

**4th Annual Conference on
FOUNDATIONS OF NANOSCIENCE:
SELF-ASSEMBLED ARCHITECTURES AND
DEVICES (FNANO07)**



DATES of FNANO07: April 18 – April 21, 2007

FNANO07 Announcement: [[PDF](#)] [[TXT](#)] [[HTML](#)]

<http://www.cs.duke.edu/~reif/FNANO/FNANO07/FNANO07.html>

FNANO07 Webpage: <http://www.cs.duke.edu/~reif/FNANO/FNANO07/>

LOCATION: Snowbird Cliff Lodge, Snowbird, Utah

HOTEL Accommodations:

<http://www.cs.duke.edu/~reif/FNANO/FNANO07/venue.html>

FNANO07 Conference Registration pages (Registration will be open starting February 5, 2007)

- *If you are a Contributing Speaker, regular participant, or student participant (and NOT a Track Chair, Track co-Chair, Invited Speaker, Keynote Speaker, Conference Organizer, or Assistant):* click here:
http://fnano07.cs.duke.edu/registration/fnano-registration_2.php
- **ONLY If you are a Track Chair, Track co-Chair, Invited Speaker, Keynote Speaker, Conference Organizer, or Assistant:** click here: http://fnano07.cs.duke.edu/registration/fnano-registration_1.php

SUPPORTING ORGANIZATIONS: Air Force Office of Scientific Research ([AFOSR](#)), Defense Advanced Research Projects Agency ([DARPA](#)), and [Nanorex, Inc.](#)

SPONSORING SOCIETY: International Society For Nanoscale Science, Computation and Engineering ([ISNSCE](#)).

FNANO Program Schedule:

LOCATION: [Snowbird Cliff Lodge](#), [Snowbird](#), UT,

Dates of FNANO Conference: April 18 - April 21, 2007.

FNANO06 Program Chair: [John H. Reif](#) <reif@cs.duke.edu>, Department of Computer Science, Duke University, Durham, NC

FNANO06 Program CoChair:

- [Paul Weiss](#) <stm@psu.edu>, Department of Chemistry, Pennsylvania State University, University Park, PA

Conference Reception Desk: Location: Outside Ballroom

Talk Durations:

Invited Talks: (20 min.+ 5 min question period after talk) = 25 min. total duration

Keynote Talks: (30 min.+ 5 min question period after talk) = 35 min. total duration

Wednesday, April 18, 2007

Track on Viral Self-Assembly, Session A: 8:30 AM – 9:30 AM

Wednesday, April 18

- **Track Chair:** [M.G Finn](#) <mgfinn@scripps.edu>, Department of Chemistry and The Skaggs Institute for Chemical Biology, Scripps Research Institute, La Jolla, CA
- **coChair:** [Morley Stone](#) <morley.stone@wpafb.af.mil>, Materials and Manufacturing Directorate, Air Force Research Laboratory

Duration: (1 Keynote Talk + 1 other talks)= 35+1*25 min. = 60 min

Location: Ballroom 1

Keynote Talk: RNA size and packageability: Small-angle scattering studies of viral RNAs

Speaker: [Chuck Knobler](#) <knobler@chem.ucla.edu> (Department of Chemistry and Biochemistry, University of California, LA, CA)

Invited Talk: Assembling viral nanoparticles for vascular imaging and tumor-specific targeting

Speaker: [Marianne Manchester](#) <marim@scripps.edu>

Authors: Giuseppe Destito, John Lewis, Heidi Stuhlmann, M.G. Finn, Marianne Manchester (The Scripps Research Institute, La Jolla, CA)

Refreshments & Poster Session 9:30 AM – 10:20 AM Wends, April 18

Location: Outside Ballroom 1

Posters for Track on Viral Self-Assembly 10:20 AM – 9:55 AM Wends, April 18

Poster: Assembly models for Papovaviridae based on Viral Tiling Theory

Presenter: Anne Taormina <anne.taormina@durham.ac.uk>

Authors: Anne Taormina (Department of Mathematical Sciences, Durham University, Durham, UK), Reidun Twarock, Thomas Keef (York University, York, UK)

Posters for Track on Molecular Electronic Devices & Circuit Assembly 9:30 AM – 10:20 AM Wends, April 18

Poster: Pyrenecyclodextrin-Decorated Single-Walled Carbon Nanotubes as Chemical Sensors

Presenter: Yan-Li Zhao <ylzhao@chem.ucla.edu>

Authors: Yan-Li Zhao, Liangbing Hu William Dichtel, George Graner, Fraser Stoddart (Department of Chemistry and Biochemistry, University of California at Los Angeles, LA, CA)

Track on Viral Self-Assembly, Session B: 10:20 AM – 10:45 AM Wednesday, April 18

Duration: (1 talk)= 25 min

Location: Ballroom 1

Invited Talk: Viral fusion elements for nanoparticle assembly

Speaker: David Wright <david.wright@vanderbilt.edu> (Vanderbilt University)

Authors: Ryan Rutledge, Scott Miller, James Crowe, David Wright (Vanderbilt University, Nashville, TN)

Track on Molecular Electronic Devices & Circuit Assembly, Session A: 10:45 AM – 12:25 PM Wednesday, April 18

- **Track Chairs:** [James R. Heath](mailto:heath@caltech.edu) <heath@caltech.edu>, Department of Chemistry, California Institute of Technology, Los Angeles, CA
- **coChair:** [Pat Collier](mailto:collier@caltech.edu) <collier@caltech.edu>, California Institute of Technology, Pasadena, CA

Duration: (1 Keynote Talk+3 other talks)= 35+3*25 min=110 min

Location: Ballroom 1

Keynote Talk: Reticular Chemistry and the design of new materials

Speaker: [Omar Yaghi](mailto:yaghi@chem.ucla.edu) <yaghi@chem.ucla.edu> (Department of Chemistry & Biochemistry, UCLA, LA, CA)

