

*Poster Presentations*

*Atomic and Molecular Physics (04)*

**DETERMINATION OF TRACE ELEMENT CONCENTRATIONS IN DIFFERENT  
TYPES CANCEROUS AND HEALTHY LUNG TISSUES USING ICP-OES  
TECHNIQUE: STAGE, SEX AND AGE DEPENDENCE**

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In this study, elemental analysis of lung cancer tissues and healthy lung tissues were performed and role of element concentrations in lung cancer was investigated in tissues. The analysis was performed with Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES) technique. In result of analysis Ca, Mg, Na, K, Fe, Cu, Zn, Mn, Al, B, Ba, Cd, Cr, Mo, Ni, P, Pb, S, Se were detected in all tissue samples. Element concentrations of the patient group with the healthy group were compared. Higher levels of Mg, K, Zn, Mn, Al, B, Cr, P, S were found in patient group and S concentration was found higher in control group ( $p < 0.05$ ). Different stages of the disease were compared and high levels Na concentration was detected in patients with stage II. Element concentrations were compared with the sex in patient group. Statistically high levels of S and Al were detected in females and males, respectively.