

دکتر محمد جواد محمدی زاده



محمدجواد محمدی زاده (زاده ۱۳۳۴ دزفول) در دولت دوم محمود احمدی نژاد، معاون رئیس جمهور و رئیس سازمان حفاظت محیط زیست ایران بود. او که دارای تحصیلات دکترای برنامه ریزی محیط زیست از دانشگاه تهران است.

در دولت اول احمدی نژاد (۱۳۸۴ تا ۱۳۸۸) استاندار خراسان رضوی بود. وی همچنین معاون خدمات شهری شهرداری تهران نیز بوده است. او در زمان ریاست جمهوری هاشمی رفسنجانی استاندار لرستان بوده و نیز دارای پست اجرایی و دولتی بود.

سمت های کلیدی

- معاون رئیس جمهور و رئیس سازمان حفاظت محیط زیست
- معاون خدمات شهری شهرداری تهران
- استاندار خراسان رضوی
- استاندار لرستان
- فرماندار دزفول

تحصیلات

- دکترای برنامه ریزی محیط زیست - دانشگاه تهران بهمن ۱۳۹۴

خلاصه سوابق اجرایی

- معاون رئیس جمهور و رئیس سازمان حفاظت محیط زیست - مرداد ۱۳۸۸ تا شهریور ۱۳۹۲
- استاندار خراسان رضوی - ۱۳۸۴ تا ۱۳۸۸
- معاون خدمات شهری شهرداری تهران - ۱۳۸۲ تا ۱۳۸۴
- مسئول نظارت و ارزیابی بر سازمان صدا و سیما ۱۳۸۰ تا ۱۳۸۲
- قائم مقام برنامه ریزی سازمان ۱۳۷۶ تا ۱۳۸۰
- مدیر کل برنامه ریزی و مشاور رئیس سازمان صدا و سیما و رئیس کمیسیون معاملات سازمان ۱۳۷۶ تا ۱۳۷۷
- استاندار لرستان ۱۳۷۲ تا ۱۳۷۶
- استانداری خراسان - معاونت سیاسی و امنیتی استانداری - ۱۳۷۰ تا ۱۳۷۲
- استانداری خراسان - معاونت برنامه ریزی - ۱۳۶۸ تا ۱۳۷۰
- مدیر کل دفتر هماهنگی امور فرهنگی وزارت بهداشت، درمان و آموزش پزشکی ۱۳۶۶ تا ۱۳۶۸
- معاون استاندارد خوزستان ۱۳۶۳-۱۳۶۶
- فرماندار دزفول - ۱۳۶۰ تا ۱۳۶۳
- عضو شورای سپاه منطقه ۸ کشوری



دکتر محمد جواد محمدی زاده

خلاصه تحصیلات

مقطع دکتری:

- دکترای برنامه ریزی محیط زیست - دانشگاه تهران - بهمن ۱۳۹۴ - ۱۸.۹۱

مقطع کارشناسی ارشد:

- آموزش بهداشت - دانشکده بهداشت دانشگاه علوم پزشکی تهران - ۱۳۶۹ - معدل ۱۹

مقطع کارشناسی:

- روانشناسی - گرایش روانشناسی صنعتی - دانشگاه جندی شاپور (دانشگاه اهواز) - ۱۳۵۸ -

معدل ۱۸.۵

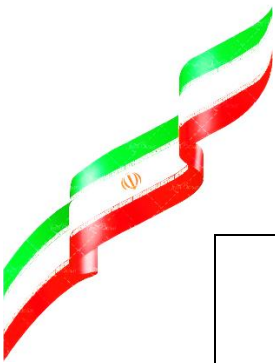
سوابق تدریس

- رشته های کارشناسی و کارشناسی ارشد در دانشگاه های علوم پزشکی کشور و مرکز آموزش مدیریت دولتی در استان های خوزستان، خرم آباد و خراسان

