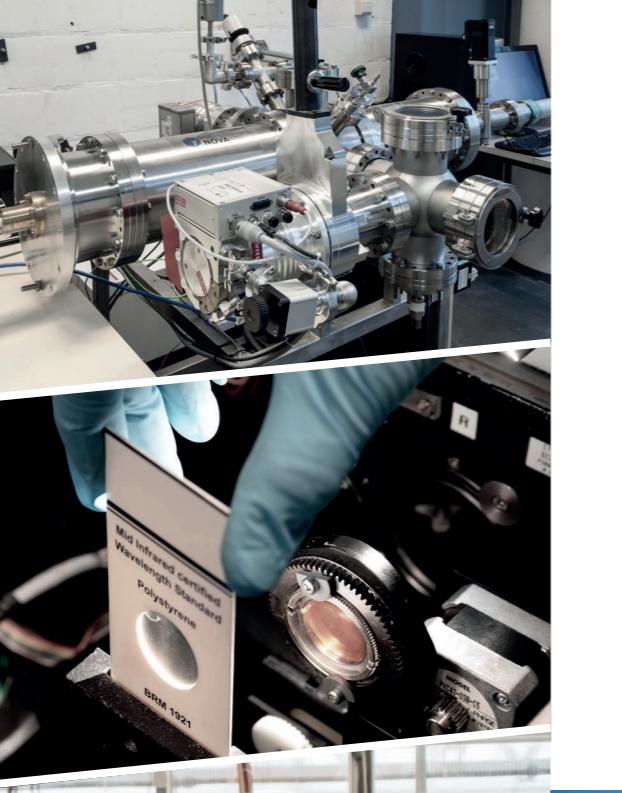


Our strengths

- A multidisciplinary team of experts
- Collaborations with R&D centers and universities worldwide
- A wide range of cutting-edge equipment
- An open and collaborative innovation strategy at national and international level
- Innovative projects for and with industrial companies
- A strong network of companies, spin offs and start-ups (B-SENS, ESIX, IONICS and NANO4)



**MATERIA NOVA,
THE TECHNOLOGICAL ACCELERATOR
OF RESPONSIBLE INNOVATIONS
IN MATERIALS AND PROCESSES**

Our services

For a turnkey support from design to industrialization

- Materials and Processes conception and innovation
- Equipment Design and Process Upscaling
- Analysis and Characterization
- Life Cycle Thinking
- Project Development and Management

Our technologies

For expertise and excellence in R&D

Processes

- Coatings and surface treatments
- Compounding
- Chemical synthesis
- Advanced 3D printing
- Waste management
- Biobased processes
- Electropolymerization



Materials

- Hybrid coatings (sol-gels)
- Paints, varnishes and inks
- Metallic and ceramic coatings
- Biomolecules
- Organic semiconductors
- (Bio) polymers and (nano) composites

Smart devices

- (Bio) sensors
- Optoelectronic, piezo and thermoelectric devices
- Decontamination
- Implants and prostheses



Our solutions

For efficient, innovative and sustainable results

Multifunctional materials and surfaces:

- Protection and durability
- Aesthetic properties
- Adhesion and surface preparation
- Electrical and electronic properties
- Optical properties
- Antimicrobial and antifouling properties
- Catalytic properties
- Fire resistance

Materials and processes for:

Energy

- Energy control and efficiency
- Transport and storage
- Capture and conversion
- Production

Environment

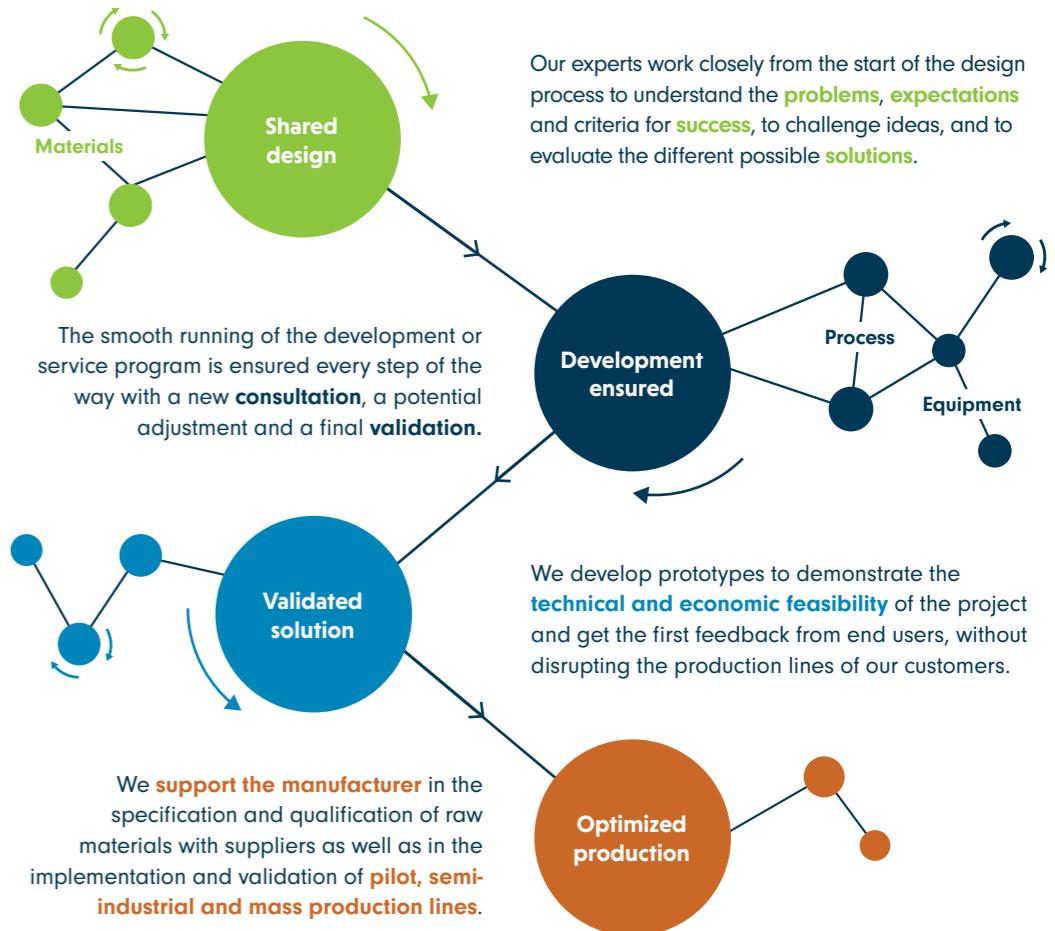
- Bioprocesses and biocatalysis
- Biobased compounds and materials
- Upcycling, recycling and reforming
- Depollution and purification
- Environmental impact and management
- Eco-design and life cycle thinking

Health

- Diagnostic
- Controlled drug release devices
- Decontamination
- Implants and prostheses



Materia Nova implements responsible innovative and collaborative projects to respond to the societal and environmental needs, changes and challenges.



Our experts work closely from the start of the design process to understand the **problems, expectations** and criteria for **success**, to challenge ideas, and to evaluate the different possible **solutions**.

The smooth running of the development or service program is ensured every step of the way with a new **consultation**, a potential adjustment and a final **validation**.

We develop prototypes to demonstrate the **technical and economic feasibility** of the project and get the first feedback from end users, without disrupting the production lines of our customers.

We **support the manufacturer** in the specification and qualification of raw materials with suppliers as well as in the implementation and validation of **pilot, semi-industrial and mass production lines**.