

## D-CHAB professors and their research areas

### Institute for Chemical and Bioengineering (ICB)

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Professor	Research areas
<a href="#">Paolo Arosio</a>	Biopharmaceutics, Chemical Engineering, Chemical Biology, Microfluidics
<a href="#">Andrew deMello</a>	Chemical Engineering, Diagnostics, Lab on a Chip, Functional Materials, Microfluidics, Nano Sciences
<a href="#">Robert Grass</a>	Functional Materials, Chemical Engineering, Digital Chemistry, Engineering, Nano Sciences, Surface Chemistry
<a href="#">Gonzalo Guillén-Gosálbez</a>	Chemical Engineering, Engineering, Digital Chemistry, Energy Storage
<a href="#">Kjell Jorner</a>	Artificial Intelligence, Computational Chemistry, Digital Chemistry
<a href="#">Javier Pérez-Ramírez</a>	Energy Storage, Chemical Engineering, Catalysis, Functional Materials, Nano Sciences, Reaction Mechanisms, Sustainable Chemistry
<a href="#">Chih-Jen Shih</a>	Engineering, Functional Materials, Nano Sciences
<a href="#">Wendelin Jan Stark</a>	3D Printing, Engineering, Functional Materials, Nano Sciences, Polymers
<a href="#">Jeroen A. VanBokhoven</a>	Catalysis, Nano Sciences, Spectroscopy

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### Institute for Molecular Physical Science (IMPS)

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Professor	Research areas
<a href="#">Alexander B. Barnes</a>	3D Printing, Chemical Biology, Spectroscopy, Engineering
<a href="#">Matthias Ernst</a>	Spectroscopy
<a href="#">Philippe Hünenberger</a>	Chemical Biology, Computational Chemistry
<a href="#">Gunnar Jeschke</a>	Computational Chemistry, Spectroscopy, Catalysis

Professor	Research areas
<a href="#">Frédéric Merkt</a>	Molecular Physics, Spectroscopy
<a href="#">Markus Reiher</a>	Computational Chemistry, Quantum Chemistry, Spectroscopy, Reaction Mechanisms, Molecular Physics, Catalysis, Theoretical Chemistry
<a href="#">Jeremy O. Richardson</a>	Quantum Chemistry, Theoretical Chemistry, Spectroscopy, Reaction Mechanisms, Molecular Physics, Computational Chemistry
<a href="#">Roland Riek</a>	Chemical Biology, Spectroscopy
<a href="#">Sereina Riniker</a>	Computational Chemistry
<a href="#">Thomas J. Schmidt</a>	Electrochemistry, Energy Storage, Catalysis

### Laboratory of Inorganic Chemistry (LAC)

Professor	Research areas
<a href="#">Máté Bezdek</a>	Analytical Methods, Catalysis, Coordination Chemistry, Energy Storage, Functional Materials, Organometallic Chemistry, Polymers, Sustainable Chemistry
<a href="#">Christophe Copéret</a>	Analytical Methods, Computational Chemistry, Organometallic Chemistry, Nano Sciences, Surface Chemistry, Catalysis, Functional Materials, Spectroscopy
<a href="#">Hansjörg Grützmacher</a>	Energy Storage, Catalysis, Polymers
<a href="#">Detlef Günther</a>	Analytical Methods, Nano Sciences, Spectroscopy
<a href="#">Maksym V. Kovalenko</a>	Energy Storage, Functional Materials, Nano Sciences
<a href="#">Thomas Lippert</a>	Surface Chemistry, Spectroscopy
<a href="#">Victor Mougel</a>	Catalysis, Electrochemistry, Bioinspired Chemistry, Coordination Chemistry, Functional Materials
<a href="#">Patrick Steinegger</a>	Spectroscopy, Surface Chemistry, Radiochemistry

