



aapptec

advanced automated
peptide protein technologies

Spirit of Innovation

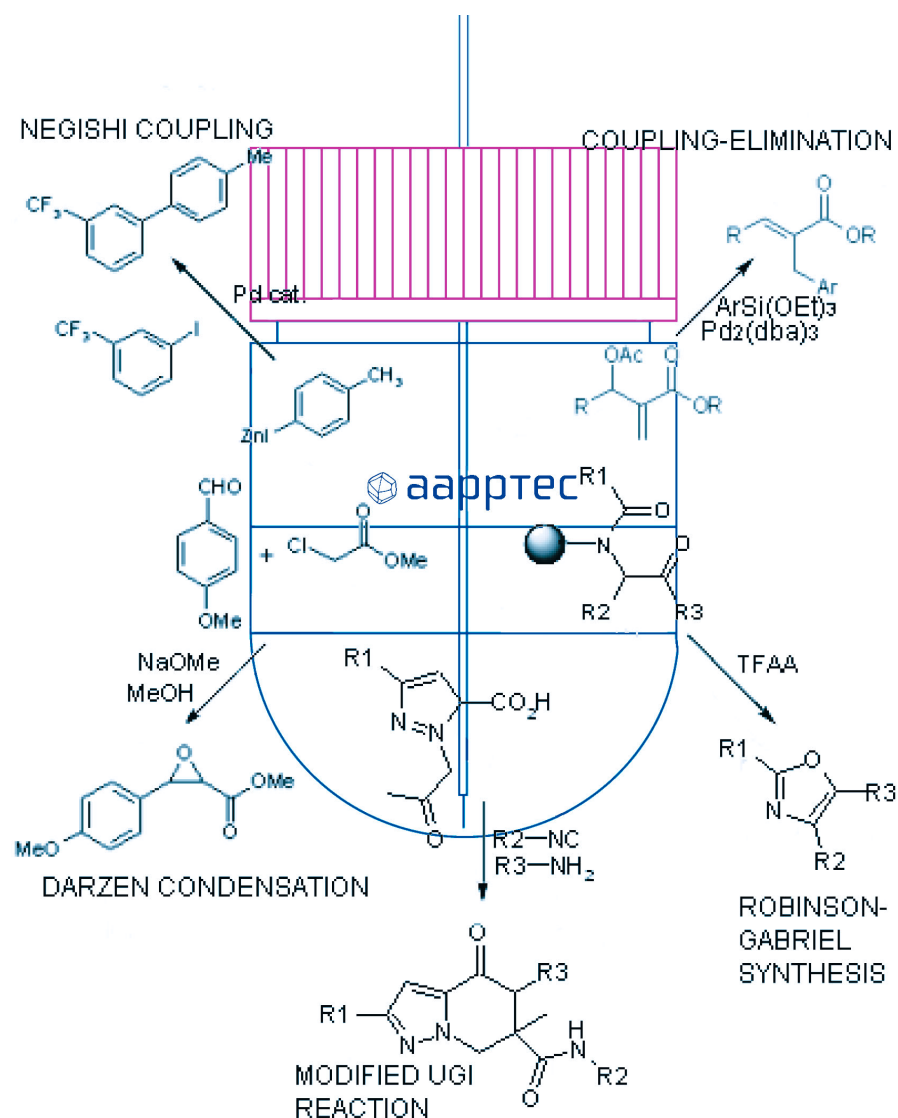
the Solution



Automated Multiple Solution
Phase Synthesizer

Automated Multiple Solution Phase Synthesizer

Chemistry

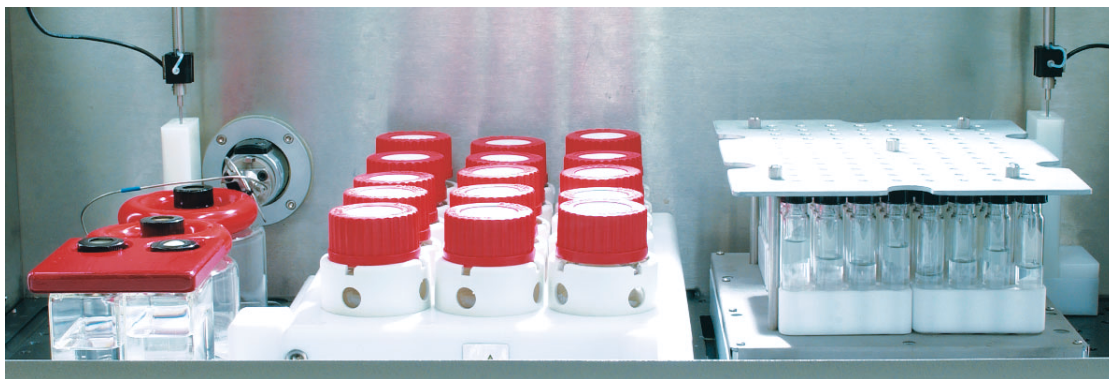


the Solution performs:

- Air or moisture sensitive reactions
- Pressure reactions up to 6 barr
- Liquid-liquid extraction
- Solid phase extraction
- Microtiter SPE
- Daughter plating

the Solution can utilize:

- Organolithium reagents
- Grignard reagents
- Air-sensitive palladium catalysts
- Solid-supported catalysts
- Reagent resins
- Scavenger resins



The Solution brings the efficiency and time-savings of automated parallel high throughput synthesis to solution-phase chemistry. The Solution can automate most of the solution-phase protocols that chemists often perform manually in round bottom flasks. The Solution also automatically performs parallel liquid-liquid extractions without user intervention. With the optional Ares reactor assembly, the Solution efficiently utilizes solid-supported catalysts, resin-supported reagents and scavenger resins or performs solid phase reactions on resins. When equipped with the optional Vulcan reactor assembly, the Solution easily performs high-pressure chemistry.

