



M2i,

Fine Chemistry expertise
& equipment presentation

INTEGRATED SOLUTIONS FOR ALL YOUR PROJECTS

We propose to our clients an integrated partner, from early development to commercial supply of high-value niche fine chemicals, for pharmaceutical and biocontrol industry.

French partner for development
& manufacturing in fine chemistry



>80 M€
fundraising



Solid industrial and academic
network



x 3 Workforce



22 Patent families



New controlled substance
production capacity

8 years of dynamism, growth &
innovation to become a global
industrial group



Biocontrol

Pheromones Formulation technology
Finished product development



Pharma & Fine Chemistry

Active Pharmaceutical Ingredients,
Advanced intermediates, Polymers,
Pheromones

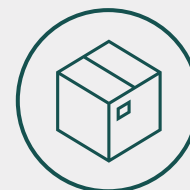
4 sites



GMP production plant
Salin-de-Giraud



R&D center
Lacq

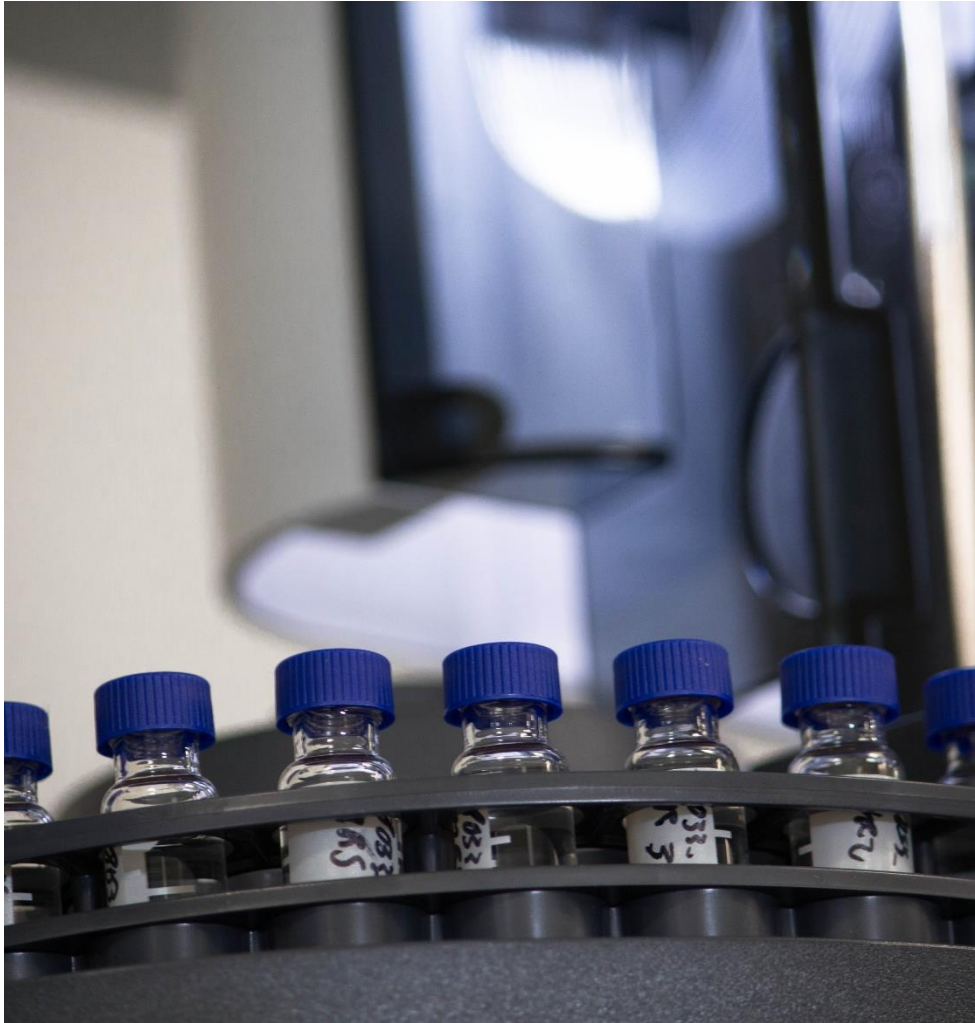


Conditioning facility
Parnac



Headquarter
Paris

PHARMA & FINE CHEMISTRY ACTIVITY



1

Proprietary molecule portfolio

API, intermediates, key building block
& pheromones

2

Contract Research

Outsourced research services

3

Custom Development & Manufacturing

Process development, industrialization
& production

4

Consulting/accompaniment

R&D, innovation, key sourcing
& industrial strategy



1 PROPRIETARY MOLECULES PORTFOLIO

GMP Active Pharmaceutical Ingredients

Intermediates & Key building blocks

Pheromones AI & Intermediates



Catalog available on request

2 CRO – Contact Research

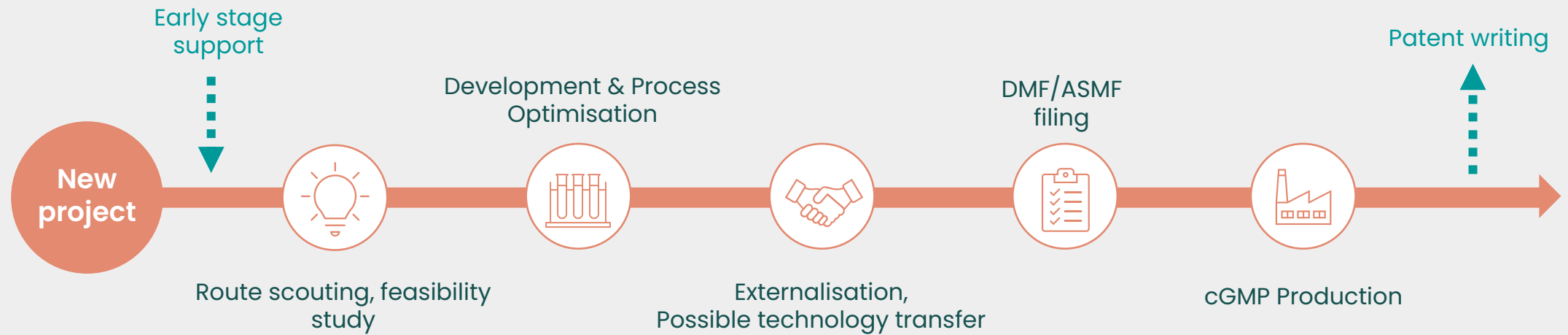
YOUR OUTSOURCED RESEARCH SERVICE