خلاصه مقالات علمی

- Mohammadizadeh, M. J., Karbassi, A. R., Nabi Bidhendi, G. R., & Abbaspour, M. (2016). Integrated environmental management model of air pollution control by hybrid model of DPSIR and FAHP. *Global Journal of Environmental Science and Management*, 2(4), 381-388.
- Mohammadi-Zadeh, M. J., Karbassi, A., Bidhendi, G. N., Abbaspour, M., & Padash, A. (2017). An analysis of air pollutants' emission coefficient in the transport sector of Tehran. *Open Journal of Ecology*, 7(05), 309.
- Ordinary and Extraordinary Meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions, 9-10 May 2013, Geneva – Switzerland

- کتاب اقتصاد محیط زیست (مبانی، اصول و کارکردها) مولف : امین پاداش با مقدمه ای از محمد جواد محمدی زاده



دکتر محمد جواد محمدی زاده



Open Journal of Ecology, 2017, 7, 183-193
<http://www.iiste.org/openjournal>
ISSN Online: 2162-1993
ISSN Print: 2162-1985

An Analysis of Air Pollutants' Emission Coefficient in the Transport Sector of Tehran

Mohammad Javad Mohammadi-Zadeh¹, Abdolreza Karbassi², Gholamreza Nahi Bidhendi³, Majid Akhavanpoor⁴, Amin Padoaki⁵

¹PhD of environmental planning, University of Tehran, Alborz, Iran
²Graduate Faculty of Environment, University of Tehran, Tehran, Iran
³Faculty of Mechanical Engineering, Sharif University of Technology, Tehran, Iran
Email: karbassi@ut.ac.ir

How to cite this paper: Mohammadi-Zadeh, M.J., Karbassi, A., Bidhendi, G.N., Akhavanpoor, M. and Padoaki, A. (2017). An Analysis of Air Pollutants' Emission Coefficient in the Transport Sector of Tehran. *Open Journal of Ecology*, 7, 183-193.
<https://doi.org/10.4236/oje.2017.73021>

Received: August 31, 2016
Accepted: May 7, 2017
Published: May 16, 2017

Copyright © 2017 by authors and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
<http://creativecommons.org/licenses/by/4.0/>

Abstract

The most important factor of mobile sources of pollution includes light and heavy vehicles. More than 75 percent of the sources of air pollution in Tehran come from mobile sources. Therefore, it is necessary to conduct researches in this field to help the decision-makers to find the best and most practical solution. Initially, we have identified the anthropogenic sources of air pollution and their respective shares. Consequently, the impact of pollutants is brought out and finally appropriate actions are prioritized to combat with air pollution in Tehran. The method is based on the IVE model that formulates appropriate estimation of pollution emissions. Emission coefficients of this software for different vehicles are obtained based on models EMFAC2007, MOBILE4, and COPERTIV. The results showed that the highest value of diffusion coefficient of volatile organic compounds (VOCs) belonged to motorcycles and taxis. The other modes of transport such as pickups, buses and cars do contribute to the VOCs to a lower extent. According to the modeling, trucks, minibuses and buses have the highest emission coefficient of nitrogen oxides. The pattern is similar in the emission of suspended particles and sulfur oxides.

Keywords

Transportation in Tehran, Air Pollution Index, Emission Coefficient

1. Introduction

Air is one of the five basic elements of human life. Every individual breathes in around 22,000 times each day, and needs almost 15 kilograms of air. Humans can survive without food for about 5 weeks and without water for 5 days but cannot live without air more than 5 minutes [1]. From the first decades of the

DOI: [10.4236/oje.2017.73021](https://doi.org/10.4236/oje.2017.73021) May 16, 2017

Global J. Environ. Sci. Manage., 7(4): 183-193, Autumn 2016
DOI: [10.2023/gjesm.2016.02.01.007](https://doi.org/10.2023/gjesm.2016.02.01.007)

CASE STUDY

Integrated environmental management model of air pollution control by hybrid model of DPSIR and FAHP

M.J. Mohammadi-Zadeh¹, A.R. Karbassi², G.R. Nahi Bidhendi³, M. Akhavanpoor⁴

¹Department of the Environment, Alborz Campus, University of Tehran, Alborz, Iran
²Department of Environmental Engineering, Graduate Faculty of the Environment, University of Tehran, Tehran, Iran
³School of Mechanical Engineering, Sharif University of Technology, Tehran, Iran

