**Vol. 8 (4):** 657-662 (2018)

# VALUABLE HABITATS IN THE REPUBLIC OF MOLDOVA FOR SOME INTERNATIONALLY PROTECTED SPECIES

**Nina Liogchii**

*Institute of Ecology and Geography of Academy of Science of Moldova nr. 1 Academiei str., Chisinau - 2028, the Republic of Moldova;*

*Corresponding author: Nina Liogchii, email: ninaliogchii@mail.ru;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8401
UOI license: http://u-o-i.org/1.01/ijees/34097769

**ABSTRACT**

Eight protected areas from Natural Reservations of Medicinal Plants category are the object of this investigation. The studies are based on field and laboratory researches. The ecosystems were evaluated in the main phenological development phases of vegetation and animal life. The rare species were identified and their abundance was described. As a result of the researches, it was found that the investigated areas correspond to the category of protection to which they are assigned and contain a rich diversity of medicinal plants. Although these areas are belonging to a national level protection category, they are serving as valuable habitats for many internationally protected species. Having a differentiated ecological protection regime, these protected areas serve as connection corridors with other ecosystems, ensuring the integrity and functionality of the state protected natural areas fund and the ecological balance in the location area. In the basis of the accumulated information, the Ecological Passports of the researched areas were elaborated. The Ecological Passports will constitute the scientific basis for organizing an efficient management for Natural Reservations of Medicinal Plants.

**Key words:** protected area, favorable habitats, rare species, international protection, ecological passport.

**Vol. 8 (4):** 663-668 (2018)

# INVESTIGATION OF KONYA CITY CULTURAL HERITAGE MANAGEMENT AND SUSTAINABLE URBAN DEVELOPMENT RELATIONSHIP

**Çiğdem Çiftçi[1*], Fatma Kunt[2]**

*[1*]Department of City and Regional Planning, Faculty of Engineering and Architecture, Necmettin Erbakan University, Konya, Turkey;*
*[2]Department of Environmental Engineering, Faculty of Engineering and Architecture, Necmettin Erbakan University, Konya, Turkey;*

[*]Corresponding author: Çiğdem Çiftçi, email: cigdemciftci@konya.edu.tr; drfatmakunt@gmail.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8402
UOI license: http://u-o-i.org/1.01/ijees/01891778

## ABSTRACT

Cultural heritage protection is one of the most essential components in the transfer of the identity of cities and communities to future generations. The concrete cultural heritage items representing traditional building technologies and social order are being used with the old or new various functions of conservation principles according to the needs of today's modern cities. Literature studies have shown that systematic assessment methods for assessing the relationship between conservation of cultural heritage and sustainable urban development are lacking (Guzman et all.2017). Cultural assets also provide sustainable ecological urban habitats to cities or urban communities to which cultural heritage must be used in the direction of balanced conservation principles. In this study, cultural heritage preservation policies, implementation tools and evaluation will be evaluated with reference to sustainable ecological planning principles at the historical city center where the Konya cultural heritage is predominantly located. At the and of the study the parameters that can be used to measure the relationship between cultural heritage management and sustainable urban development will be discussed in the case of the Konya city historical center

**Key words:** Cultural Heritage Management, Sustainable Urban Development, Urban Development Sustainability Indicators.

**Vol. 8 (4):** 669-674 (2018)

# SOME CASES OF NEGATIVE EXTERNALITIES IN THE TIRANA AREA AND THEIR IMPACT ON SOCIAL COSTS

**Eglantina Pazaj**

*Agricultural University of Tirana; Department of Economics and Rural Development Policies, Tirana, Albania;*

*Corresponding author: Eglantina Pazaj, email: epazaj@ubt.edu.al;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8403
UOI license: http://u-o-i.org/1.01/ijees/58089975

**ABSTRACT**

One of the main problems of Albanian society today is pollution of the environment and mainly pollution of air, soil, water, acoustic pollution and radioactive pollution. This problem feels very much to all residents of the district of Tirana. Causes or factors of environmental pollution are many. Our focus will mainly be on air and soil pollution. Such can be mentioned as pollution from cars, pollution from factories, pollution from plastic wastes, and especially pollution from individuals themselves. All of these factors that cause environmental pollution are called as negative externalities because the impacts of their actions affect the well-being of a contemplative. Negative externalities make the markets distribute resources in an inefficient way. How will social and private costs change in the presence of a negative externality? In this topic we will try to address some cases of negative externalities and we will try to give some of their solutions through private actors but also through the intervention that the government can do through different policies. We will try to answer the following questions: What are the consequences of pollution in society? Does the pollution of the environment cost you and on what does it render? What is our role in society to minimize pollution?, etc. Finding a solution to the elimination of externalities would affect the improvement of market failure.

**Key words:** environmental pollution, negative externality, social and private costs, political.

**Vol. 8 (4):** 675-678 (2018)

# REVIEW ON BIOREMEDIATION PROCESS OF A CRUDE OIL IN CONTAMINATED SOIL BY LEACHING AND TOXICITY ASSESSMENTS

**Mosstfa Maaroof, Sukru Dursun**

*Environmental Engineering Department, Engineering Faculty, Selçuk University, Konya, Turkey;*

*Corresponding author: Sukru Dursun, email: mmaaroof@selcuk.edu.tr; sdursun@selcuk.edu.tr;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8404
UOI license: http://u-o-i.org/1.01/ijees/94882886

## ABSTRACT

The most widely used chemicals in society today are Petroleum products. With the massive quantity of fuel required to power automobiles and heat homes, and the number of times each gallon of petroleum is stored, transported, or transferred, accidents and leakages are unavoidable. All the results of Petroleum contamination from leaking aboveground and underground storage tanks, spillage during transport of petroleum products, abandoned manufactured gasoline sites, other unplanned releases, and current industrial processes. As petroleum contains hazardous chemicals such as benzene, toluene, ethylbenzene, xylenes, phenols and naphthalene, this contamination can be hazardous to the health of plants, animals, and humans. Hydrocarbons (HC) entrance into the soil environment can take place by pipeline blow-outs, road accidents, leaking of underground storage tanks, land farming fields and uncontrolled landfilling. When released on the soil surface, HC adsorb on the organo-mineral matter (OMM) of the soil, The Removal of HC from soils can be performed using biological treatments like bioremediation if the environmental conditions are optimum (temperature, soil moisture, nutrients). The presence of high rates of organic matter and clay may affect the extent of biodegradation due to a priming effect on microbial communities and to a decrease of accessibility to microorganisms High concentrations of HC can eliminate vegetation due to their phytotoxic properties. Most country's environmental legislations are now focused on treatment and disposal of polluted soils, especially with respect to hazardous waste management. As there are no universal HC cleanup standards, the remediation end points might be in the evaluation of the impact of residual HC on the soil ecosystem and on the water quality. Petroleum-contaminated soil is currently treated using three processes: physical, chemical, and biological. The most common physical methods of treatment of contaminated soils, such as disposal in a landfill, and incineration are expensive. Incineration is also a source of air pollution Chemical treatment includes direct injection of chemical oxidants into contaminated soil and groundwater thereby altering native aquatic chemistry. Biological treatment most commonly involves the breakdown of contamination into nontoxic forms using microbiological processes.