Invited Talk: Biochemical Reaction Dynamics in Nanoscale Environments

Speaker: [Pat Collier](mailto:collier@caltech.edu) <collier@caltech.edu> (California Institute of Technology, Pasadena, CA)

Invited Talk: Effects of catalyst and dopant atoms on the electronic properties of self-assembled semiconductor nanowires

Speaker: Lincoln Lauhon <lauhon@northwestern.edu> (Materials Science and Engineering, Northwestern University, Evanston, IL)

Invited Talk: Scanning-Probe Microscopy of Organic Semiconductor Interfaces and Nanostructured Photovoltaics

Speaker: David Ginger <ginger@chem.washington.edu> (Department of Chemistry, University of Washington, Seattle WA)

Lunch Break: 12:25 PM – 1:25 PM Wednesday, April 18

**Track on Molecular Electronic Devices & Circuit Assembly, Session B:
1:25 PM – 2:15 PM Wednesday, April 18**

- **Track Chairs:** [James R. Heath](mailto:heath@caltech.edu) <heath@caltech.edu>, Department of Chemistry, California Institute of Technology, Los Angeles, CA
- **coChair:** [Pat Collier](mailto:collier@caltech.edu) <collier@caltech.edu>, California Institute of Technology, Pasadena, CA

Duration: (2 talks)= 2*25 min. = 50 min

Location: Ballroom 1

Invited Talk: Multiparameter Disease Diagnostics: Chemical Challenges and Analytical Opportunities

Speaker: [Ryan Bailey](mailto:rbailey@scs.uiuc.edu) <rbailey@scs.uiuc.edu> (Department of Chemistry, University of Illinois, Urbana-Champaign, IL)

Contributed Talk: Orbital-Mediated Tunneling (OMT) in a Unimolecular Rectifier

Speaker: Robert Metzger <rmetzger@ua.edu>
(Department of Chemistry, University of Alabama, Tuscaloosa, AL)

**Track on Self-Assembled DNA Nanostructures: Session A: 2:15 PM –
2:50 PM Wednesday, April 18**

Track on Self-Assembled DNA Nanostructures: Session A

Track Chair: [Nadrian Seeman](mailto:ned.seeman@nyu.edu) <ned.seeman@nyu.edu> (Department of Chemistry, New York University, New York, NY)

- **coChair:** [Chengde Mao](mailto:mao@purdue.edu) <mao@purdue.edu> (Department of Chemistry, Purdue University, West Lafayette, IN)

Duration: (1 Keynote Talk)= 35 min

Location: Ballroom 1

Keynote Talk: Parallel, Chip-based Integration of DNA and DNA-Nanoparticle-Conjugate Structures

Speaker: Wolfgang Fritzsche <fritzsche@ipht-jena.de>, Institute of Physical High Technology Jena, Germany

Refreshments & Poster Session 2:50 PM – 3:50 PM Wednesday, April 18

Location: Outside Ballroom 1

Posters for Track on Self-Assembled DNA Nanostructures

Poster: Proofreading in DNA Crystals that Copy Information

Presenter: [Sung Ha Park](mailto:spark@centrosome.dna.caltech.edu) <spark@centrosome.dna.caltech.edu>

Authors: Sung Ha Park, Paul W. K. Rothmund, and Erik Winfree (California Institute of Technology, Pasadena, CA)

Poster: Activatable DNA tiles for compact Error-resilient Directional Assembly

Presenter: Urmi Majumder <urmim@cs.duke.edu>

Authors: Urmi Majumder, Thomas Labean, and [John H. Reif](#) (Department of Computer Science, Duke University, Durham. NC)

Poster: Disentangling Kinetics and Energetics in DNA Nanostructure Assembly: Forming Parallel Double Crossover Molecules

Presenter: William Sherman <wsherman@bnl.gov> (Brookhaven National Laboratory, Upton, NY)

Poster: A Self-Assembled DNA Bipyramid

Presenter: Christoph Erben <christoph.erben@magd.ox.ac.uk>

Christoph Erben, Russell Goodman, and Andrew Turberfield (Department of Physics, Clarendon Laboratory, University of Oxford, Oxford, UK)

Poster: A Multiple microRNA Detection System Based on Computational Self-Assembly of DNA-Gold Nanoparticles

Presenter: Kyung Ae Yang <kayang@bi.snu.ac.kr>

Authors: Kyung Ae Yang, Ji-Hoon Lee, In-Hee Lee, Byoung-Tak Zhang (Seoul National University, Kwanak-gu, Seoul, Korea)

Poster: Title DNA directed Self-assembly of Multi-component Nanoarchitectures

Presenter: Hao Yan <hao.yan@asu.edu> (Center for Single Molecule Biophysics, The Biodesign Institute, Arizona State University, Tempe, AZ)

Poster: Heat-resistant DNA arrays constructed by self-assembly

Presenter: Miho Tagawa <tagawa@genta.c.u-tokyo.ac.jp>

Authors: Miho Tagawa, Koh-ichiroh Shohda (Department of Life Sciences and Institute of Physics, University of Tokyo, Tokyo, Japan), Kenzo Fujimoto (School of Material Science, Japan Advanced Institute of Science and Technology, Japan), Akira Suyama (University of Tokyo)

Poster: Single Strand DNA Tiles and Molecular Tubes with Precisely Programmable Circumferences

Presenter: Peng Yin <py@caltech.edu>

Authors: Peng Yin, Rizal Hariadi (Caltech, Pasadena, CA), Sudheer Sahu (Duke University, Durham, NC), Harry Choi, Sung Ha Park, Bethany Walters (Caltech, Pasadena, CA), Thom Labean, John Reif (Duke University, Durham, NC)

