LET US DEMONSTRATE HOW THE DU PONT 310 CURVE RESOLVER REDUCES COMPLEX CURVES TO COMPONENT PEAKS QUICKLY AND INEXPENSIVELY.

If you get experimental data with overlapping peaks, you no longer have to take computation time to locate them and establish their position, height, width at half-height and area. You don't have to do extra experimentation in hopes of getting better resolution.

All you need is a 310 Curve Resolver and a few minutes. The 310 is a compact instrument you keep right in the lab for immediate use.

You operate the 310 without making computations. Yet you can use it to analyze raw data from chromatography, electrophoresis, spectroscopy, ultracentrifugation, x-ray diffraction, NMR spectroscopy, counter-current extraction, and other analytical techniques— any plotted data in some form of distribution curve.

It's much more convenient to use than a digital computer. Far less expensive. And generally faster in terms of total time because you don't have to program the 310 and because you work directly with it, as part of the computation loop. You constantly examine and modify the number, positions and shapes of the peaks as the instrument builds them up and displays their algebraic sum.

To use the 310, you put the curve you want to analyze (a chromatogram, for example) on the
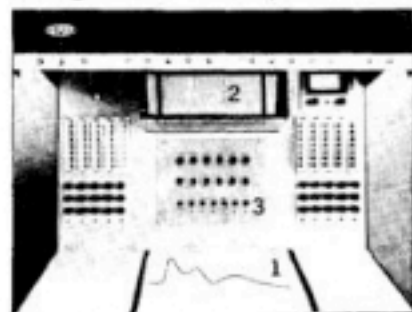
Raw plotted data (an IR spectrum of polyethylene in this case) is placed on desk top (1), reflected on scope face (2). Controls on console (3) are used to adjust and algebraically add peaks generated by 310 to superimpose curve with the reflected data.

desk. It's reflected on the screen on an 18-inch oscilloscope, located right in front of you.

Next, you turn on the "peak shapers," or function generators (the 310 has as many as ten of them), with the controls on the front of the console. The function generators cause peak shapes to be displayed on the oscilloscope superimposed with the image of
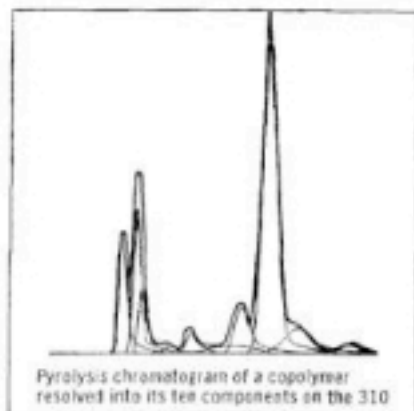

Pyrolysis chromatogram of a copolymer resolved into its ten components on the 310

your original curve. With the controls, you move the peaks and adjust their heights and widths until their algebraic sum matches your original curve. (You can also skew peaks, invert them or slope baselines.)

That's essentially all there is to operating the 310. Examine the original peaks right on the oscilloscope. Evaluate the "goodness of fit" between experimental and synthetic curves. Record the peaks, together with the sum curve, on an optional x-y plotter and read their relative areas on the integrator.

We would like to demonstrate the Du Pont 310 Curve Resolver right in your lab or office. In fact, we could demonstrate with some of your complex curves. To arrange a no-obligation demonstration, write Du Pont, Instrument Products Division, Rm. 5768-A, Wilmington, Delaware 19898.
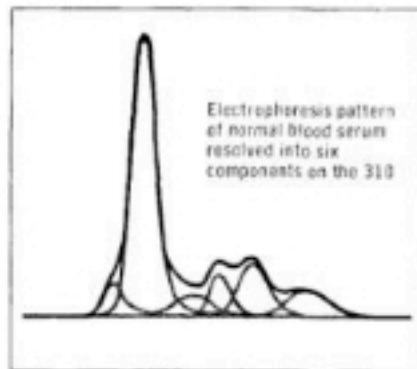
Electrophoresis pattern of normal blood serum resolved into six components on the 310