**Key words:** Petroleum, soil pollution, Leached, Hydrocarbons, Hazard Waste Management.

*This paper has been presented at the International Symposium for Environmental Science and Engineering Research (ISESER), Konya, Turkey, 11-12 May 2018*

**Vol. 8 (4):** 679-690 (2018)

# ASSESSING OF WATER QUALITY INDEX USING GEOGRAPHIC INFORMATION SYSTEM IN KONYA CITY CENTER

**Mushtaq Abdulameer Alwan Almuslehi[1,2], Sukru Dursun[1], Nahida Hameed Hamza Alqaysi[1,2]**

*[1]Environmental Engineering Department, Engineering Faculty, Selcuk University, Konya, Turkey;*
*[2]Civil Engineering Department, Engineering Faculty, Diyala University, Diyala, Iraq;*

*Corresponding author: Sukru Dursun, email: mushtaq.abdulameer@yahoo.com; sdursun@selcuk.edu.tr; nahida_mml@yahoo.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8405


## ABSTRACT

The objective of this study is estimating the groundwater quality for Konya city center and mapping their spatial variation in terms of suitability for drinking purposes, about 184 groundwater wells data had been taken from Konya city municipality during 2014 for Konya city center that involving pH, electrical conductivity (EC), Turbidity, calcium ($Ca^{2+}$), magnesium ($Mg^{2+}$), chloride ($Cl^{-}$), sulphate ($SO_4^{2-}$), nitrate ($NO_3^{-}$), total alkalinity (TA) and total hardness (TH), and analyzed with reference to the World Health Organization (WHO) limits and (TS266) Turkish Standards, The geographic information system-based spatial distribution maps of different major parameters had been created by testing Geostatistical analyses within ArcGIS version 10.5 environment, the analyzed data was validated by the best-fitted models. The WQI values of the study area were found in the range of 27.28 and 72.99 that classified between good and poor water quality, about 93.413% of the total groundwater samples fall in the suitable limited for drinking water as good water quality, whereas 6.587% of the total groundwater samples get poor water quality.

**Key words:** GIS, Geostatistical analysis, Kriging, Inverse distance weighting, Water quality index.

*This paper has been presented at the International Symposium for Environmental Science and Engineering Research (ISESER), Konya, Turkey, 11-12 May 2018*

**Vol. 8 (4):** 691-696 (2018)

# CHILD MALTREATMENT IN EUROPEAN REGION AND IN ALBANIA

**Rovena Daja[1*], Rudina Cumashi[1], Gentiana Qirjako[1]**

*[1*]Institute of Public Health, Tirana-Albania*

*Correspondent author: Rovena Daja, email: rovenadaja@yahoo.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8406
UOI license: http://u-o-i.org/1.01/ijees/39865196

**ABSTRACT**

Child maltreatment is a problem of epidemic proportions in the European Region and United States. Given the numbers of children affected by child maltreatment and the dire consequences that can develop, prompt identification of child maltreatment is crucial. This is a systematic review conducted by searching databases for relevant literature assessing the childhood maltreatment. Child maltreatment leads to the premature death of 852 children under 15 years in the European Region every year. Not all deaths from maltreatment are properly recorded and this figure is likely to be an underestimate. Data show inequalities in the Region with higher death rates in the east, though trends seem to be declining overall. Deaths, however, are only the tip of the iceberg: much abuse may not come to the attention of child protection services. National policies and practices on maltreatment vary between countries, making it difficult to take a regional view. Vital registration and official statistics need to be improved to provide a better picture of the scale of the problem at country level. Multidisciplinary approaches to cases, with teams using reliable and valid investigative methods, and periodic surveys to detect hidden maltreatment in the community would contribute greatly to this.

**Key words:** maltreatment, abuse, neglect, violence.

**Vol. 8 (4):** 697-702 (2018)

# THE SCIENTIFIC ARGUMENT CONCERNING THE ESTABLISHMENT OF MIXED NATURAL MONUMENT IN THE REPUBLIC OF MOLDOVA

**Fasola Regina**

*Institute of Ecology and Geography of Academy of Science of Moldova, Nr.1 Academiei str., Chisinau - 2028, Republic of Moldova;*

*Corresponding author: Fasola Regina, email: reginaf21@mail.ru;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8407
UOI license: http://u-o-i.org/1.01/ijees/93510044

**ABSTRACT**

The paper presents the results of an ecosystemic study, with assessment of the quality and the interaction of biotic and abiotic components from the hydrographic basin of the River Cereșnovăț. On the base of field and laboratory research, during over three years, have been established the valuable natural components, the intensity and the character of the human impact on them. As a result of the researches in the investigated area were established valuable natural components (geological, hydrological, botanical, zoological) which underlie the scientific argumentation of assigning the researched area to the category of protection – Mixed Nature Monument, because it meets the requirements stipulated in the Article 37e of Law on the State Protected Natural Areas Fund, of the Republic of Moldova.

**Key words:** conservation, environment components, forest ecosystems, Mixed Nature Monument, rare species, human impact.

**International Journal of Ecosystems and Ecology Science (IJEES)**
https://doi.org/10.31407/ijees

**Abstract**
**Volume 8, issue 4, 2018**
https://doi.org/10.31407/ijees84

**Vol. 8 (4):** 703-710 (2018)

# ASSESSMENT OF THE STATE OF GREENNESS AND SUGGESTIONS FOR ITS IMPROVEMENT IN PRISHTINA SCHOOLS IN KOSOVO

**Gjok Vuksani[1*], Haki Kurti[2]**

[1*]*Agricultural University of Tirana, Department of Horticulture and Landscape Architecture, Tirana, Albania;*
[2]*Kosovo Agency of Statistics, Agriculture and Environment Statistics Department, Prishtina, Kosovo;*

[*]Corresponding author: Gjok Vuksani, email: gjvuksani@ubt.edu.al;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8408
UOI license: http://u-o-i.org/1.01/ijees/75226596

