health maintenance Yamashita A, Kawakami M, Inagaki Y, Ukai T, Okubo T	633
Telephone access to the World Wide Web Zajicek M, Powell C	636
4 OCCUPATIONAL HEALTH	
Investigations regarding the evaluation of the noxious agents and the effects of those against the working personnel health conditions in the glass processing industry Badescu L, Grigoriu I, Petreanu V, Seracin M	641
Evaluation of a mandated occupational health program: the effects of program process and firm characteristics on hazard abatement Barthelette D, Lévesque G, Gourde D	644

Physical job demands in nurses and rehabilitation therapists Capodaglio EM, Capodaglio P, Bazzini G, Imbriani M	647
Cooperation between safety representatives and physiotherapists is an important tool for an efficient prevention of musculoskeletal disorders Crawford-Currie E, Stéen L	650
Ergonomics and back school Gilbertová S	652
Physiotherapy and ergonomics: professional limits and mutual respect Hignett S, Crumpton E, McAtamney L	654
Physical work load of paper mill workers before and after an intervention Ketola R, Toivonen R, Rauas S, Viikari-Juntura E	657
Assessing health status and diagnosing occupational diseases among workers of a paper mill Misevicius I, Liaukeviciute G	660
Psychological aspects of back schools Moffett JAK	663
Safety climate and injuries: the case of occupational exposure to HIV Murphy L, Grosch J, Gershon R, DeJoy D	666
The worker's health in the context of modernization Oliveira S	669
Conceptual design and implementation of the health at work services in the metropolitan company of São Paulo, Brazil Paraguay AIBB	672
An exercise training program for improving work- and functional capacity Rautalin O, Kauppila P, Heinonen OJ	674
Back school experience from the car industry Sahulková A, Ptácková A	677
Activity which maintains the company's operating and work ability - systematic implementation model - KYKY - WAP- (Work Ability Process) model Sillanpää P	680
Evaluation of occupational health services for farmers in Finland Taattola K, Husman K, Peurala M, Susitaival P	683
Promotion of functional capacity – a challenge for the occupational physiotherapist. A survey of the physiotherapist's goals and tasks in occupational health care in the province of Turku and Pori Tamminen-Peter L	685
Occupational overuse spinal syndrome Wilson A	688
AUTHOR INDEX	691