CPIMA SUMMER FORUM
on POLYMER SYNTHESIS in the
NEW MILLENNIUM

STANFORD UNIVERSITY
AUGUST 3-4, 2000

ORGANIZERS

CRAIG HAWKER (IBM), CURT FRANK (Stanford),
CHUCK WADE (IBM), PIETER STROEVE (UCD)

Forum Schedule
Thursday, August 3

11:30 – 1:00 pm  Registration: Braun Auditorium, Mudd Building
                 Lunch:  Mudd Building Patio

1:00 – 1:10 pm    Welcome and Opening Remarks, Braun Aud.: Curt Frank, Craig Hawker

Session I: Biologically Inspired Approaches to New Materials
Session Chairs: Craig Hawker, Marjorie Longo. In Braun Auditorium

1:10 – 1:55 pm    David Tirrell, California Institute of Technology
                 “A Polymer Chemist’s View of Protein Synthesis and Design”

1:55 – 2:40 pm    Karen Wooley, Washington University
                 “Nanoscale Constructs Inspired from Biological Systems”

2:40 – 3:10 pm    Afternoon Tea and Coffee: Mudd Building Patio

3:10 – 3:30 pm    Dave Olson, Stanford Graduate Student
                 “Electrophoresis of DNA Adsorbed to a Supported Lipid Bilayer:
                 Single Polymer Dynamics in Two Dimensions”

3:30 – 4:15 pm    Ashutosh Chilkoti, Duke University
                 “Applications of Elastin-like Polypeptides and their Fusion Proteins”

4:15 – 5:00 pm    David Bergbreiter, Texas A& M University
                 “New Approaches to Surface Modified Polymers”

5:00 - 6:30 pm    Poster Presentations: Chemistry and Chemical Engineering Gazebos

6:30 - 8:00 pm    CPIMA BBQ Banquet (hosted by CPIMA): Mudd Building Patio
Forum Schedule
Friday, August 4

8:15 - 8:45 am  Continental Breakfast: Mudd Building Patio
Program: Braun Auditorium, Mudd Building

Session II: Application of Self Assembly and Complex Macromolecular Architectures in Advanced Technologies
Session Chairs: Jim Hedrick, Alice Gast.  In Braun Auditorium

8:45 – 9:30 am  Takashi Kato, University of Tokyo
“Self-organized Liquid Crystal Materials: Dynamic Function and Hierarchical Structures”

9:30 -10:15 am  Jean Fréchet, University of California, Berkeley
“Synthetic Approaches to Functional Dendritic Macromolecules”

10:15 - 10:45 am  Morning Tea and Coffee:  Mudd Building Patio

10:45 –11:05 am  John Pople, Stanford / SSRL Post Doc
“Studies of Dendrimers Using Small Angle Scattering and Contrast Variation Techniques”

11:05 – 11:50 am  Timothy Swager, Massachusetts Institute of Technology
“Self-amplifying Sensory Materials: The Molecular Wire Concept”

11:50 – 12:35 pm  Valerie Sheares, Iowa State University
“New Materials via Polymerization of Polar, Functionalized Dienes”

12:35 – 1:50 pm  Lunch: Mudd Building Patio

Session III: Transition Metals and Accelerated Concepts in Polymer Synthesis
Session Chairs:  Bob Waymouth, Bob Miller.  In Braun Auditorium

1:50 – 2:35 pm  Timothy Deming, University of California, Santa Barbara
“Polypeptide Materials via Transition Metal Catalysis”

2:35 – 3:20 pm  Geoffrey Coates, Cornell University
“Development of Single-site Catalysts for the Synthesis of New Polymer Architectures”

3:20 – 3:50 pm  Afternoon Tea and Coffee:  Mudd Building Patio

3:50 – 4:10 pm  William Shen, Stanford Graduate Student
“Toward Biomimetic Lipid Bilayers on Solid Substrates: Design and Characterization of Lipopolymer Support”

4:10 – 4:55 pm  Gerrit Klaerner, Symyx Technologies, Inc.
“Combinatorial Material Science”

4:55 – 5:15 pm  Closing Remarks, Curt Frank, Craig Hawker
SURE Students Schedule
Thursday, August 3

10:30 – 11:30 am  Poster set up: Chemistry and Chemical Engineering Gazebos, Chemistry Department Lobby

11:30 – 1:00 pm  Registration: Braun Auditorium, Mudd Building
Lunch: Mudd Building Patio

1:00 – 1:10 pm  Welcome and Opening Remarks, Braun Aud.: Curt Frank, Craig Hawker

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“A Polymer Chemist’s View of Protein Synthesis and Design”

1:55 – 2:40 pm  Karen Wooley, Washington University
“Nanoscale Constructs Inspired from Biological Systems”

2:40 – 3:00 pm  Afternoon Tea and Coffee: Mudd Building Patio

3:00 - 3:30 pm  Check into Governors Corner

3:30 – 5:00 pm  Poster Preview

5:00 - 6:30 pm  Poster Presentations: Chemistry and Chemical Engineering Gazebos

6:30 - 8:00 pm  CPIMA BBQ Banquet (hosted by CPIMA): Mudd Building Patio

8:00 pm  Take down posters
SURE Students Career Day  
Friday, August 4

8:15 - 8:45 am  Continental Breakfast: Mudd Building Patio  
Program: Braun Auditorium, Mudd Building

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10:15 - 10:45 am  Morning Tea and Coffee: Mudd Building Patio

Career Day: Chemical Engineering Gazebo

10:45 – 11:05 am  Graduate School Application Workshop  
Prof. Curt Frank, Dept. of Chemical Engineering, Stanford University

11:05 – 12:00 pm  Resume Writing and Job Search Workshop  
Marlene Scherer Stern, Career Counselor/Outreach Coordinator  
Career Development Center, Stanford University

12:00 – 1:15 pm  Lunch: Mudd Building Patio

1:15 – 2:15 pm  Career Panel Number 1: Business and Industry  
Andre Lundkvist, Senior R & D Engineer, Guidant Corp.  
Dr. Heidi Reynolds, Hardware Engineer, Agilent Technologies  
Dr. Christopher Yoo, co-Founder, BioProtocol, Inc.

2:15 – 3:15 pm  Panel Number 2: Teaching  
Prof. Kathryn Moler, Dept. of Applied Physics, Stanford University  
Prof. Amy Shachter, Dept. of Chemistry, Santa Clara University  
Robert Zafran, IBM Almaden

3:15 – 4:15 pm  Panel Number 3: Other, Nontraditional  
Dr. Keith Chun, Associate, McKinsey & Co.  
Kurt Gross, Exhibit Developer, Exploratorium  
Dr. Bob Holmes, Editor, New Scientist Magazine

4:15 pm  Check out of Governors Corner