## ABSTRACT

The aim of the study is assessment of the condition of greenness in Prishtina schools and its positive role in students' life. Prishtina is the capital of the Republic of Kosovo, extending in the eastern part of Kosovo, in the geographical latitude of 42 °, 40 ', 00 "and the geographical longitude of 21 ° 20'15" with a surface of 572 km². The altitude ranges from 585 m, 640, 670 and about 700 m above sea level in some neighborhoods of the city. In Prishtina, the continental climate dominates. This study was conducted in lower secondary schools and upper secondary schools in Prishtina with a total of 38,232 pupils.In our study, we have focused on green spaces because they have an irreplaceable role, especially in the lives of children, as they have a positive effect on noise reduction, air quality improvement, air filtration from the dust, beautify the environment, lower high temperatures, reduces stress and depression, etc. For the assessment of the condition of green spaces in Prishtina schools, we were based on the Quantitative Assessment Method according to Barbosa et al. 2007, Wang 2009 [1], but also combined with the Williams and Green Quality Assessment Method (2001) [2] such as assessing the type and quality of vegetation, the safety of green spaces for children , etc.There are no defined objective criteria that can be followed for the assessment of green space, but we have combined the evaluation of quantitative and qualitative criteria so the conclusions that we will find to be more understandable and acceptable to the beneficiaries for greenness and decision-making bodies. Dozens of expeditions have been conducted on the field, where there were taken photographs and collection of floristic material, study of the state and types of greenery in all schools have been made.Our research work is supported by the data provided by the Ministry of Education, Science and Technology (MEST) and the principals of primary and secondary schools for the greenhouse inventory in the respective schools of Prishtina.Prishtina map and location of green spaces of schools were designed with the SIG (Geographic Information System) program.From the detailed study we can conclude that the green areas of Prishtina schools are very scarce, minimum 15 m² up to 2900 m², with a much reduced area for students, who in most schools do not even get 1 m² / student. We point out that in the structure of grown plants in green areas, the highest percentage occupy the flowers (Petunia spp., Begonia spp., Zinnia spp., Viola spp., Rosa spp. and Lilium spp.) up to 96% of all vegetation. Decorative shrubs occupy most of the space of the perennial plants because of the reduced surface available for greenness and the impossibility of planting tall plants because they will take large space.Among the tall plants, dominating the green spaces in Prishtina schools are: Linden (Tilia platyphylia and Tilia cordata), Thuja occidentalis 'Smaragd', Thuja pyramidalis, Picea abies etc.

**Key words:** Green spaces, schools, health benefits, educational benefits.

**Vol. 8 (4):** 711-716 (2018)

# USAGE OF PHOTOCATALYTIC OXIDATION FOR THE REMOVAL OF AIR POLLUTANTS

**Zeynep Cansu Ayturan*, Sukru Dursun**

**Environmental Engineering Department, Engineering Faculty, Selcuk University, Konya, Turkey;*

*Corresponding author: Zeynep Cansu Ayturan, email: zcozturk@selcuk.edu.tr; sdursun@selcuk.edu.tr;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8409
UOI license: http://u-o-i.org/1.01/ijees/38796960

**ABSTRACT**

Environmental and social damages originating from air pollutants continue to increase day by day. These are formation of fog and smoke, negative effects on human health, acid rain, ozone depletion and global warming. Air pollutants are classified under two main classes such as organic and inorganic. Inorganic pollutants include many pollutants such as sulphur dioxide ($SO_2$), nitrogen oxides ($NO_X$), carbon monoxide (CO), particulate matter (PM) while organic pollutants represent many different pollutants, including permanent toxic organics and volatile organic compounds (VOC). Especially VOC are more dangerous than any other pollutants. The VOC group contains approximately 150 different compounds, the majority of which are considered as harmful and toxic to human health. Therefore, the removal of these compounds is very important. There are several methods which may be used for this purpose such as filtration, scrubbing, adsorption and absorption. However, none of them are capable to remove toxic materials found in air efficiently. Recently, photocatalytic oxidation method emerged for the removal of both toxic VOC compounds and other pollutants. Pollutants are removed by several reactions conversion of pollutants to $CO_2$ and $H_2O$ with the help of appropriate photocatalyst and light source in photocatalytic oxidation method. In this study, photocatalytic oxidation method was investigated and the effects of the method on different air pollutants were compared.

**Keywords:** Photocatalytic oxidation, air pollution, VOC, toxic pollutants, photocatalyst

**Vol. 8 (4):** 717-722 (2018)

# CONFIRMATION OF THE PRESENCE OF *TRITHEMIS ANNULATA* (ODONATA, ANISOPTERA) IN ALBANIA

**Enilda Shkëmbi[1*], Anila Paparisto[1], Bledar Pepa[2], Xhuliana Qirinxhi[3], Kastriot Misja[1]**

*[1]University of Tirana, Faculty of Natural Science, Department of Biology, Albania;*
*[2]Elbasan University, Faculty of Natural Sciences, Elbasan, Albania;*
*[3]University Fan S Noli, Faculty of Natural and Human Sciences, Department of Nursing, Albania;*

*Corresponding author: Enilda Shkëmbi[1*], email: enilda07@gmail.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8410
UOI license: http://u-o-i.org/1.01/ijees/91178770

## ABSTRACT

The present paper brings the first records of *Trithemis annulata* (Odonata: Anisoptera: Libellulidae) in Albania. *T. annulata* (Palisot de Beauvois, 1807) is a widespread species in south-western Europe, in Mediterranean countries and Balkan Peninsula. Despite this widespread, this species is reported for the first time for Albania's odonatofauna. *T. annulata* is part of the family Libellulidae, which has the largest number of species in Albania, 19 species, belonging to 5 genera: *Libellula*, *Orthetrum*, *Sympetrum*, *Crocothemis* and *Selysiothemis*. *Trithemis* is the sixth genus to be added to the family Libellulidae and *T. annulata* is the 66-th species in the list of Odonata for Albania (Shkëmbi et al. 2016). Nine male individuals of *T.annulata* were captured in two expeditions conducted in summer-fall 2017, in Belshi Lakes, in the central part of Albania and in Pishë-Poro, the Vjosa River Delta.

**Key words:** Odonata, Libellulidae, *Trithemis annulata*, Albania, new records

**Vol. 8 (4):** 723-730 (2018)

# MOBILE APPLICATION PROJECT FOR SHARING INSTANTANEOUS& LOCATION BASED PHOTOGRAPHS FOR MAKING ENVIRONMENTAL MONITORING MORE EFFECTIVE IN TURKEY #

**Ertugrul Esmeray[1*], Sinan Savas[2]**

*[1]Karabuk University, Environmental Engineering Department, Karabuk, Turkey;*
*[2]Karabuk University Institute of Natural Sciences Department of Environmental Engineering, Karabuk, Turkey;*

*Corresponding author: Ertugrul Esmeray[1*], email: eesmeray@karabuk.edu.tr;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8411
UOI license: http://u-o-i.org/1.01/ijees/42029205

**ABSTRACT**

Environmental pollution and related problems are the first ones among the problems that humankind need to worry because of their results and the need to find immediate solutions. For preventing and monitoring environmental pollution, traditional ways such as denunciation lines are lacking efficiency. As technology got developed and used more widely, smartphones and mass communication terms got more into our lives. As an alternative to the existing methods in order to prevent and fight environmental pollution; a mobile application that lets people to share environmental pollution with photographs by providing time and location information. It was aimed to build a bridge between the prevention of and fighting against environmental pollution and to make mass fights possible. By using the mobile application, people can take pictures of "environmental pollution" acts, can add comments and captions then share with authorized bodies and other users. After sharing, pictures are stored in the cloud system and via the web interface that we created, authorized local bodies can see those acts with the location and time information, on a map. With this application, environmental pollution acts can be monitored 24/7, immediately.

