Molecular Rotors, Motors, and Switches

Ben Feringa
Josef Michl
Fraser Stoddart

TSRC hosts: Nana Naisbitt (970-708-0004) and Rory Sullivan (970-708-4542)

Meeting Location:
The Telluride Intermediate School
725 W. Colorado Ave, Telluride CO 81435

MEETING AGENDA

Sunday, June 29

6:00-8:00 pm	Informal "Meet and Greet" at Arroyo Gallery and Wine Bar at 220 East Colorado Avenue. Cash Bar. Wine Specials. TSRC staff person will be there to answer any questions.

Monday, June 30

8:00 am	Breakfast at TSRC
8:30 am	Josef Michl
9:10 am	Charles Rogers
9:50 am	DISCUSSION TIME
10:20 am	BREAK
10:40 am	Rafal Klajn
11:20 am	Carson Bruns
12:00 pm	DISCUSSION TIME
12:30 pm	BREAK FOR LUNCH
2:00 pm	Jose Berná
2:40 pm	Stephen Loeb
3:20 pm	DISCUSSION
3:50 pm	BREAK
4:10 pm	Wataru Setaka
5:00 pm	Takuzo Aida
5:40 pm	DISCUSSION
6:10 pm	BREAK FOR DINNER
8:00-11:00 pm	POSTER SESSION

Tuesday, July 1

8:00 am	Breakfast at TSRC
8:30 am	Miguel Garcia-Garibay
9:10 am	Paul Weiss
9:50 am	DISCUSSION TIME

10:20 am	BREAK
10:40 am	Chuan-Feng Chen
11:20 am	Amar Flood
12:00 pm	DISCUSSION TIME
12:30 pm	BREAK FOR LUNCH
2:00 pm	Charles Sykes
2:40 pm	Hiroyuki Isobe
3:20 pm	Onno van den Boomen
4:00 pm	DISCUSSION
4:30 pm	BREAK FOR DINNER
6:00-7:15 pm	TSRC Town Talk, Conference Center in Mountain Village

Wednesday, July 2

Free morning for hiking

1:30 pm	Nicolas Giuseppone
2:10 pm	Ben Feringa
2:50 pm	DISCUSSION
3:20 pm	BREAK
3:40 pm	Hirohiko Kono
4:20 pm	DISCUSSION
6:00 pm	Picnic at Ah Haa School for the Arts 300 S. Townsend

Thursday, July 3

8:00 am	Breakfast at TSRC
8:30 am	Alberto Credi
9:10 am	Itamar Willner
9:50 am	DISCUSSION TIME
10:20 am	BREAK
10:40 am	David Amabilino
11:20 am	Massimo Olivucci
12:00 pm	DISCUSSION TIME
12:30 pm	BREAK FOR LUNCH
2:00 pm	Gwénaël Rapenne
2:40 pm	Jacqui Cole
3:20 pm	DISCUSSION
3:50 pm	BREAK
4:10 pm	Sheng-Hsien Chiu
5:00 pm	Ivan Aprahamian
5:40 pm	DISCUSSION
6:10 pm	BREAK FOR DINNER
8:00-11:00 pm	CHEMICAL PICTIONARY

Friday, July 4

8:00 am	Breakfast at TSRC
8:30 am	Edith Sevick
9:10 am	Dean Astumian
9:50 am	Fraser Stoddart
10:30 am	DISCUSSION TIME
11:00 am	END OF MEETING

INVITED SPEAKERS:

