



IMPOSSIBLE CHEMISTRY...
INNOVATIVE RESULTS

OBITER
RESEARCH, LLC

Small Company Style & Attention

Big Company Capacity & Quality

WHO WE ARE:

OBITER Research is a contract chemical research and manufacturing company. We make custom compounds for the pharmaceutical, agrochemical and biotechnology industries as well as academic research institutes. We specialize in complex, multi step synthesis, finding new ideas developed through collaboration and communication, free from organizational boundaries.

- Established in 2001 in Champaign, Illinois. In 2005 the company experienced rapid growth which allowed the company to build its current 20,000 square foot facility.
- Each of the four labs has workspace for 6 chemists and additional Kilo scale and Analytical Chemistry suites.
- Expanded beyond research and process development, and now perform kilo scale manufacturing in excess of 1000 kg/month of specialty chemicals. These range from pharmaceutical intermediates to monomers to nutraceuticals.
- **OBITER Research** maintains a close relationship with the University of Illinois and maintains their high pressure facility.
- Our goal is to collaborate with our customers to successfully meet head on the challenges that the world of chemistry creates.



WHO WE ARE:

- Ph.D. Research and Process Development Chemists
- Experienced with multi-parallel synthesis
- Batch Records for all Manufactured Products
- Expertise in multi-step (>8 steps) synthetic sequences
- Proficiency in milligram – multi-gram (>100g) reaction scale
- Strong attention to quality, deadlines and delivery times
- Quality Control and Analysis separate from all Production
- Accomplished in process chemistry and process development
- Ability to manufacture compounds of 100+ kilograms per month



WHAT WE DO:

CUSTOM MANUFACTURING



CONTRACT RESEARCH



CUSTOM SYNTHESIS



WHAT WE DO:

Fine Kilo-Scale Chemicals

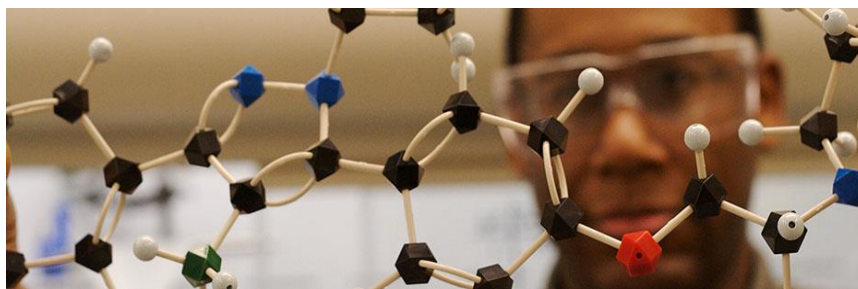
- Custom Synthesis
- Contract Research
- Catalog of Products

Custom Manufacturing

- Specification Specific
- Supply Agreements
- Manufacturing Partnership

Select Products Include

- Terpinoids
- DNA dyes
- Pharmaceutical intermediates
- Nutraceuticals
- Polymers
- Monomers



WHY OBITER RESEARCH?

- Experienced and innovative team of scientists
- Chemical Engineering approach
- Fresh and Unique New ideas
- Streamlined small business structure
- We welcome novel reactions
- OSHA certified SHARP award for safety
- Energy-efficient facility
- Laboratory space designed for functionality
- Fast and flexible operation for optimal project flow



WHAT WE'VE GOT:

Facility Highlights

- Two R&D labs with twelve 8-foot fume hoods
- Kilo facilities with eight Laminar flow Labconco 8-foot walk-in fume hoods
- 400 MHz NMR, housed in a dedicated space, separate from R&D labs
- 4 Analytical HPLC Systems
- 3 Preparative HPLC Systems
- Analytical & Quality Control laboratory
- Separate chemical, solvent and equipment storage areas
- Lab benches with multiple workspaces
- Easily adaptable work-space and storage-space
- On site glass blowing and machine shop



MANUFACTURING PARTNERS



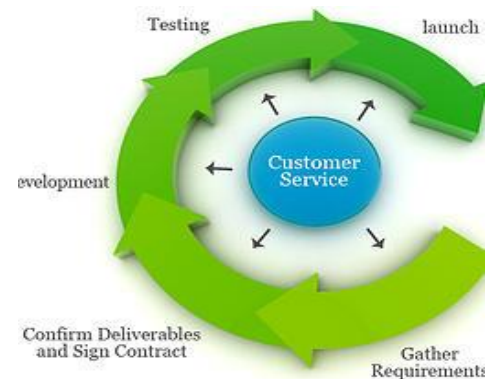
We sometimes partner with certain customers and invest in each other with the goal of establishing a long-term product development and supply relationship. The program is best suited for customers with limited chemical manufacturing capabilities or those seeking to outsource an existing product. The three key aspects and benefits of the program are: protection of intellectual property, security of supply, and cost reduction.