**Key words:** Environmental Monitoring; Mobile Software; Environmental Pollution

**Vol. 8 (4):** 731-738 (2018)

# THE PSYCHOSOCIAL CARE OF PATIENTS WITH CANCER

**Suela Kalaja[1*], Anita Pilika[1], Artan Simaku[3]**

*[1*]Neuroscience Hospital, University Hospital Centre "Mother Teresa", Tirana, Albania;*
*[2]Psychiatric Hospital Hospital, University Hospital Centre "Mother Teresa", Tirana, Albania;*
*[3]Institute of Public Health, Tirana, Albania;*

*Correspondent author Suela Kalaja, email: kalaja.suela@yahoo.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8412
UOI license: http://u-o-i.org/1.01/ijees/73367856

**ABSTRACT**

People with brain tumours can experience a range of symptoms and disabilities, such as psychological problems, difficulties with mobility or self care, and relationship and work issues, which can substantially impact their quality of life. These symptoms and disabilities may be addressed through 'multidisciplinary rehabilitation' delivered by a team of different healthcare professionals such as doctors, nurses and therapists working in an organized manner. Recognition is growing that psychosocial care is an essential component of the comprehensive care of people diagnosed with cancer. In addition to attempting to extend survival rates in people following a cancer diagnosis, the oncology community is recognizing the value of quality of life. Psychosocial care, with its goals of relieving emotional distress and promoting wellbeing, is central to efforts to improve quality of life. Individual therapy often takes the form of crisis intervention dealing with present problems or issues. Coping with changes in lifestyle, financial status, role functions, and concerns about death must be managed. Issues of dependency, disfigurement, and disability also can be addressed in therapy. Supportive techniques include gaining an understanding of the patient's prior coping abilities and determining how they can be strengthened to help the patient regain a sense of self-worth and control. Other types of therapies, such as cognitive-behavioral therapy, psychodynamic therapy, and even psychoanalysis, may be useful for patients, depending on their level of functioning and personality.

**Key words:** cerebral cancer, patient, psychotherapy, caregiver

**Vol. 8 (4):** 739-746 (2018)

# ENVIRONMENTAL TAXATION – THE EFECTS ON ENVIRONMENTAL EFFECTIVENESS AND ECONOMIC EFFICIENCY

**Flora Merko[1*], Sukru Dursun[2], Florjon Merko[3]**

*[1*]Aleksander Moisiu University, Department of Economics, Durres, Albania;*
*[2]Konya Technical University, Environmental Engineering, Konya, Turkey;*
*[3]Agriculture University of Tirana, Tirana, Albania;*

*Correspondent author Flora Merko, email: floramerko@yahoo.it;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8413
UOI license: http://u-o-i.org/1.01/ijees/69530414

**ABSTRACT**

Environmental taxes have many important advantages, such as environmental effectiveness, economic efficiency, the ability to raise public revenue, and transparency. Also, environmental taxes have been successfully used to address a wide range of issues including waste disposal, water pollution and air emissions. Regardless of the policy area, the design of environmental taxes and political economy considerations in their implementation are crucial determinants of their overall success. Environmental economic accounts data are important for understanding the situation of the Environment sector in Albania and its economy. These data can be used to analyse and evaluate different economic instruments related to the environment. Data provided by the Ministry of Finance, Ministry of Tourism and Environment, Ministry of Infrastructure and Energy show that the average increase of revenues from environmental taxes in the period 2008 - 2015 is 4.7 % and the average annual share of environmental tax revenues in the gross domestic product (GDP) is 2.77 %. In Albania the environmental taxes are energy taxes, transport taxes, pollution taxes and resource taxes. From the structure of 2015 for the environmental tax revenue, the greatest share of revenues came from the energy taxes by 56.64 %. In Albania, these kinds of taxes have begun to be collected since 2001, while the statistical processing of their revenues started in 2008. In total for the four types of taxes and for 8 years (2008-20015), in the state budget have come about 300 million Euros. So taxes can be extremely effective when they are properly designed, are levied as close to the environmentally damaging pollutant or activity as possible, and are set at an adequate rate. Also taxes may need to be combined with other instruments to obtain the most efficient and effective environmental policy package, but care should be taken to assess the impact of overlapping instruments.

**Keywords:** Environmental taxation, Economic efficiency, Environmental Economic Accounts, Tax revenues.

*This paper has been presented at the International Symposium for Environmental Science and Engineering Research (ISESER), Konya, Turkey, 11-12 May 2018*

**Vol. 8 (4):** 747-754 (2018)

# FISCAL POLICY CHANGES AND BENEFITS

**Alba Ramallari*, Olta Allmuça, Gentjan Ramallari**

**University "Aleksander Moisiu", Faculty of Business, Department of Economic Sciences, Durres, Albania;*

*Corresponding author: Alba Ramallari, email: albaramallari@gmail.com;

Received May, 2018; Accepted June, 2018; Published July, 2018;

DOI: https://doi.org/10.31407/ijees8414
UOI license: http://u-o-i.org/1.01/ijees/46950646

**ABSTRACT**

Rapid technological innovation has fundamentally changed the way we live and work. International trade and finance, migration and communications around the world have become more interconnected than ever before, exposing employees to a greater level of competition. These changes have brought tremendous benefits but they have also led to a growing perception of unknowns and uncertainties, especially in economies in the development process. While these countries struggle to follow the example of developed economies, they must as well strive to maintain their standards. Aside from being market leaders, developed countries are an example to other developing countries aspiring for development. Therefore, based on the above assumptions, the study aims to show how the pillars of fiscal policy affect the free flow of goods as well as physical and human capital.