## Laboratory of Organic Chemistry (LOC)

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Professor	Research areas
<a href="#">Jeffrey W. Bode</a>	Chemical Biology, Catalysis, Natural Products, Organic Synthesis, Polymers
<a href="#">Erick M. Carreira</a>	Medicinal Chemistry, Natural Products, Organic Synthesis
<a href="#">Peter Chen</a>	Catalysis, Organic Synthesis, Spectroscopy, Computational Chemistry, Organometallic Chemistry, Reaction Mechanisms
<a href="#">Peter Kast</a>	Directed Evolution, Enzymes, Chemical Biology
<a href="#">Kathrin Lang</a>	Biomacromolecules, Chemical Biology, Directed Evolution, Imaging, Enzymes, Organic Synthesis
<a href="#">Bill Morandi</a>	Catalysis, Organic Synthesis, Organometallic Chemistry, Supramolecular Chemistry, Polymers
<a href="#">Carlo Thilgen</a>	Surface Chemistry, Nano Sciences
<a href="#">Helma Wennemers</a>	Bioinspired Chemistry, Chemical Biology, Imaging, Functional Materials, Nano Sciences, Organic Synthesis, Catalysis, Supramolecular Chemistry, Polymers
<a href="#">Yoko Yamakoshi</a>	Imaging, Nano Sciences, Organic Synthesis, Supramolecular Chemistry
<a href="#">Renato Zenobi</a>	Analytical Methods, Disease Research, Spectroscopy, Nano Sciences

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## Institute of Pharmaceutical Sciences (IPW)

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Professor	Research areas
<a href="#">Andrea Burden</a>	Pharmacoepidemiology, Analytical Methods, Biologics, Drugs
<a href="#">Klaus Eyer</a>	Analytical Methods, Biomacromolecules, Diagnostics, Immunology, Microfluidics, Single Cell
<a href="#">Cornelia Halin-Winter</a>	Immunology, Disease Research

Professor	Research areas
<a href="#">Jonathan Hall</a>	Chemical Biology, Medicinal Chemistry
<a href="#">Stefanie Krämer</a>	Pharmacokinetics, Radiopharmaceuticals
<a href="#">Jean-Christophe Leroux</a>	3D Printing, Drug Delivery, Drug Formulation, Nano Sciences, Biomaterials
<a href="#">Ursula Quitterer</a>	Disease Research, Pharmacology, Drugs
<a href="#">Roger Schibli</a>	Imaging, Medicinal Chemistry, Radiopharmaceuticals
<a href="#">Gisbert Schneider</a>	Computational Chemistry, Artificial Intelligence, Drugs, Bioinspired Chemistry, Medicinal Chemistry, Natural Products, Lab on a Chip, Microfluidics, Chemical Biology
<a href="#">Yohei Yamauchi</a>	Chemical Biology, Disease Research, Imaging, Virus Cell Biology
<a href="#">Hanns Ulrich Zeilhofer</a>	Disease Research, Pharmacology

### Laboratory of Physical Chemistry (LPC)

Professor	Research areas
<a href="#">Ruth Signorell</a>	Aerosols, Nano Sciences
<a href="#">Hans Jakob Wörner</a>	Reaction Mechanisms, Spectroscopy

### Research areas and the D-CHAB professors working on them

Research area	Professors
3D Printing	Alexander B. Barnes, Jean-Christophe Leroux, Wendelin Jan Stark
Aerosols	Ruth Signorell
Analytical Methods	Máté Bezdek, Andrea Burden, Christophe Copéret, Klaus Eyer, Detlef Günther, Renato Zenobi
Artificial Intelligence	Kjell Jorner, Gisbert Schneider

Research area	Professors
Bioinspired Chemistry	Victor Mougel, Gisbert Schneider, Helma Wennemers
Biologics	Andrea Burden
Biomacromolecules	Klaus Eyer, Kathrin Lang
Biomaterials	Jean-Christophe Leroux
Biopharmaceutics	Paolo Arosio
Catalysis	Máté Bezdek, Jeffrey W. Bode, Peter Chen, Christophe Copéret, Hansjörg Grützmacher, Gunnar Jeschke, Bill Morandi, Victor Mougel, Javier Pérez-Ramírez, Markus Reiher, Thomas J. Schmidt, Jeroen A. VanBokhoven, Helma Wennemers
Chemical Biology	Paolo Arosio, Alexander B. Barnes, Jeffrey W. Bode, Jonathan Hall, Philippe Hünenberger, Peter Kast, Kathrin Lang, Roland Riek, Gisbert Schneider, Helma Wennemers, Yohei Yamauchi
Chemical Engineering	Paolo Arosio, Andrew deMello, Robert Grass, Gonzalo Guillén-Gosálbez, Javier Pérez-Ramírez
Computational Chemistry	Peter Chen, Christophe Copéret, Philippe Hünenberger, Gunnar Jeschke, Kjell Jorner, Markus Reiher, Jeremy O. Richardson, Sereina Riniker, Gisbert Schneider
Coordination Chemistry	Máté Bezdek, Victor Mougel
Diagnostics	Andrew deMello, Klaus Eyer
Digital Chemistry	Robert Grass, Gonzalo Guillén-Gosálbez, Kjell Jorner
Directed Evolution	Peter Kast, Kathrin Lang
Disease Research	Cornelia Halin-Winter, Ursula Quitterer, Yohei Yamauchi, Renato Zenobi, Hanns Ulrich Zeilhofer
Drug Delivery	Jean-Christophe Leroux
Drug Formulation	Jean-Christophe Leroux
Drugs	Andrea Burden, Ursula Quitterer, Gisbert Schneider
Electrochemistry	Victor Mougel, Thomas J. Schmidt

