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## Styrian Scientists Help to Improve Access to Critical Medicines

**Today, one third of the world's population lacks access to essential medicines. The Research Center Pharmaceutical Engineering (RCPE) - as part of the Medicines for All Institute (M4ALL) in the U.S. - aims to improve access to lifesaving medicines by developing more cost effective and efficient technologies to synthesize the active ingredients.**

Last summer, Virginia Commonwealth University (VCU) in Richmond, Va. (USA), was awarded a \$25 million grant from the Bill & Melinda Gates Foundation to establish the Medicines for All Institute (M4ALL) and to fund the institute's work on a wide range of essential global health treatments. With this grant, the institute helps to lower cost and increase access to lifesaving medications for HIV/AIDS, malaria, tuberculosis and other diseases around the world. B. Frank Gupton, Ph.D., professor at VCU and leader of the Medicines for All Institute, has previously developed innovative models that reduce the cost of manufacturing HIV/AIDS treatments by accelerating the way the active ingredients in these medications are synthesized. The current award by the foundation will fund the institute's work on 13 global health drugs over the next five years.

As part of a selected group of M4ALL international collaborators, the research team of C. Oliver Kappe, professor at the University of Graz, Austria, and scientific director of the Center for Continuous Flow Synthesis and Processing (CC FLOW), will contribute to the efforts of this global initiative. For the past decade, Professor Kappe's research in Graz has focused on continuous processing, a technique particularly suitable for synthesizing pharmaceuticals in a cost efficient and sustainable way, which may eventually make it possible for medicines to be manufactured directly in countries where they are actually needed. Since July of 2017, Kappe has led the CC FLOW consortium at the Research Center Pharmaceutical Engineering GmbH (RCPE), an independent research center owned by Graz University of Technology (65%), University of Graz (20%) and Joanneum Research GmbH (15%).

"We are honored to be part of the Medicines for All initiative and to contribute our expertise," Professor Kappe said. "We anticipate that in many instances the possibilities that come with applying continuous manufacturing will be a game changer in terms of reducing the cost of synthesizing the active pharmaceutical ingredient." The 5-year grant will support Ph.D.-students in Graz with research initially aimed at achieving cost effective access to a critical HIV/AIDS drug. Professor Gupton added "We are very pleased to have Professor Kappe and his team working together with M4ALL on this important initiative. His research goals in continuous processing and organic synthesis are uniquely aligned and complimentary to the objectives of the institute. We share a common vision for streamlining pharmaceutical methods through process intensification."

“The impact of this project reaches far beyond the initially targeted therapies,” said Professor Johannes Khinast, scientific director of RCPE. “The know-how developed in Graz in the field of continuous processing can readily be translated to other medicines and applications.” With the adoption of continuous manufacturing, processing times decrease, unnecessary steps are eliminated, and the entire process is streamlined. These major differences to the predominant method of batch processing result in lower manufacturing costs that will improve patient access to medication.

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### Press Contact, Inquiries, Picture Material

#### **Constantin Schmidt**

Research Center Pharmaceutical Engineering GmbH

Inffeldgasse 13, A-8010 Graz

Tel.: +43 316 873 30987

E-Mail: [constantin.schmidt@rcpe.at](mailto:constantin.schmidt@rcpe.at)

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### Information about the organizations

#### **RCPE GmbH**

Together with the global players in the pharmaceutical industry, the K1 Competence Center Research Center Pharmaceutical Engineering (RCPE) performs cutting-edge research in the field of process and product optimization. The main focus is on the development of new drug delivery systems and the associated production processes and their monitoring. In addition to an experienced multidisciplinary and international team the outstanding achievements of the center are due to its proximity to the Universities in Graz. Thus, being a link between science and industry, RCPE offers state-of-the-art business-oriented research. RCPE is owned by Graz University of Technology (65%), the University of Graz (20%) and the Joanneum Research GmbH (15%) and is supported by the Ministry of Transport, Innovation and Technology (BMWVIT), the Ministry of Science, Research and Economy (BMWFW) and the federal state of Styria within the framework of the COMET – Competence centers for Excellent Technologies. The Austrian Research Promotion Agency (FFG) is responsible for the management of the COMET program.

The K-Project CC FLOW is an international consortium consisting of three scientific and 13 industrial partners and an integral part of RCPE. The overall goal of CC FLOW is to generate expertise and technology enabling the continuous manufacturing of active pharmaceutical ingredients in an efficient, safe and sustainable manner. This ultimately contributes to a more cost-effective manufacturing of high-quality medicines.

For more information visit [www.rcpe.at](http://www.rcpe.at) and [ccflow.at](http://ccflow.at)