**Keywords:** Fiscal Policy, Economic Development, National Budget, Taxation, Government Spending.

**Vol. 8 (4):** 755-760 (2018)

# ASSESSING LEVEL OF PREPAREDNESS OF VALI ASR HOSPITAL OF DAREHSHAHR CITY AGAINST DISASTERS IN 2017

**Hamid Taghinejad[1], Mosayeb Mozafari[1], Ali Khorshidi[2], Vahid Delshad[3], Jalil Abbasi[4*]**

*[1]Department of Nursing, Faculty of Nursing and Midwifery, Ilam University of Medical Sciences, Ilam, Iran;*
*[2]Department of Epidemiology, Faculty of Medicine, Ilam University of Medical Sciences, Ilam, IR Iran;*
*[3]Health in Emergency and Disaster Research center, University of Social Welfare and Rehabilitation Sciences, Tehran Iran;*
*[4*]Department of Nursing, Ilam University of Medical Sciences, Ilam, Iran;*

*Corresponding author: Jalil Abbasi, email: jalil0918@yahoo.com; Hamid2005mordad@yahoo.com; mozafaric@yahoo.com; khorshidi-a@medilam.ac.ir; delshad.vahid@gmail.com;

Received August, 2018; Accepted August, 2018; Published September, 2018;

DOI: https://doi.org/10.31407/ijees8415
UOI license: http://u-o-i.org/1.01/ijees/64122129

## ABSTRACT

Introduction: Not all hospitals in Iran have necessity preparation to cope with and reduce financial and moral losses from natural disasters and disaster-prone victims in the country. Evidence suggests that hospitals in Iran are not well prepared to deal with disasters. The aim of this study was to assess the readiness of Valiasr Hospital properness for disasters and disaster-prone events in Darehshahr city. Method: Descriptive cross-sectional study was conducted in Valiasr Hospital, Darehshahr city in 2017. National Health Assessment Tool for assessing hospitals and health centers readiness for accidents and disasters was used to collect data for this study. Data collected were analyzed with SPSS version 18. Results: scores of 9 components: Command and Control11(61.10%), Communication 10(37.04%), Safety and Security 17(51.52%), Triage 16(53.30%), Surge Capacity 13(33.30%), Continuity of Essential services 11(45.83%), Human Resources 25(55.56%), Logistics Management and Supply 17(56.67%), and Post Disaster Recovery 12(44.40%) were assessed. In general, average readiness of Valiasr hospital for natural disasters and disaster-prone events was 48.35%. Conclusion: our result indicated that Valiasr's Hospital was only moderately prepared for natural disasters at Command and Control component. However, with the others eight component the hospital was not prepared enough to respond appropriately in crisis situations. Even though the city has been designated as disaster-prone zone, the results obtained shown hospitals lack of preparedness for disaster emergencies. Therefore, more planning and attention in this field is necessary.

**Keywords:** Disasters incidents, Hospital preparedness, DarehShahr

**Vol. 8 (4):** 761-766 (2018)

# RISK FACTORS ASSOCIATED WITH CAROTID ARTERY DISEASE IN PATIENTS UNDERGOING CORONARY ARTERY BYPASS SURGERY

**Petrika Gjergo[1*], Aferdita Veseli[1], Hortensia Gjergo[2], Artan Simaku[3], Edmond Kapedani[4]**

*[1*]Clinic of Cardiovascular Surgery, UHC "Mother Theresa" Tirana, Albania;*
*[2]Clinic of Cardiology, UHC "Mother Theresa" Tirana, Albania;*
*[3]Public Health Institute, Tirana, Albania;*
*[4]Faculty of Medicine, Catholic University "Our Lady of Good Counsel" Tirana, Albania;*

*Corresponding author: Petrika Gjergo, email: tensi1975@yahoo.com;

Received August, 2018; Accepted August, 2018; Published September, 2018;

DOI: https://doi.org/10.31407/ijees8416
UOI license: http://u-o-i.org/1.01/ijees/22737630

## ABSTRACT

Stroke and other ischemic neurological events are among the most dreaded adverse events following cardiac surgery. The stroke risk in patients undergoing coronary artery bypass graft surgery (CABG) is estimated at 2%. We performed a retrospective analysis of patients with and without severe carotid artery disease who were scheduled for CABG to determine what variables were associated with severe carotid artery stenosis. This is a case control study. 49 patients with carotid stenosis ≥70% identified by duplex ultrasound and coronary artery disease (CAD) scheduled for CABG at the University Hospital Centre "Mother Theresa" were matched by age and gender with 49 patients with carotid stenosis <50%. In univariate analysis, a statistically significant difference was found between cases and controls regarding the CAD extent ($p=0.03$), hypertriglyceridemia ($p<0.001$) and carotid bruit ($p<0.001$). In multivariate analysis by logistic regression, independent risk factors associated with stenosis were smoking ($p=0.03$) and carotid bruit ($p<0.001$). All patients with CAS should have medical management that includes control of hypertension, cholesterol levels, and diabetes, administration of antiplatelet agents, and smoking cessation.

**Keywords:** carotid arteries, atherosclerosis, coronary artery disease, coronary artery, bypass grafting.

**Vol. 8 (4):** 767-776 (2018)

# SOME THOUGHTS ON BOTANICAL GARDEN ESTABLISHMENT IN ARTVIN

**Özgür Eminağaoğlu[1]*, Zehra Eminağaoğlu[2]**

*[1*]Department of Forest Engineering, Faculty of Forestry, Artvin Coruh University, Artvin- Turkey;*
*[2]Department of Architecture, Art and Science Faculty, Artvin Coruh University, Artvin-Turkey;*

*Correspondence author: Özgür Eminağaoğlu e-mail: oeminagaoglu@artvin.edu.tr;

Received July, 2018; Accepted August, 2018; Published September, 2018;

DOI: https://doi.org/10.31407/ijees8417
UOI license: http://u-o-i.org/1.01/ijees/54733403

**ABSTRACT**

This work was carried out between 2017 and 2018 to make some evaluations on the botanical garden establishment in the province of Artvin in Turkey. In contrast to Artvin's rich flora, there are many factors that threaten this wealth, such as mining activities, dam and road construction. The botanical garden to be established in the province of Artvin will be a center where rare plants are preserved, groved medicinal and aromatic plants and visited by tourists. In this study, the possibilities of Artvin province were tried to be revealed in terms of botanical garden establishment. The following information was provided about the area where the botanical garden would be established: Legal Status, Activity Areas, Selection and Description of Site, Likely Stakeholders, Physical Elements, Infrastructure, Buildings, Miscellaneous Equipment, Organization and Staff, Financial Structure, Marketing and Public Relations Strategies, and SWOT analysis.

**Key words:** Artvin, Botanical Garden, design, planning, SWOT, Turkey.

**Vol. 8 (4):** 777-784 (2018)

# CHANGE OF HUMUS STATUS IN CASES OF INTENSIVE CULTIVATED SOIL

**Svetlana Yurevna Zorina, Lada Georgievna Sokolova***

**Federal State Budgetary Institution of Science Siberian Institute of Plant Physiology and Biochemistry SB RAS, 132, Lermontov str., Irkutsk, 664033, Russia;*

*Correspondence author: Lada Georgievna Sokolova, e-mail: sokolova.lada@sifibr.irk.ru;

Received August, 2018; Accepted August, 2018; Published September, 2018;

DOI: https://doi.org/10.31407/ijees8418
UOI license: http://u-o-i.org/1.01/ijees/69154816

**ABSTRACT**

To obtain objective data on the changes in the humus status of agrogray soil under the influence of various methods of intensive agriculture, a long - term (1990-2014) field experiment was conducted in the conditions of the Baikal forest-steppe. It was revealed that regardless of the usage practice of arable land (continuous fallow, grain - fallow and grain - row crop rotations), the humus content decreased. Its losses during fallowing and the studied crop rotations were correspondingly 21 and 15% of the initial content. The transformation trend of the system of humus substances in all the variants of the experiment was associated with a decrease in the carbon content in the labile (mobile fractions) and increase in the stable pool (immobile fractions). The humus depletion by the labile components with a decrease in its total content indicates the 'latent' degradation of the studied soil.