VERSATILITY

- Equipped with two reactor sizes, 100 mL and 10 mL, the Solution is capable of working simultaneously in multiple scales and flexible reactor sizes.
- The Solution performs multiple reactions simultaneously in 16 independent temperature zones from -40 °C to 150 °C.
- Equipped with an optional Ares or Vulcan reactor assembly, the Solution is capable of up to 96 simultaneous resin-supported reactions or high-pressure reactions (6 - 100 barr).
- Optional modular vial racks hold 20 mL vials for monomers or product storage.
- Utilizing optional titer plate racks, the Solution can perform microplate SPE and daughter plating.



Optional Ares Reactor Assembly installed

FAST, ACCURATE DELIVERY SYSTEM

- Dual robotic arms for fast and precise delivery of solvents and reagents.
- The Fast Transfer System delivers up to 6 different solvents or reagents at up to 60 mL/min
- Accurately and precisely transfers milli-liter to micro-liter volumes between any two points on the instrument work surface.
- Unlimited rack compatibility.

15 REACTOR ZONES

- 15 independently temperature controlled and magnetically stirred 100 mL round bottom reactors.



- 96 parallel, vortex-stirred 10 mL reactors for preparing parallel libraries. Reactors may also be used to store products or intermediates (see below). Other sizes available.
- Optional Savant Speed Vac® compatible racks for easy transfer of 10 mL reactors to a centrifugal evaporator for rapid solvent removal between reactions or drying samples for storage.



the Solution

AUTOMATED LIQUID-LIQUID EXTRACTION

- Thorough vortex mixing for efficient extraction.
- Automatic layer separation utilizing an ultra-sensitive liquid detection system.
- Compatible with any solvent.
- Transfers either top or bottom layer.

RACK AND BOTTLE OPTIONS

- The Solution is equipped with three 300 mL bottles for common reagents.
- An optional modular rack holding 7 to 56 septum-capped 20 mL vials may be utilized for monomers or product storage.
- With optional microtiter plate racks installed, the Solution can transfer products to titer plates for storage or prepare daughter plates for high throughput screening.
- Utilizing the optional Microtiter SPE rack, the Solution can perform Solid Phase extraction in the microtiter plate format.

REACTOR ASSEMBLY OPTIONS

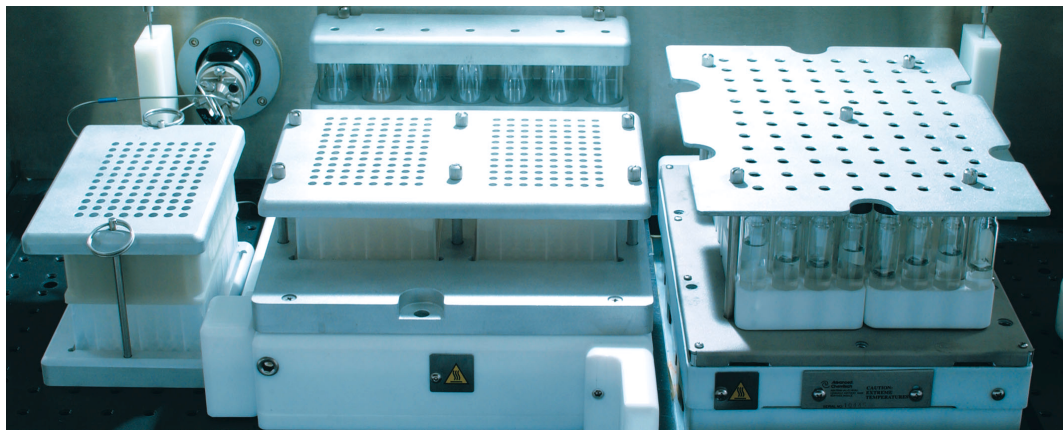
- Ares Reactor Assembly for utilization of scavenger resins, solid-supported reagents and solid phase synthesis resins.
- Vulcan High Pressure Reactor Assembly for high pressure reactions such as reductions and carbonylations.
- Teflon Reactor Block for Solution Synthesis, 96 reactors (1mL), 8 reactors (40 mL)

SOLUTION ACCESSORIES

- Savant Speed Vac® compatible racks
- 100 mL Round Bottom Reactor Holding Tray

SPECIFICATIONS

- Width:** 33 inches (84 cm)
- Depth:** 30 inches (76 cm)
- Height:** 39 inches (99 cm)
- Weight:** 350 pounds (159 kg) less computer
- Computer:** HP Pentium-4, Windows XP™ Professional
- Warranty:** One year, on site



Optional Titer Plate Racks installed



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