Improvements in technology funded by a customer always remain the exclusive property of the customer, but in our Manufacturing Partnership Program, improvements in technology developed by **Obiter Research** on its own are shared with the customer royalty free to help drive down costs in order to grow the market.

We will work closely with the customer on demand forecasts, inventory levels, raw materials purchasing and logistics to arrive at the lowest cost solutions to ensure that the customer's forecast can be met without any undue risk.

Often times a custom chemical product that is exactly on spec does not produce the desired outcome when introduced to the customer's production process. Our scientists will work directly with the customer's technical personnel to develop appropriate specifications with on going product development and application engineering. This helps drive down product costs, improve yields, and increase profits. We seek to form long term partnerships through successful collaboration and similar goals.

PROCESS DEVELOPMENT



Obiter Research invests considerable amount of its efforts on process development. Scale up of known processes sometimes takes on unique complications. Many times the solution to success is in the engineering and we pride ourselves in resolving difficulties to discover distinctive routes that allow for scale up.

We maintain ongoing research on selected products that we offer on the gram scale to ascertain the best and most economical routes for manufacturing. If one of these products is of interest to you then perhaps our Manufacturing Partnership program is a perfect fit. If you have a compound you're considering let us know. We are always looking for collaborative efforts where similar goals create a **win – win** situation.

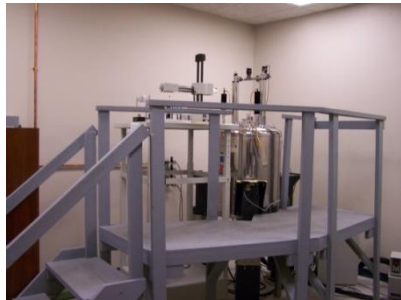
Obiter Research is a state-of-the-art facility encompassing 20,000 square feet of energy-efficient and environmentally friendly laboratory space designed for functionality. Our facility includes many features that enable our company to provide faster and more flexible operations with an eye on safety and material flow.

Our Facilities Include:

- Two research and development labs containing twelve 8ft fume hoods.
- Kilo facilities featuring eight 8ft walk-in fume hoods.
- Separate Analytical and Quality Control labs.
- Separate Chemical, Solvent and Equipment Storage Areas.
- All lab spaces contain extra wide aisles for ease of moving equipment used in a variety of processes.
- Our roll out stock room houses our equipment that is built on wheels which facilitates a more efficient and smoothly run process for multiple syntheses.
- Our own 400 MHz NMR in a separate dedicated space, separate from our R&D labs.
- Lab benches have multiple workspaces.
- Each workspace is outfitted with its own power source.

Equipment

- Varian Inova, multi-probe 400-MHZ NMR system
- with auto sampler and variable temperature unit
- 4 Analytical HPLC systems
- 3 Preparative HPLC systems
- 2 (1L) and 1 (50L) Jacketed glass reactors
- Heating/cooling systems
- Photochemical reactors
- Polarimeter
- Ozonizer
- 3 Parr hydrogenation apparatus
- 2" Wiped Film Still
- 4" Wiped Film Still
- 6" Wiped Film Still
- 9 R-220 Rotovaps
- 3 -150 L Glass Reactors
- 2 -200 L Glass Reactors
- 1 -300 L Glass Reactor
- 1 50 G SS Reactor
- 2- 14" centrifuges
- 500ml up to 10G Autoclaves with stirring mechanism



Our custom built facility provides us with a total of six laboratory suites and 21 fume hoods including separate space and hoods for kilo scale production and analytical research and quality control.



We are always interested in showcasing our facility and our experienced and innovative team of scientists. We welcome visitors who are interested in discussing possible custom synthesis projects. Together we can meet head on the challenges and opportunities that the world of chemistry creates.

