

## EDITORIAL

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Dear Readers, Contributors and Friends,

Introducing the first issue in 2013 we would like to address to you our best wishes of much happiness and prosperity in the New Year with a hope for further fruitful cooperation. The contents of this issue includes 16 articles (review, original and short communication) therefore, one may suppose that everybody will find something of their interest.

The first paper by E.A. Trafny depicts the current issues in the field of research and management of microbial contamination of water with miscible metalworking fluids (MWFs) in which microorganisms live in the form of biofilm communities. Their presence may cause a serious respiratory disorder in the metal industry employees hence the control of microorganisms' proliferation in MWFs is important.

The next review paper by K. Polańska et al. discusses the evidence on the impact of pesticides, polychlorinated biphenyls (PCBs) and some metals on ADHD or related symptoms in children. The data based on Medline, PubMed and Ebsco searches indicates that exposure to organophosphate pesticides may induce developmental disorder, ADHD or attention problem while exposure to organochlorine pesticides and PCBs is linked with ADHD-like behaviors and lead (the blood level below 10  $\mu$ g/dl) with ADHD-related symptoms vs. very scarce information on the effects of exposure to mercury or manganese.

K. Tsirigotis et al., who studied gender differentiation of indirect self-destructiveness opens the series of original papers; a population of 558 individuals (339 females and 159 males) was interviewed by means of the "Chronic Self-Destructiveness Scale (CS-DS)". It was found that masculinity is a factor that may predispose towards indirectly self-destructive behaviors, while feminity protects against those – the conclusion which may be useful in assessing occupational health and safety.

A.E. Fahim describes the predictors of job satisfaction among practicing dentists in Egyptian hospitals. 277 dentists were surveyed using a questionnaire, and the mean score of overall job satisfaction was 3.23 out of 5, the most satisfying aspect was patient relations (3.71), while personal time turned out to be the least satisfying one (2.71): the findings may help the policy makers.

The next paper by N. Pawlas from the Institute of Occupational Medicine and Environmental Health in Sosnowiec, Poland and the international team of coworkers focuses on the comparison of blood levels of cadmium (B-Cd), lead (B-Pb) and mercury (B-Hg) in women and identification of determinants in seven European cities as well as in China, Ecuador and Morocco. The study proved that exposure to lead and cadmium varies only little between European cities vs. higher cadmium and lead levels in some non-European cities and significant geographical variations for mercury. Smoking, fish and shellfish intakes as well as amalgam fillings contributed respectively to B-Cd, B-Pb and B-Hg.

W.A. Jędrychowski et al. examined the dose-dependent relationship between prenatal exposure to fine particulates ( $PM_{2.5}$ ) and exhaled carbon monoxide (eCO) in non-asthmatic children. The results of their research, which included 118 children taking part in an ongoing population-based birth cohort study, suggest that elevated eCO in non-asthmatic children may stem from oxidative stress experienced in the fetal period and that heme oxygenase activity in body issues may be programmed in fetal life by the exposure to fine particulate matters.

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M. Skrzypek et al. have assessed the effect of residential proximity to traffic on respiratory disorders in school children in Upper Silesian industrial zone in Poland based on the data analyses from cross-sectional study of 5733 children. Statistically significant association between doctor-diagnosed asthma and residential proximity to traffic, and not significant in case of allergic rhinitis was stated.

In the paper by M. Woldańska-Okońska et al., the influence of the low-frequency magnetic fields of different parameters on secretion of cortisol in 36 men subjected to magnetotherapy or magnetostimulation is reported. All changes in hormone concentration did not exceed the physiological standards of cortisol secretion, which suggests regulating impact of magnetic fields on cortisol concentration rather than strong stressogenic effect.

The question of the influence of a ringing mobile phone on the complex reaction time (RT) as well as of differences in RT during ringing mobile vs. landline phone is brought up by R. Zajdel et al. The authors pointed out by examining the test group of 47 young healthy subjects that the median RT was significantly elongated for the users of mobile phones, thus it might affect the attention-demanding activities e.g. driving.

Another problem, from the category of hygienic requirements' observance, is raised by A. Garus-Pakowska et al., who during 1544 hours of observation recorded 4101 activities requiring hand washing before contact with the patient in a group of 188 nurses and physicians working in three selected hospitals of the  $\angle ddz$  Province. The findings turned out to be alarming: the medical staff obeyed the hand washing procedure only in 5.2% of situations, and the mean time of washing ranged from 6.6 s (nurses) to 8.5 s (physicians).

The results of the questionnaire examination and faceto-face interview on the level of knowledge about, attitudes towards and the emphasis given to HBV/HCV infections among healthcare professionals are presented by A.H. Cekin et al. The data obtained from 206 female technicians and nurses employed in selected units of tertiary hospital in Turkey revealed a moderate level of knowledge among the majority of the HCV subjects, regardless of their exposure to the risk, with the highest knowledge scores and vaccination rates among in-patient clinic staff and no significant difference between hospital units in terms of attitude towards a patient or a colleague with HBV/HCV infection.

The paper by M. Kowalska et al. refers to the determinants of environmental domain of quality of life in economically active inhabitants of the industrial agglomeration in Poland. In the cross-sectional epidemiological study using the WHOQOL-BREF questionnaire, it was proved that the major determinants include non-occupational factors like marital status and health condition, while a significantly better quality of life is associated with being a white-collar worker and not living in the vicinity of the road with heavy traffic.

S. Bouraoui et al., from Sousse University Hospital in Tunisia, describe the results of their study aimed at assessing chromosomal damage due to low levels of ionizing radiation (IR). The findings confirm well-known clastrogenic properties of IR expressed in the study by the formation of micronucleated lymphocytes, more frequent in the exposed workers than in the controls.

Concentrations of airborne particles were measured and evaluated by S. Lappalainen et al. in 122 Finnish office buildings with suspected indoor air problems. The results showed typical airborne particle levels ( $\geq 0.5 \ \mu m$  and  $\geq 5.0 \ \mu g$ ), which may induce possible indoor air health effects, however additional investigation is needed.

E.I. Mohamed et al. from Alexandria University reports an original idea of electronic nose application for monitoring benzene exposure in biological samples of industrial workers in Egypt. The study indicates that e-nose technology successfully distinguished benzene-exposed subjects from controls in case of all measured samples: blood, urine and the exhaled air and seems to be a useful tool for the mass screening.

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The last report in this issue published in the short communications section, written by F. Wu et al. is devoted to the association of the methylation status of genes MGMT and hMLH1 with chromosome damage induced by vinyl chloride monomer (VCM); the detection of aberrant methylation of MGMT in a small number of chromosomedamaged VCM-exposed workers but not in chromosome non-damaged subjects is treated as preliminary observation.

We wish you a good time reading this interesting new issue.

Prof. Wiesław J. Sułkowski on behalf of the Editorial Board

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