- Innovation orientated & customer-centric team
- Flexible and adaptable open-ended project management
- Full time equivalent (FTE) basis



3 CDMO – Custom Development & Manufacturing

SOLUTIONS FROM SCOUTING TO COMMERCIAL PRODUCTION



Possibility to start the project at any stage

SERVICES

3 CDMO – Custom Development & Manufacturing

RELIABLE PARTNER, From early clinical phase up to commercial manufacturing

Pre-clinical

- **Synthesis route design** and scouting
- Process engineering
- Analytical development
- Industrial cost evaluation
- Industrial raw material sourcing

Clinical

- Chemical process development & optimisation
- Key process parameters study
- **GMP clinical batch production**
- IMP dossier preparation
- Validation of analytical methods
- Forced degradation study

Commercial

- Manufacturing process validation
- ICH stability program
- **ASMF preparation & filing**
- Quality & Regulatory support
- **Industrial scale cGMP production**
- Continuous improvement
- APIs lifecycle management

4 CONSULTING/ACCOMPANIMENT

- **OutSourcing/Smart sourcing**
Strong network & partnerships
- **Assistance in R&D**
Experimental plan, bibliographic studies, studies on patent exploitation ...
- **Industrial production strategy**
- **Accompaniment in innovation**
Patent drafting







R&D CENTER in Lacq

- ISO 9001:2015 certified
- Team of 25 people
- Vessels up to 20L



PRODUCTION PLANT in Salin-de-Giraud

- GMP certified by the French National Agency for Medicines and Health Products Safety (ANSM)
- Team of 70 people
- Vessels up to 3500 L

