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Modeling and Simulation of Rarefied RF Plasma Flow[1] VIKTOR ZHELTUKHIN[2], Retired, ALEXANDER SHEMAKHIN[3], Kazan Federal University — A hybrid mathematical model of the rarefied RF plasma flow in transition regime at Knudsen 0.03 <Kn<3 for the carrier gas is described. The model based on both the statistical approach to the ground-state atom and the continuum model for electron, ion, and metastables. The results of plasma flow calculations are described. The upwarming effect on the bound of the plasma stream near the input is found in some mode. The effect is confirmed by comparison with experimental data.

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