Received 11 April 2016; revised 12 June 2016; accepted 14 May 2016; available online 1 September 2016

ABSTRACT: The aim of this study is to evaluate the obstacles due to a DPSIR model combined with fuzzy analytic hierarchy process technique. Hence, to prioritize the responses regarding the driving forces, pressures, states and impacts, the hierarchy of the model is established. Evaluations and prioritization of model results of urban transport situation in Tehran have provided a number of necessary issues for strategic planning to reduce local air pollution and emission of greenhouse gases by prioritizing their effectiveness in the implementation, including: a) development and improvement of public transport (R1), b) improvement of fuel quality (R2), c) improvement of vehicle emission standards (R3), d) vehicle inspection (R4), f) traffic management (R5). In this study, responses to improve the factors of pressure, stimulus, the current state and the impacts were examined and compared hierarchically. Finally, their priority relative to each other was achieved. Development and improvement of public transport, improvement of the quality of fuel, improvement of vehicle emission standards, vehicle check-up and finally urban traffic management were identified respectively as practical steps to control and reduce air pollution in Tehran.

KEYWORDS: Air pollution, Analytic hierarchy process (AHP), DPSIR, Fuzzy theory, Tehran metropolitan

INTRODUCTION

Tehran metropolitan with a population over 12 million people as the industrial, educational, medical, and commercial center faces shortages of roads and parking. Further, air pollution is trapped within the city due to climatic and topographic characteristics. It is estimated that over 5.5 million cars and about 3 million motorcycles are present in Tehran. The very low wind speed as well as topographic features would retain air pollutants within Tehran. Consumption of over 9 million liters of petrol per day (Karbassi *et al.*, 2009; Sakharovtsev *et al.*, 2011; Salehi *et al.*, 2016), has

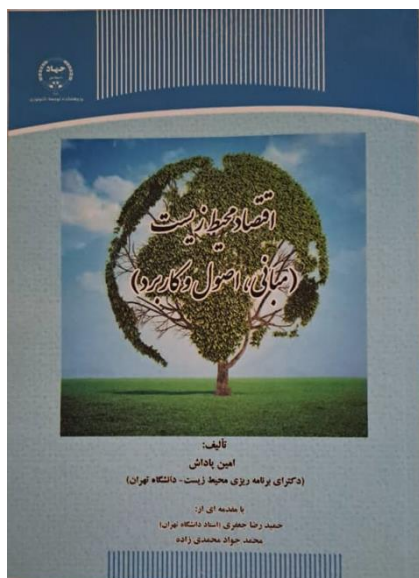
*Corresponding Author Email: mohammadi@ut.ac.ir

Tel.: +98 21 8111 1156 Fax: +98 21 4400 1916

Note: Discussion period for this manuscript open until December 1, 2016 on GJESM website at the "Short Article".

categorized Tehran as one of the most polluted cities in the world. The energy consumption in car fleets of Iran is generally high when compared with world average (Tehrani and Karbassi, 2005). Average fuel consumption of vehicles in the fleet of country is approximately 10.5 liters per hundred km, indicating higher fuel consumption in this city (Nadafati, 2012; Jafarizadeh *et al.*, 2015). United Nations Environment Program (UNEP) has warned that many developing countries in Asia and Latin America are at the serious risk of air pollution (Hsieh *et al.*, 2003). According to the World Bank report, annual compensation of air pollution in Iran is US\$ 4 million, equivalent to 1.6% of GDP of country (Atrish, 2007). In addition, according to Air

183



Statement by:

H.E. Mr. Mohammad Javad , Mohammadi Zadeh

Vice President and Head of Department Of Environment

Islamic Republic Of Iran



Ordinary and Extraordinary Meetings of the Conferences of the Parties to the Basel, Rotterdam and Stockholm Conventions,

9-10 May 2013

Geneva – Switzerland