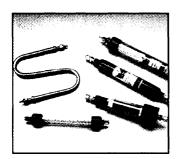
## How can YOU help your column last longer?

Remove oxygen & moisture from your carrier gas. They are column killers!



Even high purity grades of gas can contain trace amounts of oxygen and moisture from small leaks in the carrier lines. Therefore, it is very important to use good quality traps to ensure that your carrier gas is oxygen- and moisture-free. It is also important to frequently leak check all fittings and connections to maintain an oxygen- and moisture-free system.

See page 280 in Restek's 1997 Chromatography Products Catalog.

Use guard columns. They protect the analytical column and decrease maintenance time!



A guard column is a length of deactivated, uncoated tubing connected to the front of an analytical column that traps non-volatile residue before it can contaminate the analytical column, thus increasing the number of injections before column maintenance is required. The newest concept in guard columns is the Integra-Guard" column. These new columns have the guard column built-in, which eliminates the need for connectors that can leak and allow air into your analytical column.

See page 19 in Restek's 1997 Chromatography Products Catalog.

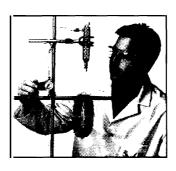
Use clean samples. Clean samples allow columns to last longer!



Some samples contain high molecular weight or nonvolatile residue. These contaminants can build up on the front of the column and eventually cause loss of resolution, poor peak shape, and high bleed. Many techniques can be used to remove these unwanted contaminants prior to injecting the sample. The cleaner your samples are, the longer your columns will last.

See page 204 in Restek > 1997 Chromatography Products Catalog.

Solvent-rinse and rejuvenate contaminated columns!



Not all contaminants can be removed with rinsing. and only bonded phase c:lumn should be solvent-rinsed. However, solvent-rinsing can often bring your dying column back to life.

Stop the contamination before it reaches the column!



Add fused silica or glass wool to your injection port sleeve to help trap non-volatile sample residue in the injector. The addition of fused silica beads or a CarboFrit" insert increases the surface area in the inlet liner which improves the trapping of sample contaminants.

Caution: packing sleeves too tighrly bvith wooI can cause  $adsorption\ of\ active\ compounds.$ Use wool sparingly.

See page 288 in Restek's 1997 Chromatography Products Catalog.

Fur more useful information about maintaining your capillary column, request a copy of Restek's **Guide to Analyzing Dirty Samples** 

See page 239 in Resteks 1997 Chromatography Products Catalog.