Poster: FRET Detection of DNA on Superparamagnetic Silica Nanoparticles

Presenter: Sophie Tan <sophie.tan@hotmail.com>

Authors: Sophie Tan, Benoit Simard, (Steacie Institute for Molecular Sciences, National Research Council of Canada, Ottawa, Ontario, Canada), Sébastien Dubus, Isabelle Charlebois, Mario Leclerc (Université Laval, Québec, Quebec)

Poster: A Designed Two-Dimensional DNA Array: The Three-Layer Logpile

Presenter: Jonathan Malo <jonathan.malo@physics.ox.ac.uk>

Authors: Jonathan Malo, James Mitchell (University of Oxford), Robin Harris (University of Mainz), Andrew Turberfield (Department of Physics, Clarendon Laboratory, University of Oxford, Oxford, UK)

Track on Self-Assembled DNA Nanostructures: Session B: 3:50 PM – 5:20 PM Wednesday, April 18

Duration: (4 talks)= 4*25 min. = 100 min

Location: Ballroom 1

Contributed Talk: 2D DNA Arrays Used to Organize DNA-Based Devices, DNAAzymes and Metallic Nanoparticles

Speaker: [Nadrian Seeman](mailto:ned.seeman@nyu.edu) <ned.seeman@nyu.edu>

Authors: Baoquan Ding, Alejandra Garibotti, Jiwen Zheng, Pamela Constantinou, and Nadrian Seeman (Department of Chemistry, New York University, New York, NY)

Contributed Talk: DNA-nanotube-enabled alignment of membrane proteins for NMR structure determination

Speaker: William Shih <William_Shih@dfci.harvard.edu>

Authors: William Shih, Shawn Douglas, and James Chou (Dana-Farber Cancer Institute, Boston, MA)

Contributed Talk: Sculpting addressable and responsive nano-architectures using a three-dimensional structure syntax of RNA

Speaker: Luc Jaeger <jaeger@chem.ucsb.edu>

Authors: Cody Geary, Isil Severcan, Erik Verzemnieks, Arkadiusz Chworos, Luc Jaeger, (Chemistry and Biochemistry Dept., PSBN4649A, University of California, Santa Barbara, CA)

Contributed Talk: Quadruplex-based DNA nanostructures and nanodevices

Speaker: Jean-Louis Mergny <mergny@mnhn.fr>

Authors: Jean-Louis Mergny, Peng Yang, Julien Gros, Anne De Cian, Patrizia Alberti, Laurent Lacroix (Laboratoire de Biophysique Regulation et Dynamique des Genomes, Muséum National d'Histoire Naturelle, Paris, France)

Combined Poster Session for All Posters of Day & Reception: 6:00 PM – 7:00 PM Wednesday, April 18

Location: Golden Cliff Room

Thursday, April 19, 2007

Track on Nanoplasmonics & Nanotovoltaics: 8:30 AM – 10:20 AM

Thursday, April 19

- **Track Chair:** [Rick Kiehl](mailto:kiehl@ece.umn.edu) <kiehl@ece.umn.edu>, Department of Electrical and Computer Engineering, University of Minnesota, Minneapolis, MN

Duration: (Keynote+3 talks)= 35+3*25. =110 min

Location: Ballroom 1

Keynote Talk: Plasmonics: an Enabling Technology for Nanoscience and Defense Applications

Speaker: [Naomi J. Halas](mailto:halas@ece.rice.edu) <halas@ece.rice.edu> (Laboratory for Nanophotonics, Rice University, Houston, TX)

Invited Talk: Ultrafast Processes in Molecular and Plasmonic Hybrid Nanostructures

Speaker: [Gary Wiederrecht](mailto:wiederrecht@anl.gov) <wiederrecht@anl.gov>

(Center for Nanoscale Materials, Argonne National Laboratory, Argonne, IL)

Invited Talk: Plasmonic Nanostructures: Arrays of Holes and Particles

Speaker: [Teri W. Odom](mailto:todom@northwestern.edu) <todom@northwestern.edu> (Northwestern University, Evanston, IL)

Invited Talk: Quantum-dot-sensitized nanowire solar cells

Speaker: [Eray S. Aydil](mailto:aydil@umn.edu) <aydil@umn.edu>

Authors: Eray S. Aydil, Kurtis S. Leschkies, Ramachandran Divakar1, Joysurya Eray Aydil, Kurtis Leschkies, Emil Enache-Pommer, Janice Boercker, David Norris, Uwe Kortshagen, C. Barry Carter, Ramachandran Divakar, Joysurya Basu (University of Minnesota, Minneapolis, MN)

Refreshments & Poster Session 10:20 AM – 11:25 AM Thursday, April 19

Location: Outside Ballroom 1

Posters for Track on Molecular Motors

Poster: Control schemes for an autonomous DNA nanomotor

Presenter: Josh Bishop <jdbishop@u.washington.edu>

Authors: Josh Bishop and Eric Klavins (Department of Electrical Engineering, University of Washington, Seattle, WA)

Poster: Convergent Synthesis of Mechanically Interlocked Compounds using Click Chemistry

Presenter: Jason Spruell <jspruell@chem.ucla.edu>

Authors: Jason Spruell, William Dichtel, Ognjen Miljanic, Fraser Stoddart (University of California, LA, CA)

Poster: Wear in active nanosystems powered by biomolecular motors

Presenter: Henry Hess <hhess@mse.ufl.edu>

Authors: Yoli Jeune and Henry Hess (University of Florida, Gainesville, FL)

Poster: Highly Convergent Synthesis of Rotaxanes Using Click Chemistry

Presenter: William Dichtel <wdichtel@chem.ucla.edu>

Authors: William Dichtel, Ognjen Miljanic, Ivan Aprahamian, Adam Braunschweig (California Nanosystems Institute; Dept. of Chemistry, UCLA) James Heath (Dept. of Chemistry, Caltech), Fraser Stoddart (California Nanosystems Institute; Dept. of Chemistry, UCLA)

