

**Without any staining or marking, non-destructive  
Ultimate analysis of drugs, biopsies and devices**

**Pharmaceuticals**  
Tissues and biomaterials  
Wood, Paper & Textiles



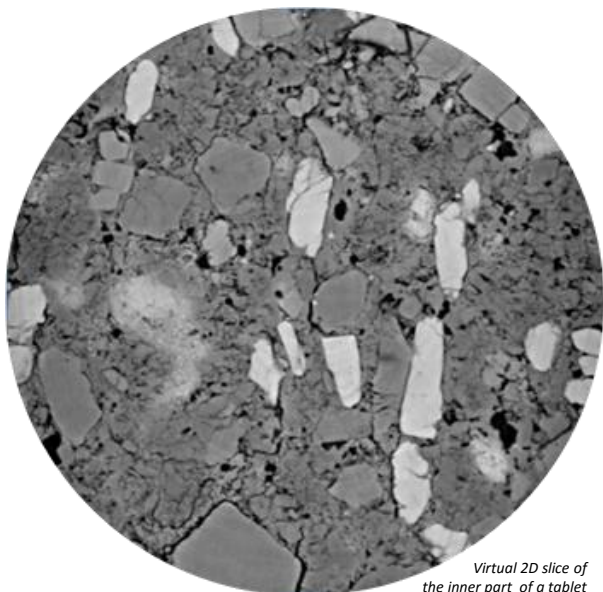

## Scan

- Tablets, Pills, Pellets, Granules, Powders
- Creams, Gels, Ointments
- Suppositories, Capsules
- Implants, Transdermal patches
- Drug delivery systems
- Tissues : Skin, Hair, Bones, Biopsies
- Bandages
- Packaging



## Analyse

- 3D distribution & shape of API and excipient particles
- Compactness, Homogeneity
- Porosity, Cracks and failures, Delamination, Leaks
- *in situ* chemical & cristallinity analyses
- Crystalline and semisolid polymorphism
- Identification of contaminants
- Diffusion inside drugs and human tissues
- Micro-metrology
- Real time monitoring: temperature, compression, wetting

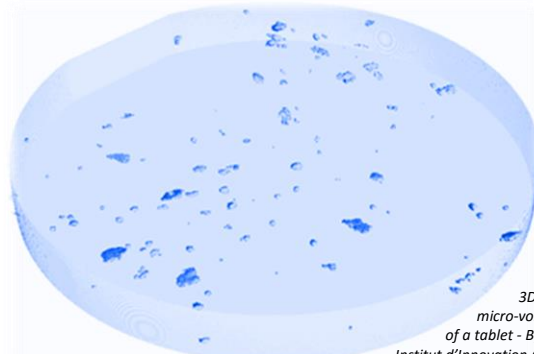


*Virtual 2D slice of the inner part of a tablet*




## Predict

- Rate of diffusion
- Risk of failure of solid dosage forms
- Medium-term degradation of drugs
- Physico-chemical behaviour
- Effect of compactness or coating quality on API diffusion rate



*3D rendering of the micro-voids in the coating of a tablet - By courtesy of the Institut d'Innovation Galénique Servier*



## Control

- Stability during storage
- Stability under temperature or humidity
- Behaviour versus a mechanical stress
- Segregation of phases
- Dissolution of drugs
- Structural and chemical changes in tissues
- Packaging quality

**NOVITOM** is the first full-service provider to specialise in 3D micro-imaging and micro-analyses powered by synchrotron technology. Novitom's innovative techniques go way beyond standard laboratory methods and use advanced non-destructive characterization tools to reveal the inner micro-structure of materials and products, with an exceptional level of quality and detail.

1, Place Firmin Gautier - 38000 GRENOBLE - France Tel. +33 (0)9 82 32 60 97