Safer, more efficient and low-cost pharmaceutical production

‘There is an enormous potential in continuous manufacturing for the production of solid dosage forms such as tablets and capsules’, underlines Dr. Matthias Müller, Senior Vice President Engineering, Bosch Packaging Technology. The good market prospects justify particularly an increasing demand on a much faster market launch of new drugs as well as a higher degree of automation, which is cost and time saving. At the same time, the production quality is increased and the failure rate can be minimized.

‘The continuous manufacturing offers many advantages, especially as products can be produced much quicker and within hours, as opposed to months at present usual batch process,’ explains Prof. Johannes Khinast, Scientific Director of RCPE. The elimination of many intermediate steps, much shorter supply chains, fast and flexible response to changing needs, and significantly smaller plants that enable a quick and local production, even in areas of conflict or extreme situations, are key elements that speak clearly for the continuous manufacturing’. Furthermore, by controlling the production at a 100 percent rate, the product quality is significantly increased and thus also the productivity’, explains Khinast. The continuous manufacturing allows each process step to be monitored. In case of failure, the production can be stopped immediately and the damage can be remedied.

Economic factor Research

‘The cooperation between RCPE and Bosch shows that the Styrian competence centers perform cutting-edge research. This has several positive effects for the business location Styria. On the one hand according to such examples Styria can be internationally positioned as an excellent location for innovation and is of high attractiveness for companies and top researchers. On the other hand, impulses for value creation and employment in Styria are created as in addition to RCPE Styrian companies benefit by securing existing jobs and creating new ones’, mentioned Dr. Christian Buchmann, Styrian Minister of Economy.
Impact and effects

The collaboration is exclusive contract research, which is 100% financed by the corporate partner Bosch. Around ten RCPE experts from fields such as particle technology, simulation, regulators, process control, analysis and control work on this pioneering project. “Since the beginning of our cooperation we have experienced the RCPE as a competent, professional and reliable partner. Therefore, we expect in the coming years, good, and especially validated results and look forward to the joint projects”, says Christian Gebauer, project leader Continuous Manufacturing, Bosch Packaging Technology.

The decision for the Graz based competence center RCPE was taken after intensive worldwide search, due to its unique excellence in pharmaceutical process and product optimization. RCPE is one of the few international research institutes, which have a recognized, long-standing expertise in this field. The research cooperation agreement will initially run for five years, with an option for another five years as an extension.

Contact and information

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