Poster: Oscillator for self-assembled DNA nanomachines

Presenter: Masahiro Takinoue <takinoue@genta.c.u-tokyo.ac.jp>

Authors: Masahir Takinoue (University of Tokyo), Daisuke Kiga (Tokyo Institute of Technology), Koh-ichiroh Shohda, Akira Suyama (University of Tokyo, Tokyo, Japan)

Poster: A Kinesin-based Molecular Shuttle

Presenter: Helen Carstairs <h.carstairs@physics.ox.ac.uk>

Authors: Helen Carstairs (University of Oxford), Junichiro Yajima, Marie Curie Research Institute), Jonathan Bath (University of Oxford), Robert Cross (Marie Curie Research Institute), Andrew Turberfield (University of Oxford, Oxford, UK)

Poster: Cucurbit[6]uril-Based Biocompatible Nanovavles

Presenter: Ying-Wei Yang <yyang@chem.ucla.edu>

Authors: Ying-Wei Yang, Sarah Angelos, Kaushik Patel, William Dichtel, Jeffrey Zink, Fraser Stoddart (University of California, LA, CA)

Track on Molecular Motors: 11:25 AM – 12:50 PM, Session A:

Thursday, April 19

- **Track Chair:** [Andrew Turberfield](mailto:a.turberfield@physics.ox.ac.uk) <a.turberfield@physics.ox.ac.uk>, (Department of Physics, Oxford University, Oxford, UK)

Duration: (1 Keynote Talk + 2 other talks)= 35+2*25 min. =85 min

Location: Ballroom 1

Keynote Talk: How myosin motors work

Speaker: Jim Spudich <jspudich@stanford.edu>
(Department of Biochemistry, Stanford University School of Medicine
Stanford, CA)

Invited Talk: Motion and Power Generation in Chemically Driven Wholly Synthetic Muscles

Speaker: Jon Howse <j.r.howse@sheffield.ac.uk> (Department of Physics, Sheffield University, UK)

Authors: Jonathan Howse, Tony Ryan, Richard Jones, Paul Topham (Sheffield University, UK), Wim Bras (European Synchrotron Radiation Facility, Grenoble, France), Anthony Gleeson (Synchrotron Radiation Source, Daresbury, UK)

Invited Talk: A microrotary motor powered by bacteria

Speaker: Yuichi Hiratsuka <yhira@jaist.ac.jp> (School of Materials Science, Japan Advanced Institute of Science and Technology (JAIST), Ishikawa, Japan)

Lunch Break: 12:50 PM - 1:50 PM Thursday, April 19

Track on Molecular Motors: 1:50 PM – 2:15 PM, Session B: Thursday, April 19

- **Track Chair:** [Andrew Turberfield](mailto:a.turberfield@physics.ox.ac.uk) <a.turberfield@physics.ox.ac.uk>, (Department of Physics, Oxford University, Oxford, UK)

Duration: (1 talk)= 25 min

Location: Ballroom 1

Invited Talk: Molecular chaperones- cellular machines for protein folding

Speaker: [Johannes Buchner](mailto:johannes.buchner@ch.tum.de) <johannes.buchner@ch.tum.de> (Department Chemie, Technische Universitaet Muenchen, Garching, Germany)

Track on Self-Assembled Surface Chemistry: 2:15 PM - 3:40 PM Thursday, April 19

- **Track Chair:** [Lloyd Smith](mailto:smith@chem.wisc.edu) <smith@chem.wisc.edu> (Department of Chemistry, University of Wisconsin, Madison, WI)
- **CoChair:** [Paul Weiss](mailto:stm@psu.edu) <stm@psu.edu> (Department of Chemistry, Pennsylvania State University, University Park, PA)

Duration: (1 Keynote Talk + 2 other talks)= 35+2*25 min. = 85 min

Location: Ballroom 1

Keynote Talk: Label-Free Detection of Kinase Activities and Protein-Protein Interactions on BioChips

Speaker: Milan Mrksich <mrmksich@uchicago.edu> (Howard Hughes Medical Institute, University of Chicago, Chicago, IL)

Invited Talk: Self- and Directed Assembly of Functional Nanoscale Structures

Speaker: [Paul Weiss](mailto:stm@psu.edu) <stm@psu.edu> (Department of Chemistry, Pennsylvania State

University, University Park, PA)

Contributed Talk: Assembly of a simple self-replicating nanoscale aggregate

Speaker: Pierre-Alain Monnard <pmonnard@lanl.gov>

Authors: Pierre-Alain Monnard, James, A. Bailey, James, M. Boncella, Michael, S. Declue, Hans-Joachim Ziock Steen Rasmussen (Los Alamos National Laboratory, Earth and Environmental Sciences, Los Alamos, NM)

Refreshments & Poster Session 3:40 PM – 4:30 PM Thursday, April 19

Location: Outside Ballroom 1

Posters on Track on Self-Assembled Surface Chemistry

Poster: Aerosol-Based Methods for Monolayer Self-Assembly on Silicon Nanoparticles

Presenter: Jeffrey Roberts <roberts@chem.umn.edu>

Authors: Jeffrey Roberts and Jason Holm (Department of Chemistry, University of Minnesota, Minneapolis, MN)

Posters on Principles and Theory of Self-Assembly

Poster: Experiments in Stochastic Self Assembly

Presenter: Boonsit Yimwadsana <by35@columbia.edu>

Authors: [Yuliy Baryshinkov](#) (Bell Laboratories, Lucent Technologies, Murray Hill, NJ), Ed Coffman and Boonsit Yimwadsana (Columbia University, New York, NY)

Poster: Error Correction With Arbitrarily Small Resolution Loss

Presenter: Ho-Lin Chen <holin@stanford.edu>

Authors: Ho-Lin Chen, Ashish Goel, and Chris Luhrs (Stanford University, Palo Alto, CA)

Poster: Reversible self-assembly of squares as a rapidly mixing markov chain

Presenter: Urmi Majumder <urmim@cs.duke.edu>, Department of Computer Science, Duke University, Durham. NC