**Key words:** humus status; carbon pools; continuous fallow; crop rotations.

**Vol. 8 (4):** 785-790 (2018)

# SEXUALLY TRANSMITTED INFECTIONS AMONG HIV PATIENTS IN ALBANIA

**Erjona Shehu[1], Arjan Harxhi[2], Artan Simaku[3*]**

*[1]Dermatological Service, University Hospital Centre "Mother Theresa", Tirana, Albania;*
*[2]Infectious Diseases Service, University Hospital Centre "Mother Theresa", Tirana, Albania;*
*[3*]Institute of Public Health, Tirana, Albania;*

*Corresponding author Artan Simaku, email: artan.simaku@gmail.com;

Received August, 2018; Accepted August, 2018; Published September, 2018;

DOI: https://doi.org/10.31407/ijees8419
UOI license: http://u-o-i.org/1.01/ijees/94646925

**ABSTRACT**

Sexually transmitted infections (STI) are important health risks for people living with human immunodeficiency virus (HIV) infection in the era of combination antiretroviral therapy. This is a retrospective study including HIV-positive patients who referred to the Ambulatory Clinic for HIV/AIDS, at the Infective Service and Dermatology Service of University Hospital Centre (UHC) "Mother Theresa", Tirana, Albania over the period 2008 to 2015. The study included all cases of adult patients over 15 years diagnosed with HIV/AIDS infection associated with STI registered and attended by the outpatient clinic and the UHC Infectious Disease Service which is is the only national tertiary care center in Albania that treats HIV/AIDS patients all over the country. Overall, five hundred twenty one patients presents to the clinic and 115 (22.1%) out of them were diagnosed with a STI (95%CI 18.60 – 25.91). Syphilis is the most common STI in 44 (38.8%) followed by anal condyloma in 20 (17.4%) of total patients. All such patients should be regularly screened and subsequently treated for prevalent and incident STIs. There should be emphasis on avoidance of high-risk sexual behavior that leads to increased STI acquisition.

**Key words:** infection, therapy, HIV, STT, patients.

**Vol. 8 (4):** 791-794 (2018)

# NECESSITY OF MENTAL HEALTH PACKAGE OF THE ALBANIAN STUDENT OF MEDICINE AND YOUNG DOCTORS

**Admir Nake**[1*]

*1*University of Medicine, Tirana, Albania;*

*Correspondence author: Admir Nake, e-mail: admir.nake@umed.edu.al; adi.nake@yahoo.com;

Received August, 2018; Accepted August, 2018; Published September, 2018;

DOI: https://doi.org/10.31407/ijees8420
UOI license: http://u-o-i.org/1.01/ijees/87261641

## ABSTRACT

Every two-three years the requests change during the years of studies in University of Medicine. The first two years are adaption to the new point of view of studies, relationships, and environmental and micro-environment changes. This immediate change of reality, without right adaption can lead to stress or short-term or long-term depressive episodes. The second two years can pass with unexpected changes and pressure because of clinical situations and disciplines and a lot of hours of studies. The last two years can pass with the pressure of getting married, finding a job, successful finishing of faculty, selecting right profile or specialization and being a doctor. Stigma, mobbing and competition as one of the most competitive profession are continuous challenges of doctors, especially young doctors. Sensibilities to create The Mental Health Package of the Albanian student of medicine and young doctor. Students of University of Medicine are inclusive target groups with age and gender feature. This theoretically and practically package, will fight masked depression, depression episodes, depression or minimizing stress during the six years of University of Medicine and young doctors. Students of University of Medicine and young doctors need special and professional instructions and support, through The Mental Health Package of the( Albanian )Student of Medicine, to begin, to go on and finish full of success and without stress or depression, their long and different year of study and to be a successful young doctors.

**Key words**: students, medicine, young doctors, stigma, burn out

**Vol. 8 (4):** 795-798 (2018)

# FOREST FIRES IN THE BAIKAL REGION, EASTERN SIBERIA, RUSSIA

**Victor Voronin[1*], Gennadii Ruzhnikov[2]**

*[1]Siberian Institute of Plant Physiology and Biochemistry of the Siberian Branch of the Russian Academy of Sciences, 664033 Irkutsk, Lermontova str., 132, Russia;*
*[2]Matrosov Institute for System Dynamics and Control Theory of the Siberian Branch of the Russian Academy of Sciences, 664033 Irkutsk, Russia;*

*Corresponding author Victor Voronin: bioin@sifibr.irk.ru;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8421
UOI license: http://u-o-i.org/1.01/ijees/11738464

## ABSTRACT

The history of forest fires for six areas of mixed pinewoods in the Baikal region (Eastern Siberia, Russia) was reconstructed. We found traces of 56 forest fires (fire scars) which occurred in the past four centuries. Besides the fire scars on the trees we also used the reduced growth of the trees after a forest fire. On the basis of these investigations we found sixteen periods of important fire activity from 1669 to 2003. The mean time interval of the fires varies from 11 to 20 years depending on the forest type and human activity. Whereas in the 18th century the mean time interval between two fires was 19.25 years, it was only 11.75 years in the 20th century. Based on the correlation and spectral analysis, the occurrence of forest fires depend strongly on the precipitation during May and June. For these precipitations are found the major cycle with the duration of 60 (61-62) years. This agrees well with the occurrence of forest fires in the 20th century.

**Key words:** Eastern Siberia, Russia, Southern Baikal region, forest fires.

**Vol. 8 (4):** 799-808 (2018)

# LARGE-SCALE AEROSPACE PHOTOGRAPHY, SOIL-GEOBOTANIC PROFILING IN THE GEOBOTANICAL MAPPING *(DISCOVER ASPECTS OF THE PHYTOCOENOTIC AND BIOGEOCOENOTIC DIVERSITY)*

**Alexander Sizykh[1*] Victor Voronin[1], Alexey Shekhovtsov[2]**

*[1]Siberian Institute of Plant Physiology and Biochemistry SB RAS, Irkutsk, 664033 Irkutsk, Lermontova str., 132, Russia;*
*[2]V.B. Soshava Institute of Geography SB RAS, Irkutsk, 664033, Ulan-Batorskaya str., 1, Russia;*

*Corresponding author Alexander Sizykh: alexander.sizykh@gmail.com;

Received August, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8422
UOI license: http://u-o-i.org/1.01/ijees/41633559

## ABSTRACT

The aim of the studies is to reveal phytocoenotic diversity and peculiarities of spatial-temporal organization of phytocoenoses with vegetation types contact and of extrazonal coenoses within zonal taiga in different Pre-Baikalian regions. The objects of studies are phytocoenoses of zonal vegetation types contact as well as of coenoses formed under extrazonal conditions. The subject of studies is to reveal phytocoenotic (and structural-dynamic) peculiarities of environments contact phytocoenoses and to determine the vector of their development on the background of modern climate dynamics.

