

## NEWS ANNOUNCEMENT - FOR IMMEDIATE RELEASE

February 28th, 2023  
Milan, Italy

# RCPE and InSilicoTrials add new tool to their XPS simulation software

RCPE and InSilicoTrials agreed to an **exclusive partnership** to commercialize the **XPS simulation software** in May 2022. Today the two companies announce the launch of **SimTabletCoater**, an additional tool within the comprehensive XPS model portfolio. This tool is developed specifically for **pharmaceutical applications**. It makes it possible for companies to assess their process configurations in unprecedented detail and explore the decision space without time- and labor-intensive experiments.

Simulation-based process design, evaluation, and troubleshooting are indispensable in today's industrial landscape. Various powder and solids handling industries, such as the pharmaceutical, food, and chemical industries, apply **particle-based methods** to simulate the flow behavior of particulate solids. Applications of those methods include geometry optimization, material processability issues, and process transfer or scale-up challenges.

Tablets are the most common dosage form because tablet production is economically efficient, dosing is comparably easy and accurate, and patient usage is simple, which leads to good compliance. However, designing the coating process can be a challenge. RCPE and InSilicoTrials joined forces to facilitate **tablet coating simulations** via an easy-to-use cloud interface. The GPU-based **DEM solver XPS**, developed by RCPE, is integrated into the InSilicoTrials cloud platform, adding a new tool to the comprehensive model portfolio: **SimTabletCoater**.

Finding the ideal operating conditions in the laboratory often requires multiple coating runs. Simulations with **SimTabletCoater** instead offer a comfortable way of surveying the parameter space and **experimenting virtually with different coating setups**. Parameters such as the tablet shape, the mass of tablets in the coater, the amount and composition of the spray applied over time, or the coater rotation speed can easily be varied to study their effect on the coating outcome. Superior to the laboratory setting, the virtual process exploration is not bottlenecked by the amount of available equipment and material.

### InSilicoTrials

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**SimTabletCoater** uses simple inputs, automated post-processing, and customizable reporting templates. In addition, 3D visualization of the tablets motion during the process in the coater is possible.

With **SimTabletCoater**, a process engineer can **harness the power of XPS** from the web browser without requiring software installation or specialized hardware in the form of computers with high-end graphics cards and processors. Using the InSilicoTrials platform, **cloud computing capacities** can be leveraged to run many simulations simultaneously with unmatched speed, further accelerating the establishment of a coating process to obtain the desired velocity and quality.

**Get your tablet coating process right the first time and use SimTabletCoater via <https://insilicotrials.com/xps/>.**

**Tags:**

RCPE, InSilicoTrials, Modeling, Simulation, Pharmaceutical Manufacturing, Pharma 4.0, Process Development, SimTabletCoater, Cloud-Platform, XPS, Simulation Software, XPS Simulation Software.

**InSilicoTrials**

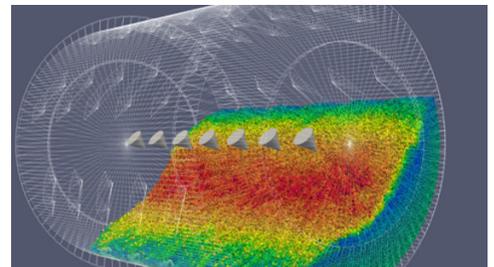
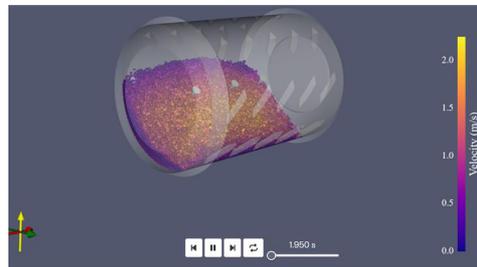
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**New Simulation**



**Setup**

- Select workflow
- New simulation
  - Compare previous simulations

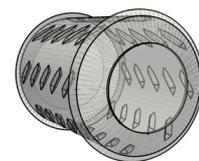
Title

Select a coater

Coater rotation speed (rpm)

Enable advanced settings

Next >



Contour of the selected coater.

*Example of New Simulation Setup on InSilicoTrials' Platform*



## InSilicoTrials

**InSilicoTrials** is an emerging startup founded by a team of life science, cybersecurity, and digital innovation experts, which aims to revolutionize Healthcare through an innovative digital simulation platform where complex computational simulations run easily and cost-effectively to hyper-accelerate drug & medical device development.

We offer **Pharma and MedTech** companies a **cloud platform** combining state-of-the-art AI, simulation tools, and patient data that can highly reduce the cost and time of drugs & medical device development. InSilicoTrials built up an ecosystem of more than 70 scientific collaborations, where computational models are developed with internationally recognized universities and research centers, offering access to the highest level of data security.

With our cloud-based platform offering advanced **Modeling and Simulation** tools to perform in silico trials analyses, InSilicoTrials supports companies to integrate AI and simulation technology into their drug development workflows. The in silico technology can increase the quality of life of millions of patients by allowing accessible treatments, bringing innovative drugs to the market in a shorter time, and personalized cures and new solutions for rare diseases.

[www.insilicotrials.com](http://www.insilicotrials.com)

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## RCPE

The Research Center Pharmaceutical Engineering (RCPE) is a global leader in pharmaceutical process engineering. The center supports its partners in the development and manufacture of innovative medicines.

Our science enables tomorrow's medical discoveries and improves patients' lives worldwide. The experience and expertise of our multi-disciplinary team and our unique capabilities in simulation, AI, (nano-) material science, process design & quality control, as well as process monitoring and quality assurance, redefine the boundaries of what is possible and provide cutting-edge, scientific solutions tailored to our partners' needs.

As a non-profit, private company owned by Graz University of Technology (65%), the University of Graz (20%), and Joanneum Research GmbH (15%), we combine outstanding science, business, and industry in an application-oriented approach.

[www.rcpe.at](http://www.rcpe.at)