



**UNIVERSITÄT  
HEIDELBERG**  
ZUKUNFT  
SEIT 1386

## **COLLOQUIUM ENGINEERING MOLECULAR SYSTEMS**

The Flagship Initiative Engineering Molecular Systems of Heidelberg University is starting the virtual colloquium series “Engineering Molecular Systems” on **May 3rd 2021** at 5 p.m. (CEST) and proudly presents

**Matthew Tirrell**

Pritzker School of Molecular Engineering  
University of Chicago



### **Molecular Engineering of Peptide Conjugates for Cardiovascular Therapies**

Molecular engineering in our parlance means building functional systems from the molecular level up. Ten years ago, the University of Chicago launched what has now become the first school embracing and advancing this approach to applied science and engineering. This talk will describe the institutional aspects of how this is being done and some examples of the breadth of this approach. In-depth attention will be given to the molecular engineering of self-assembled nanoparticles that can target pathological cardiovascular endothelium and deliver anti-inflammatory therapeutics that retard progression of atherosclerosis and stenosis.

Please register for the Zoom-Webinar using the following link:  
[https://zoom.us/webinar/register/WN\\_iXL5CgVwQs6HrZ6y0rMRpg](https://zoom.us/webinar/register/WN_iXL5CgVwQs6HrZ6y0rMRpg)

**Matthew Tirrell**

**Robert A. Millikan Distinguished Service Professor and Dean  
Pritzker School of Molecular Engineering  
University of Chicago**

Matthew Tirrell's research has been in the fields of polymer interfaces, dynamics, fluid phase behavior and nanomedicine. He is particularly known for his work on polymer brushes, surface force measurement, peptide amphiphiles and polyelectrolyte complex phase behavior. In 2011, Matthew Tirrell was appointed as the founding Pritzker Director and Dean of the Faculty of the Institute for Molecular Engineering and established the first University of Chicago engineering program, which he continues to oversee (now the Pritzker School of Molecular Engineering). Professor Tirrell simultaneously served as Deputy Laboratory Director for Science (September 2015 - April 2018) and Chief Research Officer (January 2017 - March 2018) at Argonne National Laboratory. Immediately prior to joining the University of Chicago, he was the Arnold and Barbara Silverman Professor and Chair of Bioengineering at the University of California, Berkeley, with additional appointments in chemical engineering and materials science & engineering, as well as a Faculty Scientist appointment at the Lawrence Berkeley National Laboratory. Dr. Tirrell completed ten years as Dean of Engineering at the University of California, Santa Barbara on June 30, 2009. From 1977 to 1999, he was on the faculty of Chemical Engineering and Materials Science at the University of Minnesota, where he served as department head from 1994 to 1999. Tirrell received a B.S. in Chemical Engineering at Northwestern University in 1973 and a Ph.D. in 1977 in Polymer Science from the University of Massachusetts. He has co-authored about 400 papers and one book, has supervised about 100 Ph.D. students and 50 postdoctoral researchers. Professor Tirrell is a member of the National Academy of Engineering, the National Academy of Sciences, the American Academy of Arts & Sciences and the Indian National Academy of Engineering, and is a Fellow of the American Institute of Medical and Biological Engineers, the AAAS, and the American Physical Society.