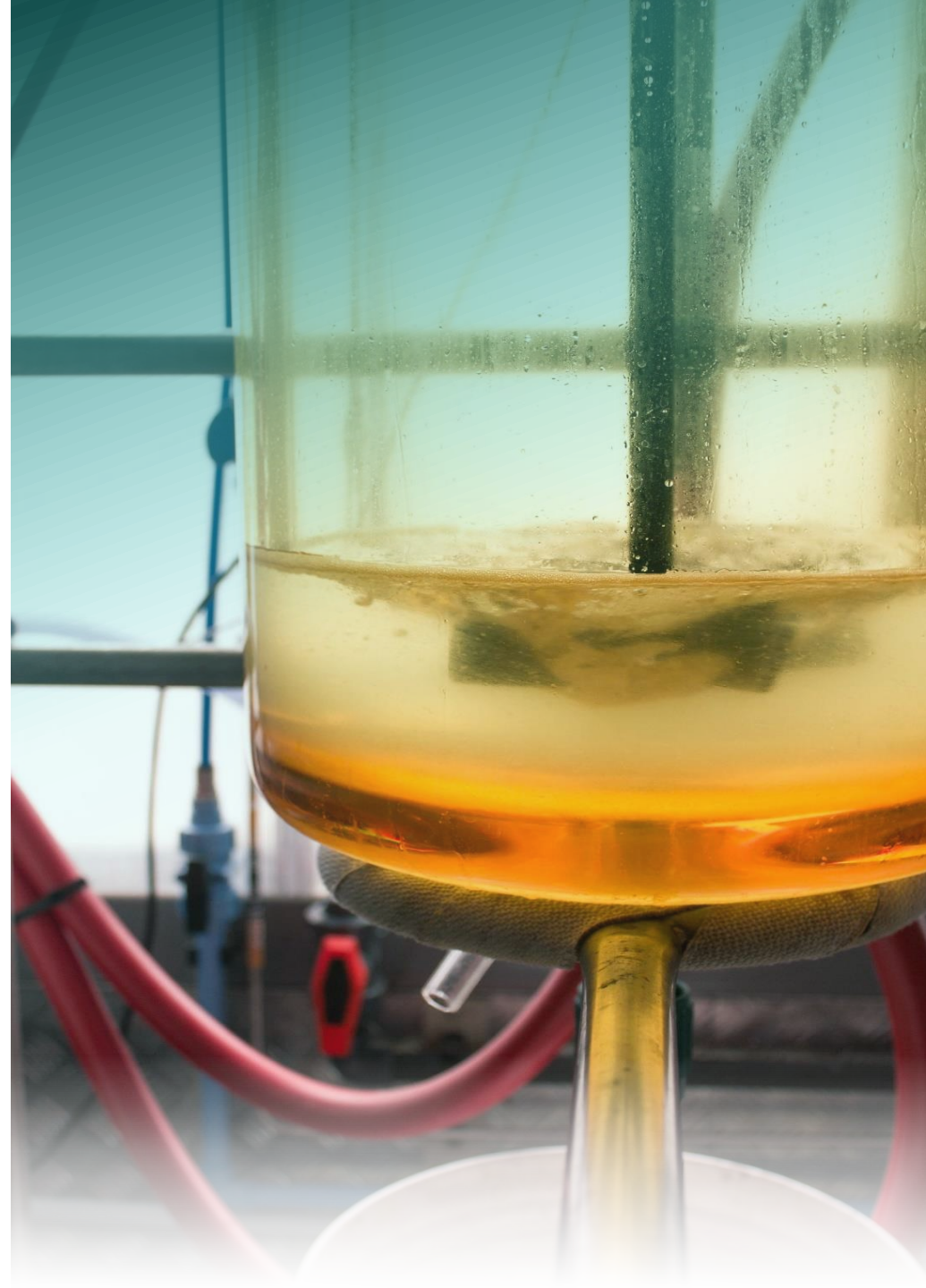


Both R&D center and production plant are approved for Research Tax Credit :

Crédit d'Impôts Recherche, CIR

HISTORICAL TIMELINE

- 2003** – Holis Technologies company creation
- 2012** – Acquisition of Holis Technologies by M2i
- 2015**
 - Relocation to Chemstart'up center
 - Start of polymer synthesis activity
- 2016** – Obtention of ISO 9001:2015 certification
- 2020** – Premises expansion



cGMP FACILITY

Salin-de-Giraud

- Since **1896**
- Ex Solvay Production plant
- **6** production lines
- Regularly audited

HISTORICAL TIMELINE

- 1896** - Kick off the Salin-de-Giraud facility by Solvay
- 1981** - Beginning of the Fine Chemistry activities
- 1996** - GMPs productions starts
- 1998** - First afssaps inspection
- 2005** - FDA preapproval inspection
- 2013** - Acquisition of the Salin facility by M2i
- 2018** - Premises expansion
- 2018** - Ansm inspection – 10 GMP APIs



