```
   try
      CurveFit/N/Q line, test; AbortOnRTE
   catch
      if (V_AbortCode == -4)
         Print "Error during curve fit:"
         Variable cfError = GetRTError(1)    // 1 to clear the error
         Print GetErrMessage(cfError,3)
      endif
   endtry
End
```

If you run this function, the output is:

```
  Error during curve fit:
  You must have at least as many data points as fit parameters.
```

No error alert is presented because of the call to **GetRTError**. The error is reported to the user by getting the error message using **GetRTErrMessage** and then printing the message to the history area.

V_FitIterStart

V_FitIterStart provides a way for a user-defined function to know when the fitting routines are about to start a new iteration. The original, obsolete purpose of this is to allow for possible efficient computation of user-defined fit functions that involve convolution. Such functions should now use all-at-once fit functions. See **All-At-Once Fitting Functions** on page III-256 for details.

S_Info

If you create a string variable in a function that calls CurveFit or Funcfit, Igor will fill it with keyword-value pairs giving information about the fit:

Keyword	Information Following Keyword
DATE	The date of the fit.
TIME	The time of day of the fit.
FUNCTION	The name of the fitting function.
AUTODESTWAVE	If you used the /D parameter flag to request an autodestination wave, this keyword gives the name of the wave.
YDATA	The name of the Y data wave.
XDATA	A comma-separated list of X data waves, or "_calculated_" if there were no X waves. In most cases there is just one X wave.

Use **StringByKey** to get the information from the string. You should set keySepStr to "=" and listSepStr to ";".

Errors in Variables: Orthogonal Distance Regression

When you fit a model to data, it is usually assumed that all errors are in the dependent variable, and that independent variables are known perfectly (that is, X is set perfectly and Y is measured with error). This assumption is often not far from true, and as long as the errors in the dependent variable are much larger than those for the independent variable, it will not usually cause much difference to the curve fit.

When the errors are normally distributed with zero mean and constant variance, and the model is exact, then the standard least-squares fit gives the maximum-likelihood solution. This is the technique described earlier (see **Overview of Curve Fitting** on page III-179).