

In this talk, I will review the results of the most recent papers on the abundance gradients obtained from spectroscopy of ionized nebulae in the disks of the Milky Way, M31 and the Magellanic Clouds. I will also discuss the different evidence on the presence or absence of chemical inhomogeneities and azimuthal gradients in the Galactic disk. Finally, a brief comparison will be made between the results obtained from the ionized gas and other young objects in the Milky Way.