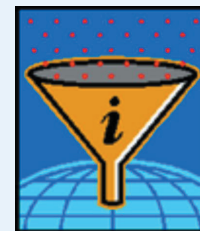
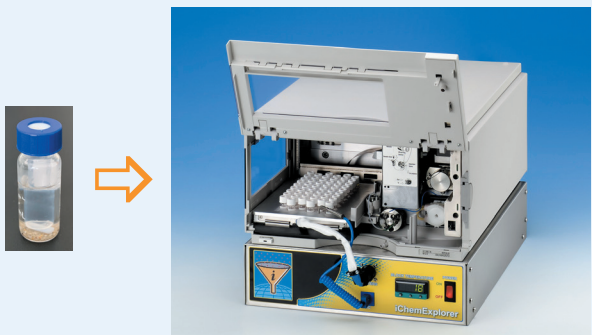


iChemExplorer Application

Forced Degradation for API Assessment

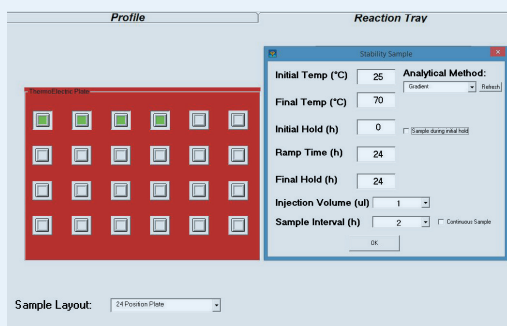


Turn your LC and LC/MS into an Automated Screening System
Chemistry to Results in a LC Sample Vial

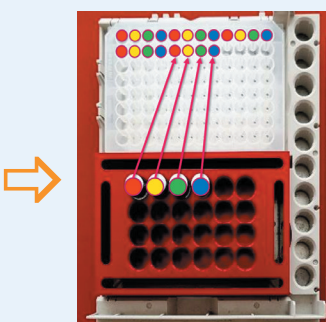


iChemExplorer is an innovative hardware/software module integrated into your HPLC autosampler:

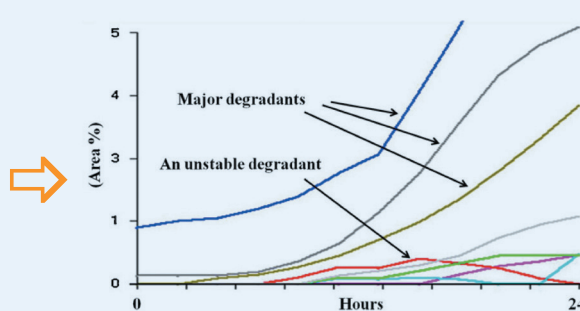
- Heating and cooling (5 to 150 °C)
- Stirring up to 1200 rpm
- Proprietary in-vial filter insert technology
- Intuitive software interface for experiment design and execution
- Application specific data analysis and reporting



Design and Control of Temperature and Sample Profiles



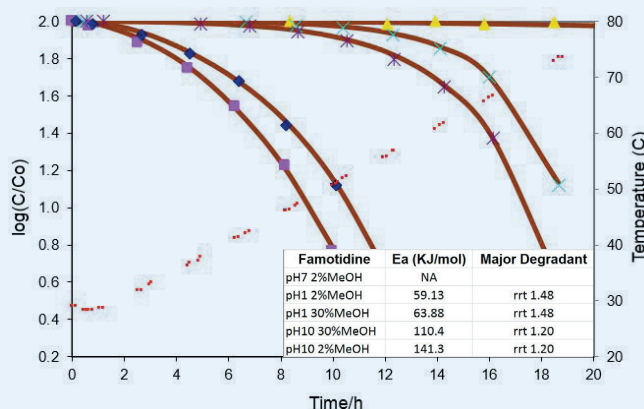
On-Plate Sampling Quench and Analysis



Real Time Peak Profiling for Degradation Kinetics

iChemExplorer provides "fit-for-purpose" protocols for conducting API's forced degradation in buffers:

- Automated LC sequence for stability time point and sample injection, coupled with non-isothermal program
- Direct or quench injection of stability samples, appropriate for insoluble excipients through in-vial filtration
- Real time LC peak profiling for degradation kinetics
- Estimated E_a , k and $t_{1/2}$ by plot fitting to Arrhenius Equation
- Completed stability test and report in 2 days



User Case Study

Application of *iChemExplorer* in Pharmaceutical pH Stress Testing
F. Qiu *et al.*, *J. Pharm. Biomed. Analysis* 2013, 76, 219