Research area	Professors
Energy Storage	Máté Bezdek, Hansjörg Grützmacher, Gonzalo Guillén-Gosálbez, Maksym V. Kovalenko, Javier Pérez-Ramírez, Thomas J. Schmidt
Engineering	Alexander B. Barnes, Robert Grass, Gonzalo Guillén-Gosálbez, Chih-Jen Shih, Wendelin Jan Stark
Enzymes	Peter Kast, Kathrin Lang
Functional Materials	Máté Bezdek, Christophe Copéret, Andrew deMello, Robert Grass, Maksym V. Kovalenko, Victor Mougel, Javier Pérez-Ramírez, Chih-Jen Shih, Wendelin Jan Stark, Helma Wennemers
Imaging	Kathrin Lang, Roger Schibli, Helma Wennemers, Yoko Yamakoshi, Yohei Yamauchi
Immunology	Klaus Eyer, Cornelia Halin-Winter
Lab on a Chip	Andrew deMello, Gisbert Schneider
Medicinal Chemistry	Erick M. Carreira, Jonathan Hall, Roger Schibli, Gisbert Schneider
Microfluidics	Paolo Arosio, Andrew deMello, Klaus Eyer, Gisbert Schneider
Molecular Physics	Frédéric Merkt, Markus Reiher, Jeremy O. Richardson
Nano Sciences	Christophe Copéret, Andrew deMello, Robert Grass, Detlef Günther, Maksym V. Kovalenko, Jean-Christophe Leroux, Javier Pérez-Ramírez, Chih-Jen Shih, Ruth Signorell, Wendelin Jan Stark, Carlo Thilgen, Jeroen A. VanBokhoven, Helma Wennemers, Yoko Yamakoshi, Renato Zenobi
Natural Products	Jeffrey W. Bode, Erick M. Carreira, Gisbert Schneider
Organic Synthesis	Jeffrey W. Bode, Erick M. Carreira, Peter Chen, Kathrin Lang, Bill Morandi, Helma Wennemers, Yoko Yamakoshi
Organometallic Chemistry	Máté Bezdek, Peter Chen, Christophe Copéret, Bill Morandi
Pharmacoepidemiology	Andrea Burden

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Research area	Professors
Pharmacokinetics	Stefanie Krämer
Pharmacology	Ursula Quitterer, Hanns Ulrich Zeilhofer
Polymers	Máté Bezdek, Jeffrey W. Bode, Hansjörg Grützmacher, Bill Morandi, Wendelin Jan Stark, Helma Wennemers
Quantum Chemistry	Markus Reiher, Jeremy O. Richardson
Radiochemistry	Patrick Steinegger
Radiopharmaceuticals	Stefanie Krämer, Roger Schibli
Reaction Mechanisms	Peter Chen, Javier Pérez-Ramírez, Markus Reiher, Jeremy O. Richardson, Hans Jakob Wörner
Single Cell	Klaus Eyer
Spectroscopy	Alexander B. Barnes, Peter Chen, Christophe Copéret, Matthias Ernst, Detlef Günther, Gunnar Jeschke, Thomas Lippert, Frédéric Merkt, Markus Reiher, Jeremy O. Richardson, Roland Riek, Patrick Steinegger, Jeroen A. VanBokhoven, Hans Jakob Wörner, Renato Zenobi
Supramolecular Chemistry	Bill Morandi, Helma Wennemers, Yoko Yamakoshi
Surface Chemistry	Christophe Copéret, Robert Grass, Thomas Lippert, Patrick Steinegger, Carlo Thilgen
Sustainable Chemistry	Máté Bezdek, Javier Pérez-Ramírez
Theoretical Chemistry	Markus Reiher, Jeremy O. Richardson
Virus Cell Biology	Yohei Yamauchi

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