

## Product Development

Our service portfolio for product development, application technique and product invention



### Description

#### 1. Concept development to define innovative product applications

- Definition of target (project target profiling)
- Creation of possible product concepts based on given target profile
- Forecast and concept scoring
- Prototyping (tentative set up of possibilities)
- Definition of winning concepts

#### 2. Frame formulation development

- Definition of formulation ingredients
  - Actives
  - Detergens
  - Solvents
  - Inerts
  - Perfumes and colours
- Testing of specific application properties and compatibilities
- Definition of manufacturing technique
- Definition of methods for analysis
- Definition of packaging

#### 3. Comparison of application and competitor products

Technical product test screening according to international test standards (WHO, CIPAC, ISO, etc.)

- Combined evaluation of usage and efficacy testing
- Shelf life and compatibility screening
- Physical / chemical evaluation of specific application properties
- Analytical evaluation of active content (GC / HPLC / LC/MS)

Technical counselling of application improvement

We know how it works.



## Description

### 4. Finished product development

- Definition of ingredient and packaging supplier
- Product testing
  - Shelf life
  - Efficacy of product
  - Use of application
  - Physical/ chemical data packages
  - Safety data packages
  - Manufacturing
- Setting up of ingredient, packaging and product specification
- Setting up of product booklets for manufacturing
- Setting up of registration booklets, reports and documents for international product registration
- Technical support for manufacturing trouble shooting

### 5. Technical consulting of development projects

- Ideation and patent invention
- Project management counselling (Defining the project team, Milestones / timing / costs)
- Application testing during development phases
- Support application claims and methodology requirements
- Directive requirements of **Biocidal- and Plant Protection directive**
- Counselling of network partners for different approaches

### 6. Development of processes (Lab scale)

- Development of analytical and application determination process concepts
- Testing of determination concepts
- Definition of determination process properties
- Technical set up of determination process
- Determination process validation
- Set up of lab samples for determination, for internal testing or for testing at external partner laboratories

We know how it works.



## Description

### 7. Our methods / procedures

- Concept and product development
  - Creative combination of existing principles and technical features (transforming /adjustment)
  - „Me too“ development concepts
  - Principles of innovation and creativity tools and technique
  - Trend product or technique research
  - Pro active invention of innovative application and formulation
- Application testing
  - Product usage tests according to international standards
  - Durability testing
  - Efficacy screening
  - Application characteristics
  - Shelf life screening
  - Qualification of different active ingredients
  - Physical / chemical properties
  - Safety and hazard data

### 8. Applications and products

- Frame formulation concepts
  - Intermediates for sprays or vaporizers
  - Ready to use liquids
  - Emulsion or suspension concentrates
  - Paste or gels
  - Films
  - Tissues
- Finished products for insecticidal or repellent use
  - Sprays cans or other spray application
  - Concentrates
  - Granulars
  - Active and passive vaporizer systems
  - Baits pastes, pellets, gels films, etc

We know how it works.



## Description

BioGenius is also capable to provide such services for other segments like:

- Airfreshener or purifying applications
- Veterinary applications
- Household care or cleaning application
- Cosmetics

The detailed methods and procedures are described in our service catalogue for analytics and application.

We know how it works.