

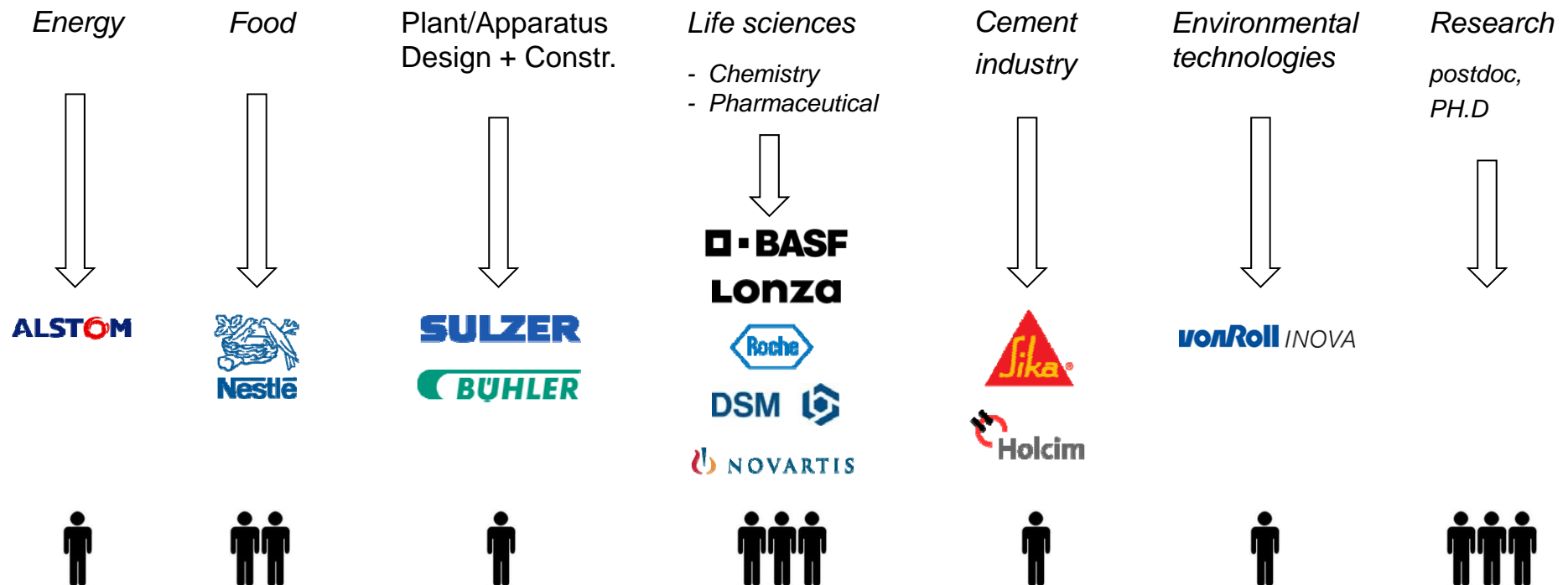
Master of Process Engineering at the Transport Processes and Reactions Laboratory

Ph. Rudolf von Rohr



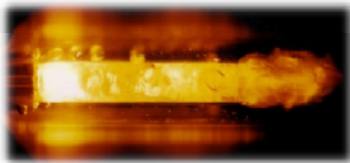
Why?

- Attractive industry
- Broad field
- Well known profile

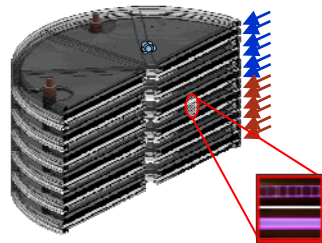


Our strengths

Highly attractive fields of research (with student participation)



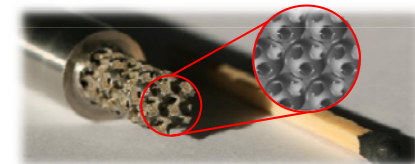
- High pressure technologies
 - Geothermal energy
 - CO₂ conversion



- Coating processes
 - Particle modification
 - Polymer coatings



- Sustainable materials (from wood)
 - Degradation of renewable carbon source
 - Alternative to petrochemical feedstocks



- Fundamentals in heat and mass transfer
 - Novel reactors (micro and millimeter scale)
 - Optical measurement tools
 - LES / RANS - calculation

Our strengths

National and international cooperation

- Universities



Massachusetts Institute of Technology

Cooperation: Micro-reactors



Ecole Polytechnique Fédérale de Lausanne

Cooperation: Coating of food containers



Delft University of Technology

Cooperation: Computational fluid dynamics,
Micro-reactors



Cornell University

Cooperation: Geothermal energy



- Industry: Highly attractive internships
(world-wide)



Novartis AG

Cooperation: Pharmaceutical processing



Sika AG

Cooperation: Degradation of renewable
carbon source



DSM AG

Cooperation: Novel reactors



Rio Tinto Alcan Inc.

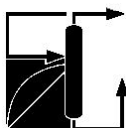
Cooperation: Coating of polymer containers

Our strengths

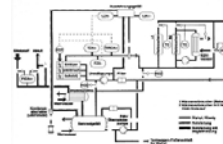
Interdisciplinary courses

- Nuclear/chemical, process and mechanical engineers
- From fundamentals to application (process development)

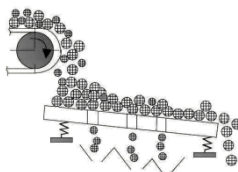
- *Thermal separation*



- *Process safety and design*



- *Mechanical separation/mixing*



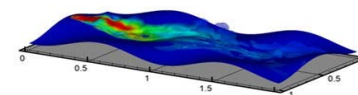
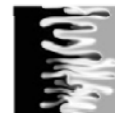
- *Laboratory courses*



- *Particle technology*



- *Multiphase flow*



Our strengths, your chance

- Opportunity to take part in conferences
- Opportunity to publish paper
- Involved in first class research teams

Transport Processes and Reactions Laboratory

Prof. Dr. Philipp Rudolf von Rohr

Separations Processes Laboratory

Prof. Dr. Marco Mazzotti

Particle Technology Laboratory

Prof. Dr. Sotiris Pratsinis

IPE

Materials Processing Laboratory

Prof. David J. Norris, Ph. D

Meeting?

- Come to our student working room ML H 13 and talk to our students!
- Join our industry visits (announcement follows)
- Need help to find an internship? Ask us!
- Any further questions? You are welcome to contact us!



SHAPE THE FUTURE, JOIN OUR TEAM

Transport Processes and Reactions Laboratory

Prof. Dr. Philipp Rudolf von Rohr

Institute of Process Engineering

ML H 19

Sonneggstrasse 3, Zürich

vonrohr@ipe.mavt.ethz.ch