**Key words:** phytocoenotic diversity, climate dynamics, vegetation types

**Vol. 8 (4):** 809-812 (2018)

# INVESTIGATION OF AN IMPORTED MEASLES OUTBREAK

**Alma Robo[1*], Elona Kureta[1], Alma Pura[2], Iria Preza[1], Erida Nelaj[1], Artan Simaku[1], Eugena Tomini[1], Silvia Bino[1]**

*[1*]Institute of Public Health, Tirana, Albania;*
*[2]Directorate of Public Health, Pogradec, Albania;*

*Corresponding author author Alma Robo, e-mail: almarobo@gmail.com;

Received August, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8423


**ABSTRACT**

Measles virus infection remains a significant cause of childhood mortality and morbidity despite continued global efforts and the availability of a safe and effective vaccine.. After a 9 year period without confirmed measles cases an imported outbreak occurred in Pogradec district in 2017. Epidemiological investigation was carried out to identify sources of infection, transmission routes, and implement measures of control and prevention. Epidemiological service of Directorate of Public health of Pogradec district (DPH) reported 11 suspected cases out of whom 9 (82.%) were laboratory-confirmed. The outbreak was imported from Macedonia. The outbreak management team took several measures in response to the outbreak. Immediately a districtwide emergency MCV vaccination campaign was initiated. The campaign included screening and vaccination activities in the city and suburban areas, as well as in a school and recreational center for roma children. Also contact in some remote villages were traced and also vaccinated. The target ages included children 12 months to 14 years of age.

**Key words:** measles, outbreak, surveillance, system, laboratory, immunization

**Vol. 8 (4):** 813-818 (2018)

# STUDY OF RISK FACTORS FOR POSTPARTUM HEMORRHAGE

**Ilta Bylykbashi[1*], Aferdita Manaj[1], Mirton Muhametaj[1]**

*1*University Hospital for Obstetric and Gynecology "Queen Geraldine", Tirana, Albania;*

*Corresponding author author Ilta Bylykbashi, e-mail: ilta.bylykbashi@yahoo.com;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8424


**ABSTRACT**

Postpartum blood loss is difficult to evaluate. Some healthy women tolerate a 500-mL loss of blood, whereas other women become clinically unstable. Postpartum hemorrhage often occurs in women with no identifiable risk factors. Uterine atony is the most common cause of postpartum hemorrhage. In this study, our aim was to identify risk factors for immediate postpartum hemorrhage after vaginal delivery. The source population was all women admitted for labor at gestational week ≥23 at two University Hospital for Obstetric and Gynecology "Queen Geraldine", Tirana, Albania during the period January 1, 2016 to December 31, 2017. After exclusion of women with planned caesarean deliveries, we extracted the study population, which included 114 PPH and a random sample of controls without severe PPH. Active management of labor incorporates three main interventions: administration of a uterotonic medication after delivery of the baby; early cord clamping and cutting; and controlled traction on the umbilical cord while awaiting placental separation and delivery (13). The clinical adoption and practice of active management or its individual components varies throughout the world. Few studies have explored the association between the total duration of active labor and PPH. Several authors have reported that a prolonged second stage of labor is associated with PPH.

**Key words:** Postpartum haemorrhage, risk factor, active management

**Vol. 8 (4):** 819-824 (2018)

# THE IMPACT OF PPROM ON NEAONATAL AND MATERNAL OUTCOME

**Gentiana Koroveshi[1*], Gjeorgjina Kuli-Lito[2], Elton Koroveshi[1], Ilta Bylykbashi[1], Alma Nurce[1]**

*[1*]Obstetric-Gynecologic University Hospital "Queen Geraldine" in Tirana, Albania;*
*[2]University Hospital Centre "Mother Teresa", Tirana, Albania;*

*Correspondent author Gentiana Koroveshi, e-mail: goragenta@yahoo.com;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8425
UOI license: http://u-o-i.org/1.01/ijees/12486644

**ABSTRACT**

Premature rupture of membranes (PROM) refers to a patient who is beyond 37 weeks' gestation and has presented with rupture of membranes (ROM) prior to the onset of labor. Preterm premature rupture of membranes (PPROM) is ROM prior to 37 weeks' gestation. The evidence for the management of near term prelabor rupture of membranes is poor. The aim of our study was to determine the incidence of neonatal sepsis in late preterm born from mothers with PPROM between 34 until 37 weeks of gestation, and to assess the effect of planned early birth compared with expectant management for those pregnancies. This is a prospective study conducted from 2014 until 2017 including 248 pregnant women with PPROM between 34 until 37 weeks of gestation. Patients were randomized, 124 of them to induced labour (IoL group) and 124 patients to expectant managemen t (EM group). Sepsis rates were 3.2% in the IoL group as compared to 4.8% in the EM group without a statistical difference (p=0.7). Respiratory distress syndrome (RDS) was seen in 8 newborns in the IoL group (6.5%) as compared to 7 in the EM group (5.6%) (RR, 1.14; 95% CI, 0.42–3.05). For other neonatal outcome measures, there were also no significant differences between both groups. The incidence of neonatal sepsis and other neonatal outcomes is low after these pregnancies, and this rate is not reduced by induction of labor.

**Key words:** PPROM, sepsis, incidence, late preterm, outcome

**Vol. 8 (4):** 825-834 (2018)

# ADVANTAGES IN DYNAMIC BEHAVIOR OF BLDC ELECTRICAL DRIVES

**Loreta Nakuçi[1], Aida Spahiu[2*]**

*[1]Institute Harry Fultz, Tirana, Albania;*
*[2*]Polytechnic University of Tirana, Department of Automation,Tirana, Albania;*

*Correspondent author Aida Spahiu, email: loreta.nakuci@gmail.com; aida.spahiu@fie.upt.al;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8426
UOI license: http://u-o-i.org/1.01/ijees/98791570

**ABSTRACT**

This paper tends to show some of the dynamic avantages of BLDC motors in the electrical drives. In many sectors of the industry, or other fields it is requested to adjust the speed of a driver for a higher efficiency, to control the speed, velocity and accelerations, also to eliminate the mechanical stress when do some motors have to operate with the same speed. Sometimes when the starting and stalling processes are frequent, this drive operate in the same manner as the variable speed drives. These problems are very difficult to solve with the standart motors, otherwise they are assosiated with higher cost. In this case the use of the BLDC motors is a good choise. BLDC motors are used in many applications and continue to apply widly because of very good dinamic behaviour of this motor during transient processes. This is dedicated the usage of the permanent magnets made from materials whith outstanding properties in the creating of the magnetic field, power electronics, electronic control and motor design. The application of BLDC motor in variable speed drive is able especially for control of the speed, position, torque and wider range of control characteristic. It is important to point out the impact of this motor in the environment protection. Through the experiments it is proved that the inertia moment, dynamic respond in starting, stopping proces and the efficiency of the BLDC motor in compare with shaded- pole one phase induction motor ensure the better performance of BLDC motor used in a fan application.