Authors: Urmi Majumder, Sudheer Sahu, and [John H. Reif](#) (Department of Computer Science, Duke University, Durham. NC)

Poster: Expand the Single Template method to Multiple Template Method in DNA Computing

Presenter: Wenbin Liu <wbliu@mail.hust.edu.cn> (College of Computer Science and Technology, Wenzhou University, Wenzhou City, China)

Poster: Adding, Multiplying, and Factoring in the Tile Assembly Model

Presenter: Yuriy Brun <ybrun@usc.edu> (Computer Science Department, University of Southern California, Los Angeles, CA)

Poster: A Scheme for 2-D Primitive Blocks Self-Assembling

Presenter: Vojislav Stojkovic <stojkovi@jewel.morgan.edu>

Authors: Vojislav Stojkovic & Samir Tannouri, (Computer Science Department, Morgan State University, Baltimore, MD) and Hongwei Huo (Xidian University, Shaanxi, China)

Poster: Self-Assembly of Viral Capsids via a Hamiltonian Paths Approach: The Case of Bacteriophage MS2

Presenter: Tom Keef <tk506@york.ac.uk> (Department of Mathematics, University of York, York UK)

Poster: Application of molecular dynamics simulations in the design of a minimal self-replicating molecular machine

Presenter: Pawel Weronki <pawel@lanl.gov>

Authors: Pawel Weronki, Yi Jiang, and Steen Rasmussen (Theoretical Division, Los Alamos National Lab, Los Alamos, NM)

Track on Principles and Theory of Self-Assembly, Session A: 4:30 PM – 5:55 PM -Thursday, April 19

Chair: [Natasha Jonoska](mailto:jonoska@tarski.math.usf.edu) <jonoska@tarski.math.usf.edu> (Department of Mathematics, University of South Florida, FL)

Duration: (1 Keynote Talk + 2 other talks)= 35+2*25 min. =85 min

Location: Ballroom 1

Keynote Talk: Markov Chain Convergence and the Efficiency of Some Self-Assembly Models

Speaker: [Dana Randall](mailto:randall@cc.gatech.edu) <randall@cc.gatech.edu> (College of Computing, Georgia Institute of Technology, Atlanta, GA)

Invited Talk: On growth in 2D structures, Mathematical and Algorithmic Sciences

Speaker: [Yuliy Baryshinkov](mailto:yymb@research.bell-labs.com) <yymb@research.bell-labs.com> (Bell Laboratories, Lucent Technologies, Murray Hill, NJ)

Invited Talk: Formalizing Nanostructure Description

Speaker: Gregory McColm <mccolm@cas.usf.edu>

Authors: [Gregory McColm](#) and [Natasha Jonoska](#) (Department of Mathematics, University of South Florida, Tampa, FL)

Combined Poster Session for All Posters of Day & Reception: 6:00 PM – 7:00 PM Thursday, April 19

Location: Golden Cliff Room

ISNSCE Business Meeting: 7:00 PM – 7:30 PM Thursday, April 19

▪ **ISNSCE Meeting Chair:** [Andrew Turberfield](mailto:a.turberfield@physics.ox.ac.uk)

<a.turberfield@physics.ox.ac.uk>, (Department of Physics, Oxford University, Oxford, UK)

Location: Golden Cliff Room

Friday, April 20, 2007

Track on Principles and Theory of Self-Assembly, Session B: 8:30 AM – 9:20 AM Friday, April 20

Chair: [Natasha Jonoska](mailto:jonoska@tarski.math.usf.edu) <jonoska@tarski.math.usf.edu> (Department of Mathematics, University of South Florida, FL)

Duration: (2 talks)= 2*25 min. = 50 min

Location: Ballroom 1

Invited Talk: A Hamiltonian Paths Approach to Viral Capsid Assembly of RNA Viruses Based on a Novel Symmetry Principle

Speaker: [Reidun Twarock](mailto:rt507@york.ac.uk) <rt507@york.ac.uk> (York Centre for Complex Systems Analysis, University of York, York, UK)

Contributed Talk: Autonomous Programmable Nanorobotic Devices Using DNAzymes

Speaker: [Sudheer Sahu](mailto:sudheer@cs.duke.edu) <sudheer@cs.duke.edu>

Authors: [John H. Reif](#) and [Sudheer Sahu](#) (Department of Computer Science, Duke University, Durham, NC)

Refreshments & Poster Session 9:20 AM – 10:20 AM Friday, April 20

Location: Outside Ballroom 1

Posters for Track on Self-assembled Computer Circuit and System Architectures

Poster: Dynamic Low-Density Parity Check Codes for Fault-tolerant Nano-scale Memory

Presenter: [Shalini Ghosh](mailto:shalini@csl.sri.com) <shalini@csl.sri.com> (Computer Science Laboratory, SRI International, Menlo Park, CA)

Track on Principles and Theory of Self-Assembly, Session C: 10:20 AM – 11:10 AM Friday, April 20

Chair: [Natasha Jonoska](mailto:jonoska@tarski.math.usf.edu) <jonoska@tarski.math.usf.edu> (Department of Mathematics, University of South Florida, FL)

Duration: (2 talks)= 2*25 min. = 50 min

Location: Ballroom 1

Contributed Talk: NUPACK: a web-based tool for the analysis and design of nucleic acid systems

Speaker: Niles Pierce <niles@caltech.edu> (Caltech, Pasadena, CA)

Authors: Joseph Zadeh, Justin Bois, Marshall Pierce, Robert Dirks, and Niles Pierce

Contributed Talk: A simple model of self-replicating protocells

Speaker: Harold Fellermann <harold.fellermann@upf.edu>

Authors: Harold Fellermann, Steen Rasmussen, Hans-Joachim Ziock (Los Alamos National Laboratory, Los Alamos NM)