Takuzo Aida / The University of Tokyo
Dean Astumian / The University of Maine
David Amabilino / Institut de Ciència de Materials de Barcelona
Ivan Aprahamian / Dartmouth College
Jose Berná / Universidad de Murcia
Chuan-Feng Chen / Beijing National Laboratory for Molecular Sciences
Sheng-Hsien Chiu / National Taiwan University
Jacqui Cole / University of Cambridge
Alberto Credi / Universita di Bologná
Ben Feringa / University of Groningen
Amar Flood / Indiana University
Miguel Garcia-Garibay / UC-Los Angeles
Nicolas Giuseppone / University of Strasbourg
Hiroyuki Isobe / Tohoku University
Rafal Klajn / Weizmann Institute of Science
Hirohiko Kono / Tohoku University
Stephen Loeb / University of Windsor
Josef Michl / University of Colorado and Academy of Sciences of the Czech Republic
Massimo Olivucci / Bowling Green State University
Gwénaël Rapenne / CEMES-CNRS and University of Toulouse
Charles Rogers / University of Colorado at Boulder
Wataru Setaka / Tokyo Metropolitan University
Edith Sevick / Australian National University
Fraser Stoddart / Northwestern University
Charles Sykes / Tufts University
Onno van den Boomen / University of Nijmegen
Paul Weiss / University of California, Los Angeles
Itamar Willner / The Hebrew University of Jerusalem

Chemical Pictionary

Thursday evening will be dedicated to an interactive ‘chalk talk forum' to allow participants the opportunity to engage in free discussion about new ideas and to discuss problems raised throughout the earlier stages of the meeting – this should be a problem solving and creative thinking session.

The venue for the Monday poster session will be reused, with the addition of 3–5 white boards and an ample supply of markers, erasers, and refreshments. Each whiteboard should be hosted dynamically, with input from all attendees including professors and students. In order to kick start the discussion, we would seek a handful of the younger participants to volunteer (a call for this will be issued on the first or second day) and to come prepared with an interesting topic or problem for group discussion. We hope that the discussion will be dynamic and will lead to a creative discourse.

Poster Session

Microscopic Reversibility: The Organizing Principle for Understanding Molecular Machines
Dean Astumian

Off The Drawing Board: Engineered Componenets for Lifelike Molecular Machines
Christopher R. Benson, Amar H. Flood

Molecular Switches and Machines with Mechanical Bonds
Carson J. Bruns, J. Fraser Stoddart

Facile Assembly of Light-Driven Molecular Motors onto a Solid Surface
Jiawen Chen, Kuang-Yen Chen, Ben L. Feringa

A Molecular Pump
Chuyang Cheng, Paul R. McGonigal, J. Fraser Stoddart

Towards Ferroelectric Materials through Molecular Rotors
Paul Dron

Molecular Self-Assembly at the Solid-Liquid Interface
Esther Frederick, Steven L. Bernasek

New Generation of Molecular Rotors for Surface Inclusion in a Host Crystal
Jiří Kaleta, Paul Dron, Ke Zhao, Yongqiang Shen, Charles T. Rogers, Richard Shoemaker, Josef Michl

Langmuir-Blodgett Films from Triptycene-Based Molecular Rotors
Eva Kaletová, Jiří Kaleta, Josef Michl

Imaging Conformational Change
Thomas Magnera

Directional Loading of a Dissymmetric Ring onto a Symmetrical Dumbbell
Paul R. McGonigal, Takatoshi Kawaji, Nicolaas A. Vermeulen, Chenfeng Ke, J. Fraser Stoddart

Light-Powered Autonomous and Directionally Controlled Motion based on a Dissipative Self-Assembling System
G. Ragazzona, M. Baroncinia, S. Silvia, M. Venturia, A. Credia

Rotation and Fluorescence in Crystalline Organic Solids
Braulio Rodríguez-Molina

A Strategy for Preparing Catalytically Active Metal Organic Frameworks
Nicolaas A. Vermeulen, Olga Karagiaridi, Omar K. Farha, Joseph T. Hupp, J. Fraser Stoddart

Supramolecular Chirality Induction in Coordination Nanotube with Chiral Auxiliary
Hiroshi Yamagishi

Dielectric Studies of Dipolar Molecular Rotor Systems
Ke Zhao, Paul Dron, Yongqiang Shen, Jiří Kaleta, Charles Rogers and Josef Michl