



“Gheorghe Asachi” Technical University of Iasi, Romania



---

## CONCENTRATIONS OF CHROMIUM, CADMIUM AND NICKEL IN TWO CONSUMED FISH SPECIES OF PERSIAN GULF, IRAN

Ali Koolivand<sup>1</sup>, Amir Hossein Mahvi<sup>2,3\*</sup>, Gholam Reza Jahed<sup>4</sup>, Ahmad Reza Yari<sup>4,5</sup>

<sup>1</sup>Department of Environmental Health Engineering, School of Public Health, Arak University of Medical Sciences, Arak, Iran

<sup>2</sup>School of Public Health and Center for Environmental Research, Tehran University of Medical Sciences, Tehran, Iran

<sup>3</sup>National Institute of Health Research, Tehran University of Medical Sciences, Tehran, Iran

<sup>4</sup>Department of Environmental Health Engineering, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

<sup>5</sup>Department of Environmental Health Engineering, School of Public Health, Qom University of Medical Sciences, Qom, Iran

---

### Abstract

In this study heavy metal (Cr, Cd and Ni) levels in muscle tissues of pelagic and benthic fish species in Persian Gulf from western and eastern sides of Bandar Abbas were determined. In western side, the mean concentrations of Cr, Cd and Ni in *Aldrichetta forsteri* species were 0.57, 0.33, and 0.12 mg/kg dry weight, while in *Pomadasys kaadan* species were 0.08, 2.18, and 1.39 mg/kg dry weight, respectively. In eastern side, the concentrations in *Aldrichetta forsteri* species were 0.26, 0.10, and 0.04 mg/kg dry weight, while in *Pomadasys kaadan* species were 0.02, 0.27, and 0.15 mg/kg dry weight, respectively. The concentrations of analyzed metals in fish muscles were found to be under the permissible limits.

**Keywords:** Bandar Abbas, fish, heavy metal

Received: November, 2012; Revised final: December, 2013; Accepted: December, 2013

---

---

\* Author to whom all correspondence should be addressed: e-mail: [m\\_ghapanvari@yahoo.com](mailto:m_ghapanvari@yahoo.com); Phone: +982188951390; Fax: +982188950188