**Track on Self-assembled Computer Circuit and System Architectures:
11:10 AM – 12:00 PM Friday, April 20**

- **Track Chairs:** [Philip J. Kuekes](mailto:kuekes@hpl.hp.com) <kuekes@hpl.hp.com>, Hewlett-Packard Corporation, Palo Alto, CA
- **coChair:** [Alvin R. Lebeck](mailto:alvy@cs.duke.edu) <alvy@cs.duke.edu>, Department of Computer Science, Duke University, Durham, NC

Duration: (2 talks)= 2*25 min. = 50 min

Location: Ballroom 1

Invited Talk: Statistically Self-Assembled nanoPLA Logic

Speaker: Andre DeHon <andre@seas.upenn.edu> (Dept. of Electrical and System Engineering, University of Pennsylvania, Philadelphia, PA)

Invited Talk: Expanders and Self-Assembled Architectures

Speaker: Alexander Gamburd <agamburd@ucsc.edu>

Authors Alexander Gamburd (University of California at Santa Cruz), Ming-Hsuan Kang (Pennsylvania State University), Philip Kuekes (Hewlett-Packard Laboratories), Wen-Ching Winnie Li (Pennsylvania State University), Pascal Vontobel (Hewlett-Packard Laboratories)

**Track on Biomedical Nanotechnology, Session A: 12:00 PM - 12:25 PM
Friday, April 20**

- **Description:** *Talks & posters in this track present biomedical applications of nanoscience.*
- **Track Chair:** [Carston R. Wagner](mailto:wagne003@tc.umn.edu) <wagne003@tc.umn.edu>, Department of Medicinal Chemistry, University of Minnesota, Minneapolis, MN
- **Track coChair:** [Thomas LaBean](mailto:thl@cs.duke.edu) <thl@cs.duke.edu>, Department of Computer Science, Duke University, Durham, NC

Duration: (1 talk) = 25 min

Location: Ballroom 1

Invited Talk: Oligomer-Function Relationships: Case Study of Adiponectin, a Multimeric Hormone Implicated in Metabolic Disease

Speaker: [David H. Lee](mailto:dave.lee@tufts.edu) <dave.lee@tufts.edu>

Authors: Shinji Suzuki (Tufts University), Elizabeth Wilson-Kubalek (Scripps Research Institute), David Wert, Tsu-Shuen Tsao (University of Arizona), Cory Rillahan, Martha Simmons, David Lee (Department of Chemistry, Tufts University, Medford, MA)

Lunch Break: 1:25 PM - 1:45 PM Friday, April 20

Track on Biomedical Nanotechnology, Session B: 1:45 PM - 3:10 PM -

Friday, April 20

Duration: (1 Keynote Talk + 2 other talk)= 35+2*25 min. = 85 min

Keynote Talk: Why are Gold Nano-Particles More Precious Than Pretty Gold, Fundamentals and Some Applications

Speaker: [Mostafa A. El-Sayed](mailto:mostafa.el-sayed@chemistry.gatech.edu) <mostafa.el-sayed@chemistry.gatech.edu> (Department of Chemistry and Biochemistry, Georgia Institute of Technology, Atlanta, GA)

Invited Talk: Controlled Encapsidation and Delivery of a Payload by a Plant Viral Nanoparticle

Speaker: [Stefan Franzen](mailto:Stefan_Franzen@ncsu.edu) <Stefan_Franzen@ncsu.edu>

Authors: LiNa Loo, Richard H. Guenther, Steven A. Lommel, Stefan Franzen (Department of Chemistry and Department of Plant Pathology, North Carolina State University, Raleigh, NC)

Contributed Talk: Metal Sulfide Nanoparticle Based Electrochemical Biosensors

Speaker: Kurt Gothelf <kvg@chem.au.dk>

Presenter: Jacob Hansen, Rupa Mukhopadhyay, Jonas Hansen, Vadim Sumbayev and Kurt Gothelf (Center for DNA nanotechnology and iNANO, Aarhus University, Aarhus, Denmark)

Refreshments & Poster Session 3:10 PM – 4:10 PM Friday, April 20

Location: Outside Ballroom 1

Posters for Track on Biomedical Nanotechnology

Poster: Preparation and Investigation of Octa(3-aminopropyl) Silsesquioxane L-Lysine Dendrimers for Nucleic Acid Delivery

Presenter: Zheng-Rong Lu

Authors: Todd Kaneshiro, Xuli Wang, Zheng-Rong Lu (Dept. of Pharmaceutics, University of Utah, Salt Lake City, UT)

Poster: Enzyme-Triggered Biocompatible Nanovalves

Presenter: Kaushik Patel <kaushik@chem.ucla.edu>

Authors: Kaushik Patel, Sarah Angelos, Ali Coskun, Ying-Wei Yang, William Dichtel, Fraser Stoddart (Department of Chemistry and Biochemistry, Los Angeles, CA)

Poster: Coupling Computing, Movement, and Drug Release

Presenter: Steven Taylor <st2171@columbia.edu>

Authors: Rejun Pei, Steven Taylor, Milan Stojanovic, (Columbia University, Department of Medicine, Division of Nephrology, New York, NY)

Poster: Towards programmable Drug Delivery Systems

Presenter: Tim Liedl <tim.liedl@physik.lmu.de>

Authors: Tim Liedl, Hendrik Dietz, Bernard Yurke (Bell Labs), Friedrich Simmel (Center

for NanoScience and Department of Physics, Ludwig-Maximilians University Munich, Germany)

Poster: Biomolecule-modified Nanoparticles as Affinity Capture Probes

Presenter: Arnold Kell <arnold.kell@nrc.ca>

Authors: Arnold Kell, Benoit Simard (Steacie Institute for Molecular Sciences, National Research Council of Canada, Ottawa, Ontario, Canada), Gale Stewart, Maurice Boissinot, Ann Huletsky, Michel Bergeron, (Centre de Recherche en Infectiologie, Université Laval, Québec, Quebec)

Poster: Superparamagneticnanoparticles for Pathogen Capture

Presenter: Kanchana Somaskandan <Kanchana.Somaskandan@nrc-cnrc.gc.ca>

Authors: Kanchana somaskandan, Arnold Kell, Benoit Simard (National Research Council of Canada, Ottawa, Ontario, Canada)

Poster: Prediction of protein/ion binding sites, affinities and specificities with a geometrical knowledge based scoring function.