cGMP MULTIPURPOSE EQUIPMENT

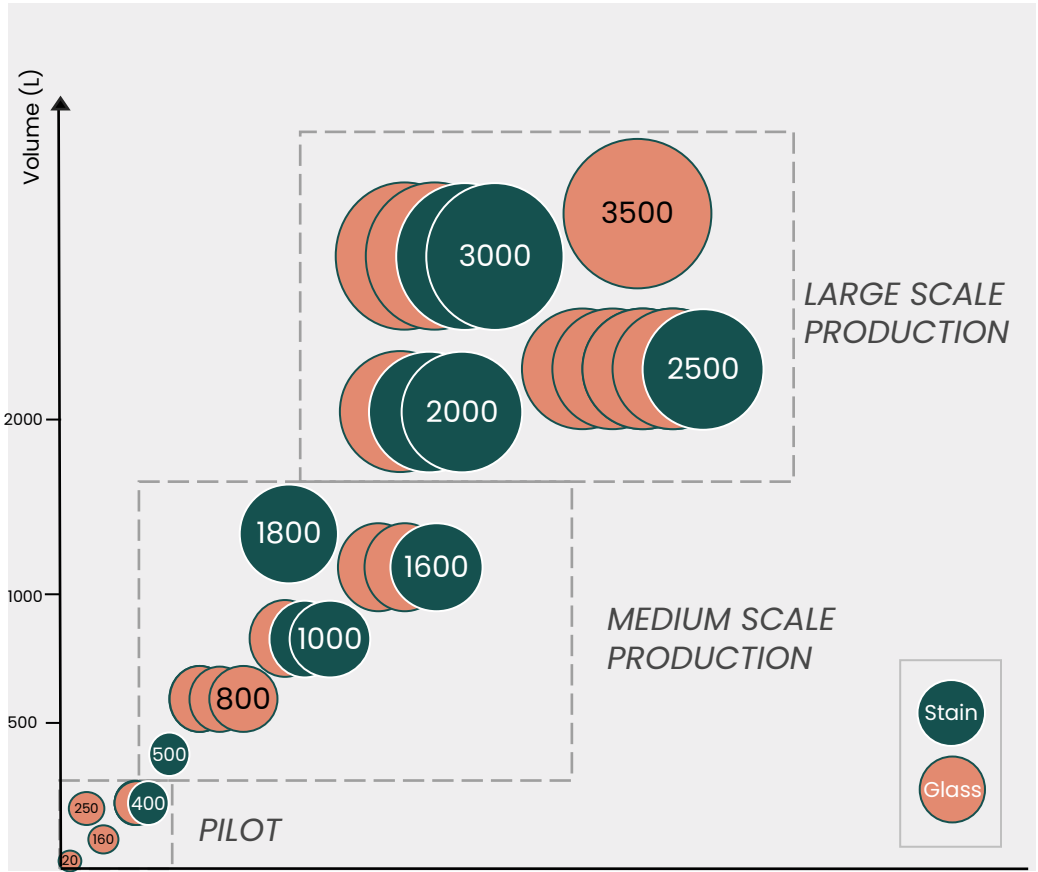
- Vessel capacity : **46 m³**
- **27** reactors
- Stainless /glassline
- Volume : [**0,16m³ / 3,5m³**]
- Pressure : [**10 mbars / 4 bars**]
- Temperature : [**-15°C / + 210°C**]
- Monofluidic thermal control
- Anhydrous thermal control (double jacket & condensers)



cGMP EQUIPMENT

from 160 L to 3500 L

PRODUCTION PLANT



KEY DIFFERENTIATORS

DIFFERENTIATING TECHNOLOGIES

- **Bromine** chemistry associated with cyanation
- **Sulphur** and mercaptan chemistry
- Hydride mediated deprotonation
- High energy POCl₃ chlorination
- Cyclopropane & cyclobutane chemistry
- **Continuous process**

DIFFERENTIATING PROCESSES

- Multistep synthesis
- **Controlled substance production capacity**
- Integrated CRO-CDMO
- Industrial Proprietary Portfolio
 - ✓ 7 GMP APIs
 - ✓ 8 sensitive Building Blocks and KSM
 - ✓ 9 Pheromones active ingredients and intermediates

INDUSTRIAL SCALE MAIN REACTIONS

- Alkylation (dimethyl sulfate)
- Amidation
- Bromination (Br_2 , HBr , ...)
- Chemical resolution
- Chlorination (SOCl_2 , Cl_2 , POCl_3)
- Continuous process
- Cyanation
- Cyclization
- Esterification
- Etherification
- Friedel-Crafts
- Grignard
- Hoffman rearrangement
- Hydrides (LiH , NaH , KH)
- Oxidation
- Phase transfer Catalysis
- Reduction (NaBH_4 , AlLiH_4)
- Saponification
- Sulfuration (H_2S , S_8)



- **Chemistry initiatives Award** – *Innovation and research*
- **Pierre Potier** – *Innovation in chemistry for sustainable development*
- **Double winner of the Ecophyto plan**
- **European Business Award for the Environment** winner
- **French Chemical Society Award** – *Industrial chemistry*
- **3rd International Symposium on Green Chemistry Award**



L'USINENOUVELLE

M2i Life Sciences named Start-up of the year 2019

Forbes

Fundraising: French start-ups break records

L'EXPRESS

M2i replaces pesticides with organic pheromones

Les Echos Capitalfinance

M2i Life Sciences obtains € 60 million from five investors

france
bleu

NOTRE
Pharma

Europe 1

Challenges

Les
PÉPITES TECH

The Telegraph

FORTUNE

**MYFRENCH
STARTUP.com**

L'ADN

 **Owler**


ELDORADO

INFOCHIMIE

FINANCIAL TIMES

crunchbase

Finyear

FEATURED IN...



LOCATION

112 Bureaux de la Colline,
9210 Saint-Cloud - FRANCE



EMAIL

contact@m2i-lifesciences.com



PHONE

+33 1 84 76 00 50



WEBSITE

www.m2i-lifesciences.com



THANK YOU

M2i, Lead the Change