**Key words:** Brushless Direct Current Motor; dynamic behavior; fan driving; Induction Motor.

**Vol. 8 (4):** 835-838 (2018)

# ROOT CANAL TREATMENT USING THREE DIMENSIONAL FILLING WITH GUTTA PERCHA

**Lauren Muhametaj[1*], Rozarka Budina[2]**

*[1*]Dental Clinic "Muhametaj", Tirana, Albania;*
*[2]Faculty of Dental Medicine, Tirana, Albania;*

*Corresponding author: Lauren Muhametaj, e-mail: dr.aferdita@gmail.com;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8427


**ABSTRACT**

Successful root canal treatment depends critically on controlling pulp-space infection. Three dimensional filling with gutta percha results in a uniformed smooth surface and least observable space between gutta-percha and canal walls especially in middle and apical region of the root canal. The aim of this study was to evaluate the success rate of three dimensional root filling with gutta percha. Among the 71 study teeth filling using three dimensional gutta-percha, 67 were clinically sound and did not have signs and symptoms suggesting failure at the evaluation. The success rate was thus 94.4%. An ideal root canal filling three-dimensionally fills the entire root canal system as close to the cemento-dentinal junction as possible. Three dimensional filling with gutta percha are effective in filling canals with a high rate of success.

**Key words:** gutta-percha, three dimensional, root filling

**Vol. 8 (4):** 839-844 (2018)

# CHALLENGES OF THE IMPLEMENTATION OF AIR QUALITY REGULATION AND STANDARDS IN MACEDONIA

**Zoran Sapuric[1*], Filip Ivanovski[1], Dame Dimitrovski[2]**

*[1]University American College, Skopje, Macedonia;*
*[2]University St. Cyril and Methodius, Skopje, Macedonia;*

*Corresponding author Zoran Sapuric, e-mail: sazoran@hotmail.com;
f.ivanovski@t-home.mk; dame.dimitrovski@mf.edu.mk;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8428
UOI license: http://u-o-i.org/1.01/ijees/36107178

## ABSTRACT

One of the biggest environmental threats in Macedonia is related with pollution, especially in the capital city Skopje and in the bigger cities. There are many sources, which cause air pollution: transport, industry, energy, unsustainable constriction and special planning, overpopulation in the urban areas and also in some areas unfavorable geographic conditions. Combating with air pollution is a big challenge for central and local government authorities and for all involved stakeholders. Air pollution affects health and quality the citizen's life. European Union, as one of the world leaders in the field on the environment has been acting permanently for the improvement of the environment, including ambient air quality. The EU regulation stipulates high level of air quality standards. The main objectives of this regulation is to provide the conditions for reduction of air pollution which leads toward to better health protection and better quality of life. The EU ambient air quality legal regulation is very dynamic and it is based on the scientific research and consultation with all involved stake holders. Macedonia as state with candidate status for the full membership of EU has an obligation to transpose the EU regulation into the national legislation. This also applies to the air quality. In 2004 it was adopted the Law on ambient air quality which has amended several times. The Law is detailed in several sub law acts. This national regulation transposes the main principles of EU legislation, but the problem appears with its practical implementation. The aim of this paper is to analyze the ambient air quality regulation and standards in Macedonia and its practical implementation and to compare this with the EU regulation and to give some recommendations.

**Key words:** regulation, standards, ambient air, quality, European Union.

**Vol. 8 (4):** 845-848 (2018)

# ARTERIAL HYPERTENSION IN CHRONIC RENAL DISEASE

**Merita Alimadhi[1], Nestor Thereska[2]**

*[1]Regional Hospital of Fier, Albania;*
*[2]University Hospital Centre "Mother Teresa", Tirana, Albania;*

Corresponding author: Merita Alimadhi, Email: meritaalimadhi@yahoo.com;

Received September, 2018; Accepted September, 2018; Published October, 2018;

DOI: https://doi.org/10.31407/ijees8429


**ABSTRACT**

Hypertension is both an important cause and consequence of chronic kidney disease. Evidence from numerous clinical trials has demonstrated the benefit of blood pressure control. However, it remains unclear whether available results could be extrapolated to patients with chronic kidney diseases because most studies on hypertension have excluded patients with kidney failure. In addition, chronic kidney disease encompasses a large group of clinical disorders with heterogeneous natural history and pathogenesis. In this paper, we review current evidence supporting treatment of hypertension in various forms of chronic kidney disease and highlight some of the gaps in the extant literature.

**Key words:** chronic renal disease, hypertension, treatment, prevention

**Vol. 8 (4):** 849-856 (2018)

# DIATOMS COMMUNITY AND ECOLOGICAL STATUS IN OHRID LAKE, INFLUENCE BY VERDOVA RIVER

**Bahiti E. [1], Kupe L[2*]**

*[1]University of "Alekander Xhuvani", Elbasan, Albania;*
*[2*]Department of Agronomy Sciences, Faculty of Agriculture and Environmental, Agricultural University of Tirana, Albania;*

Corresponding author: Kupe L, *email: lirika_kupe@yahoo.com; elonabahiti@gmail.com;

Received August 2018; Accepted September 2018; Published October 2018;

DOI: https://doi.org/10.31407/ijees8430
UOI license: http://u-o-i.org/1.01/ijees/58557480

**ABSTRACT**

Ohrid Lake is a tectonic lake and he has many endemic species covering the whole food-chain, from phytoplankton to fish. The biological investigation was based on a microscopic examination of diatom communities, which are the mostly common used as bio indicators of aquatic system health. The diatom community are collected on August 2011, like epiphyte in different macrophytes and in different depth from shoreline in estuaries of Vërdova river (T6: 5m, 6.5m, 9m, 11m, 12m, 13m, 14m, 19m). In this paper in total we will present 8 samples, in which sample we have determined many diatoms species and ecological status in each sample. Several studies have clearly demonstrated that diatom community's change with increasing concentrations of both organic and inorganic load of substances, making them the preferred organism group for in situ biomonitoring methods. This study clearly showed that it was the shift in dominance of certain species, as shown by relative abundances and they reflected in water ecology in Lake Ohrid. A pennate diatom was classified as the most dominant species in eight samples; we have identified many endemic species. The trophic classes oscillated from 2.1 (meso-eutroph) to 2.6 (eutroph) and saprobic classes oscillated from 1.4 (oligosaprob) to 1.6 (Oligosaprob deri β-mesosaprob). Implementation of Waste Water Treatment Plant in Pogradeci town, will improve the ecological status in the Lake.

**Keywords**: Diatoms community, ecological status, Vërdova River, species.