Presenter: Gong Cheng <gcheng@u.washington.edu>

Authors: Gong Cheng, David Baker, Ram Samudrala (University of Washington, Seattle, WA)

Posters for Track on Self-assembly Across Scales

Poster: Scaling metal contacts for capillary-force driven micro-component self-assembly

Presenter: Christopher Morris <cjmorris@u.washington.edu>

Authors: Christopher Morris, Babak Parviz (Electrical Engineering, University of Washington, Seattle, WA)

Poster: Micrometric Droplets Motion

Presenter: Gragory Mermoud <gregory.mermoud@epfl.ch>

Authors : Gragory Mermoud, Vahid Fakhfour, Alcherio Martinoli, Jargen Brugger (Swarm-Intelligent Systems Research Group, Laboratory of Microsystems and Nanoengineering, Lausanne, Switzerland)

Poster: Global-to-Local Rule Generation for Self-Assembly and Self-Repair by Active Robots

Presenter: Daniel Arbuckle <daniel.arbuckle@usc.edu>

Authors: Daniel Arbuckle and Aristides Requicha (Department of Computer Science, University of Southern California, LA, CA)

Track on Self-assembly Across Scales: 4:10 PM - 6:00 PM Friday, April 20

Track on Self-assembly Across Scales: (April 19 afternoon or later)

- **Track Chair:** [Karl Bohringer](mailto:karl@ee.washington.edu) <karl@ee.washington.edu>, Department of Electrical Engineering, University of Washington, Seattle, WA
- **coChair:** [Babak Amir Parviz](mailto:babak@ee.washington.edu) <babak@ee.washington.edu>, Department of

Electrical Engineering, University of Washington, Seattle, WA
Duration: (1 Keynote Talk + 3 other talks)= 35+3*25 min. =110 min
Location: Ballroom 1

Keynote Talk: Biologically-Inspired Swarms of Robots

Speaker: [Vijay Kumar](mailto:kumar@grasp.upenn.edu) <kumar@grasp.upenn.edu> (Department of Mechanical Engineering and Applied Mechanics, University of Pennsylvania, Philadelphia, PA)

Contributed Talk: An Extended State-Space Markov Chain Model for Self-Organizing Systems in Non-Well-Mixed Environments

Speaker: Nils Napp <nnapp@u.washington.edu>

Authors: Nils Napp, Eric Klavins (Department of Electrical Engineering, University of Washington, Seattle, WA)

Contributed Talk: Improving Conformality in Selective Dip-Coating of Patterned Planar Substrates

Speaker: Massimo Mastrangeli <massimo.mastrangeli@imec.be>

Authors: Massimo Mastrangeli (IMEC/Katholieke Universiteit Leuven, Belgium), Wouter Ruythooren, Kris Baert, Chris Van Hoof (IMEC, Belgium), Jean-Pierre Celis (Katholieke Universiteit Leuven, Belgium))

Contributed Talk: Merging Assembly Concepts from Meso- to Micro Scale

Presenter: Erik Jung <erik.jung@izm.fhg.de>

Authors: Erik Jung (Fraunhofer IZM, Berlin, Germany), Panos Lazarou (University of Patras, Patras, Greece)

Combined Poster Session for All Posters of Day & Reception: 6:00 PM – 7:00 PM Friday, April 20

Location: Golden Cliff Room

Session on Nanoscience Business: 7:00 PM – 8:00 PM Friday, April 20

- Track Chair: Doug Jamison <doug@TinyTechVC.com>, President and CEO, Harris & Harris Group, New York, NY
- Track coChair: Mark A. Parsells<mparsells@montpelierventures.com>, Montpelier Ventures, LLC, Montchanin, DE
- Other Panel Members: To be Announced

Location: Ballroom 1

Saturday, April 21, 2007

Track on Fullerene Nanostructures, Session A: 8:00 AM - 9:25 AM

Saturday, April 21

- **Track Chair:** [Jie Liu](mailto:j.liu@duke.edu) <j.liu@duke.edu>, Department of Chemistry, Duke

University, Durham, NC

Duration: (1 Keynote Talk +2 other talks)= 35+2*25 min. =85 min

Location: Ballroom 1

Keynote Talk: Selective etching of metallic carbon nanotubes by gas-phase reaction

Guangyu Zhang <gyzhang@stanford.edu>,

Authors: Guangyu Zhang <gyzhang@stanford.edu>, Pengfei Qi, Xinran Wang, Yuerui Lu, Xiaolin Li, Ryan Tu, Sarunya Bangsaruntip, David Mann, Li Zhang and Hongjie Dai <hdai1@stanford.edu> (Department of Chemistry, Stanford University, Palo Alto, CA)

Invited Talk: Evolution of SU(4) Transport Regimes in Carbon Nanotube Quantum Dots

Speaker: Gleb Finkelstein <gleb@duke.edu>

Authors: Alex Makarovski, Jie Liu, Gleb Finkelstein (Duke University Durham, NC)

Invited Talk: Recent Advancements and Applications of "Super-Growth" Carbon Nanotubes

Speaker: Takeo Yamada <takeo-yamada@aist.go.jp>

Authors: Kenji Hata <kenji-hata@aist.go.jp>, Takeo Yamada <takeo-yamada@aist.go.jp> (AIST / Research Center for Advanced Carbon Materials, Japan)

Refreshments & Poster Session 9:25 AM –10:25 AM Saturday, April 21

Location: Outside Ballroom 1

Posters for Track on Fullerene Nanostructures 9:25 AM –10:25 AM Saturday, April 21

