

Abstract Submitted
for the DPP13 Meeting of
The American Physical Society

Optical measurements of helicon, inductive and capacitive RF discharges effects in ECR plasma sources FERHAT BOZDUMAN, ALI GULEC, ERDOGAN TEKE, LUTFI OKSUZ, Suleyman Demirel Univ, AHMED M. HALA, KACST, AYSEGUL UYGUN OKSUZ, MELEK KIRISTI, Suleyman Demirel Univ — Low pressure argon plasma was produced by using Rf and ECR simultaneously. 2.45 GHz magnetron and for magnetic field permanent magnets were used for ECR plasma system. ECR-Helicon, ECR-Inductive, ECR-Capacitive plasmas were obtained by 13.56 MHz Rf power. Optical emission spectrums were taken. The plasma electron densities and temperatures will be calculated. Spatial and temporal evolution of plasmas will be investigated by an ICCD camera. A thermocouple will be inserted into the plasma for measurement of plasma gas temperature. Comparisons for three configurations will be given.

Ali Gulec
Suleyman Demirel Univ

Date submitted: 13 Sep 2013

Electronic form version 1.4