

## Open PhD position in modelling of pharmaceutical processes!

### PhD Topic: Model-based Analysis of Stability and Robustness of Continuous Production of Pharmaceutical Ingredients

Continuous flow reactor

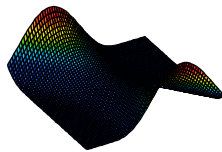


MIT Technology Review (2012)

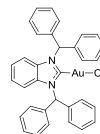
Microfluidic reactor



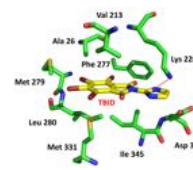
Elvira et al, Nat.Chem. (2013)



Potential Energy Surface



Gold (I) Complexes



TBID

Im Rahmen des niedersächsischen Graduiertenprogramms "Processing of poorly soluble drugs at small scale" soll am Institut für Energie- und Systemverfahrenstechnik die Modell-basierte Analyse der Stabilität und Robustheit kontinuierlicher Produktionsverfahren für neue, pharmazeutische Wirkstoffe untersucht werden. Die Arbeiten sind in das neu gegründete Zentrum für Pharmaverfahrenstechnik (PVZ) der TU Braunschweig eingebettet. Wir bieten Ihnen zudem die Möglichkeit, an der renomierten International Max Planck Research School for Advanced Methods in Process and Systems Engineering (IMPRS ProEng) teilzunehmen.

Informationen zu Programm und Bewerbung finden Sie unter:  
<https://www.tu-braunschweig.de/forschung/zentren/pvz/application>

**Deadline: 15 December 2014**

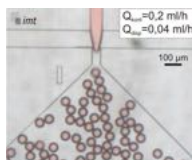
Within the graduate program "Processing of poorly soluble drugs at small scale", the Institute of Energy and Process Systems Engineering encourages candidates to apply for the project "Model-based analysis of stability and robustness of continuous production of pharmaceutical ingredients". All students will be part of the highly interdisciplinary Center for Pharmaceutical Process Engineering (PVZ) of the TU Braunschweig. We also offer you the opportunity of joining the renowned International Max Planck Research School for Advanced Methods in Process and Systems Engineering (IMPRS ProEng).

More information about the application procedure can be found at:  
<https://www.tu-braunschweig.de/forschung/zentren/pvz/application>

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Continuous flow set-up, Jamison Group, MIT  
(<http://web.mit.edu/chemistry/jamison/Research/Continuous%20Flow/Flow%20Setup.jpg>)



Droplet formation by flow focusing in microsystem



Tablet Drug Formulation  
(<http://studiomedica.com/about-us/>)

#### Kontakt:

Weitere Infos auch direkt bei Prof. Dr.-Ing. Ulrike Krewer, Institut für Energie- und Systemverfahrenstechnik TU Braunschweig. Email: [u.krewer@tu-braunschweig.de](mailto:u.krewer@tu-braunschweig.de); Telephone: +49 -531 391 30 30.

#### Contact:

Enquiries about the position can be made by contacting Prof. Dr.-Ing. Ulrike Krewer, Institute of Energy and Process Systems Engineering, TU Braunschweig. Email: [u.krewer@tu-braunschweig.de](mailto:u.krewer@tu-braunschweig.de) Telephone: +49 -531 391 30 30.