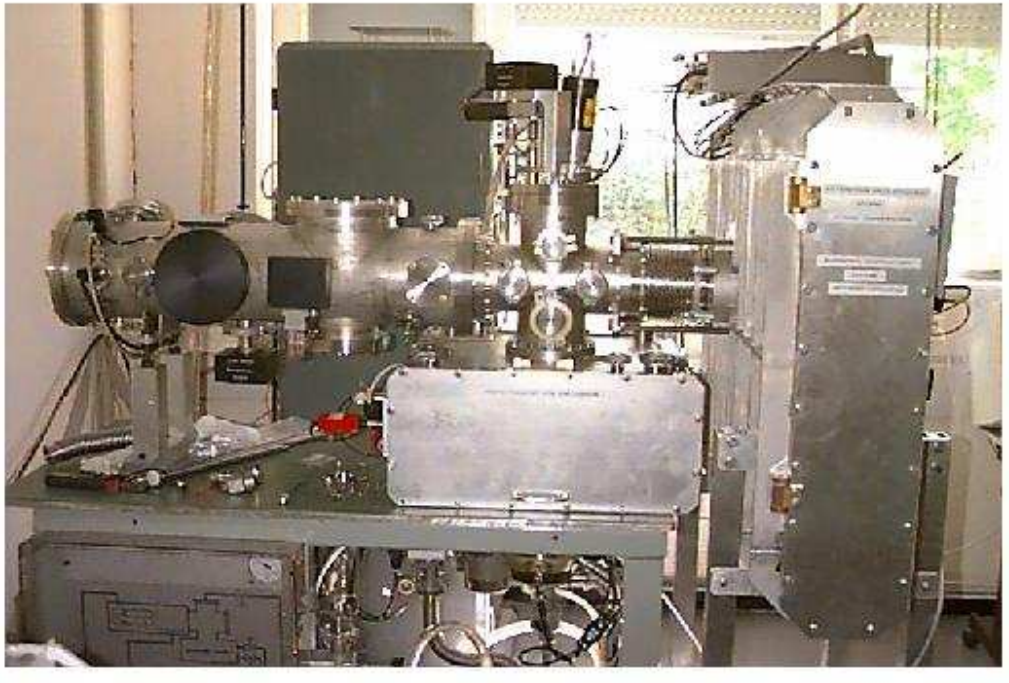C_4F_{10} pre-cleaning (liquid phase)