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**Biomonitoring Study on Workers Occupationally Exposed  
to Automobile Fuels**

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**KEYWORDS** Occupational Exposure. Urinary Phenol. Antioxidant Enzymes. Petrol Pump Attendants. Toxicology. Health Risk

**ABSTRACT** Petrol products remain unavoidable environmental pollutants as well as serious health hazards. Hence, the present study was undertaken amongst 70 petrol pump attendants and 70 Control subjects to evaluate the effects of exposure. The Exposed Group was further divided into two groups (Addiction and Non-addiction). Urinary phenol measurement, haematological analysis and Reactive Oxygen Species (ROS) parameters such as Super oxide dismutase (SOD), Catalase (CAT), Glutathione (GSH) and Glutathione peroxidase (G-Px) were performed in serum. The haematological parameters were found to be within normal range. Urinary phenol levels and the ROS parameters were significantly increased in Exposed Group. Further, the ROS levels were significantly increased in Addicted group as compared to the Non-addicted group. The results showed a positive correlation between exposure and its effects on enzyme activity. Long term occupational exposure to automobile fuel may be linked to oxidative stress which can further alleviate due to confounding factors.