Galaxy, where the extinction in the optical range is very severe (see for example Escudero & Costa 2001; Escudero, Costa, & Maciel 2004; Chiappini et al. 2009; Cavichia, Costa, & Maciel 2010). On the other hand, PNe distances are still subject to discussion. Only in a few cases can the distances be determined by a direct method, such as for nearby PNe, which have the distances determined by trigonometric parallax, or in cases where there is a main sequence binary companion. In the cases were accurate individual distances cannot be determined, alternative methods have been developed in order to obtain reliable distances. In these cases, distances are derived from nebular properties (see e.g., Maciel & Pottasch 1980; Cahn, Kaler, & Stanghellini 1992; Stanghellini, Shaw, & Villaver 2008). These methods are called statistical methods and the distances so obtained are called statistical distances. In spite of the uncertainties, statistical distance scales are still the best tool to study the chemical abundance patterns in the Galaxy from the point of view of PNe, as done by Maciel & Quireza (1999), Maciel et al. (2006), Perinotto & Morbidelli (2006), and recently by Gutenkunst et al. (2008), Stanghellini & Haywood (2010), Henry et al. (2010).

From the point of view of the chemical evolution of the Galaxy, the bulge and the disk display different chemical abundance patterns such as the radial abundance gradients in the disk (Carigi et al. 2005; Daflon & Cunha 2004; Andrievsky et al. 2004; Maciel et al. 2005, 2006), or the wide abundance distribution in the bulge (Rich 1988; Zoccali et al. 2003, 2006). Also, the bulge and the disk may have different evolution histories, as described for example by the multiple infall scenario (Costa, Escudero, & Maciel 2005; Costa, Maciel, & Escudero 2008) or by the inside out formation model (Chiappini, Matteucci, & Romano 2001), respectively. As a consequence, we expect these differences to be reflected on the chemical properties of each component.

Additionally, the gas density, and consequently the star formation rate (SFR), also decrease in the inner Galaxy as found by Portinari & Chiosi (1999). They attribute this result to the influence of the galactic bar in the first 3 kpc of the Galaxy (see for example Gerhard 2002; Binney 2009). The decrease of the SFR is reflected on the α-element abundances in PNe, since a lower SFR limits the total mass ejected by the progenitor star, and consequently the chemical enrichment of the ISM decreases throughout the succeeding stellar generations. The galactic evolution models also point to a severe decrease in the SFR and chemical abundances at radii smaller than 3 kpc (Portinari & Chiosi 2000). Other chemical evolution models also predict a flatter abundance gradient in the inner-disk, such as those by Hou, Prantzos, & Boissier (2000) and Mollá & Díaz (2005).

Some recent work seems to support this scenario, based on the fact that towards the galactic center, stars do not follow the chemical abundance gradient found in the disk (Cunha et al. 2007). Davies et al. (2009) studying the chemical abundance patterns of the Scutum red supergiant clusters, located at the end of the galactic bar, find that there is a minimum in the abundances in this region, compared to other azimuthal angles.

From the point of view of PNe, the results of Gutenkunst et al. (2008) also point to a discontinuity in the abundance gradient towards the galactic center, in the sense that the abundances of bulge PNe do not follow the trend of those from the disk, as can be seen in their Figure 4. Górny et al. (2004) also notice that the oxygen gradient of the PNe population in the galactic disk flattens in the most internal parts of the Galaxy, and may even change sign. On the other hand, Chiappini et al. (2009) compared the abundances of PNe located in the bulge, inner-disk and Large Magellanic Cloud. Their results do not show any clear difference between bulge and inner-disk objects.

Other previous studies of the galactic bulge based on abundances of PNe such as Ratag et al. (1992), Cuisinier et al. (2000), Escudero & Costa (2001), Escudero et al. (2004), Exter, Barlow, & Walton (2004), find that bulge PNe have an abundance distribution similar to disk PNe, showing that He, O, Si, Ar, and Ca have a normal abundance pattern, and favoring therefore a slower galactic evolution than that indicated by stars. In conclusion, the distribution of chemical abundances in the inner region of the Galaxy is still an open question, especially regarding the bulge-disk connection. On the other hand, a detailed comparison of the bulge and inner-disk populations is important in order to characterize the galactic bulge as a "pseudobulge", as suggested by photometric and kinematic evidences (Howard et al. 2009; Shen et al. 2010), in opposition to a classical bulge as suggested by Binney (2009).

Both from modelling and from observational results, we expect a galactocentric distance to exist which better separates the populations of the bulge and inner-disk from the point of view of chemical abundances. However, such transition is still to be determined from the point of view of chemical abundances. The goal of this paper is to perform a