Poster(Invited): Fabrication and Applications of Carbon Nanotube Fibrils by Dielectrophoresis

Speaker: Jie Tang <tang.jie@nims.go.jp> (1D Nanomaterials Group, National Institute for Materials Science, Japan)

Poster: DNA Encapsulated Single-Walled Carbon Nanotubes Formed by DNA Ion Irradiation in Electrolyte Plasmas

Speaker: Rikizo Hatakeyama <hatake@ecei.tohoku.ac.jp>

Authors: Rikizo Hatakeyama, Takeru Okada, Toshiro Kaneko, (Department of Electronic Engineering, Tohoku University, Sendai, Japan)

Poster: A simple method for synthesis of carbon nanotubes decorated with size-controllable Fe nanoparticles

Speaker: Wencai Ren <wcren@imr.ac.cn>

Authors: Qingfeng Liu, Wencai Ren, Hongtao Cong, Hui-Ming Cheng (Institute of Metal Research, Chinese Academy of Sciences, Shenyang, China)

Poster: Selective Synthesis of Nitrogen Encapsulated Fullerene and Azafullerene Using Plasma-Ion Irradiation Method

Presenter: Toshiro Kaneko <kaneko@ecei.tohoku.ac.jp>

Authors: Toshiro Kaneko, Shigeyuki Abe, Shohei Nishigaki, Hiroyasu Ishida, Rikizo Hatakeyama, (Department of Electronic Engineering, Tohoku University, Sendai, Japan)

**Posters for Track on Top-down Meets Bottom-up 9:25 AM –10:25 AM
Saturday, April 21**

Poster: A chemist looks at electron-beam lithography: high-resolution patterns to guide self-assembly

Presenter: Marya Lieberman <mliberm@nd.edu>

Authors: Marya Lieberman, Bo Gao, Kyoung Nan Kim, Koshala Sarveswaran (Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame IN)

Posters for Track Self-assembly of Peptide-Protein Nanostructures 9:25 AM –10:25 AM Saturday, April 21

Poster: Tuning Hydrogel Rigidity via Photopolymerization of Self-Assembled Beta-Hairpin Peptides

Presenter: Ronak Rughani <ronakcvr@udel.edu>

Authors: Ronak Rughani, Matthew Lamm, Darrin Pochan, Joel Schneider (University of Delaware, Delaware, Maryland)

Poster: Investigation of the impact of structured water on peptide binding at the TiO₂ surface

Presenter: Adam Skelton <a.a.skelton@warwick.ac.uk>

Authors: Adam Skelton, Tiffany Walsh (University of Warwick, Warwick, UK)

Poster: Molecular Basis for Patterned Supramolecular SelfAssembly of a Genetically Engineered Gold Binding Protein on Au {111}

Presenter: Christopher So <crso@u.washington.edu>

Authors: Christopher So, Ersin Emre Oren, John Kulp, Hadi Zareie, Candan Tamerler, John Evans (Materials Science and Engineering, University of Washington, Seattle, WA)

Poster: In Silico Design of Inorganic Binding Peptides

Presenter: Ersin Emre Oren <eeoren@u.washington.edu>

Authors: Ersin Emre Oren, Ram Samudrala, Deniz Sahin, Marketa Hnilova, Candan Tamerler, Mehmet Sarikaya (Materials Science and Engineering, University of Washington, Seattle, WA)

Poster: Biomimetic Regulation of Calcium Phosphate Mineral Morphology Using Combinatorially Selected Hydroxyapatite Heptapeptides

Presenter: Mustafa Gungormus <musgun@u.washington.edu>

Authors: Mustafa Gungormus, Hanson Fong, Il Wong Kim, John Spencer, Candan Tamerler, Mehmet Sarikaya (University of Washington, Seattle, WA)

Poster: Approaches for the controlled assembly of peptide-QD conjugates

Presenter: Juan Bautista

Authors: Juan Bautista (Department of Organic Chemistry, University of Santiago de Compostela, Santiago de Compostela, Spain)

Juan Bautista, Florence Brunel, Kimihiro Susumo, Jim Delehanty, Igor Menditz, Hedi Mattoussi, and Philip E. Dawson (Scripps Research Institute, Skaggs Institute for Chemical Biology, Departments of Cell Biology and Chemistry, La Jolla, CA)

Poster: Nucleophilic Catalysis of Oxime and Hydrazone Reactions by Aniline:
Expanding the Scope of Imine Chemistry

Presenter: Anouk Dirksen <dirksen@scripps.edu>

Authors: Anouk Dirksen (The Scripps Research Institute, La Jolla, CA/Cardiovascular Research Institute Maastricht, Maastricht, The Netherlands), Tilman M. Hackeng (Cardiovascular Research Institute Maastricht, Maastricht, The Netherlands), [Phil E Dawson](#) (The Scripps Research Institute, La Jolla, CA)

Track on Fullerene Nanostructures, Session B: 10:25 AM - 11:40 AM Saturday, April 21

- **Track Chair:** [Jie Liu](#) <j.liu@duke.edu>, Department of Chemistry, Duke University, Durham, NC

Duration: (2 talks)= 3*25 min. =75 min

Location: Ballroom 1

Invited Talk: Determination of the chirality of carbon nanotubes

Speaker: Lu-Chang Qin <lcqin@physics.unc.edu>

Authors: Lu-Chang Qin, Otto Zhou <ozhou@phys.unc.edu>

(Department of Physics, University of North Carolina, Chapel Hill, NC)

Invited Talk: (n,m) -Abundance Evaluation and Intermediate Frequency Raman Modes of Single Walled Carbon Nanotubes and their Aggregates

Speaker: Fotios Papadimitrakopoulos <papadim@mail.ims.uconn.edu> (Institute of Materials Science, University of Connecticut, Storrs, CT)

Contributed Talk: Temperature and pH-responsive single-walled carbon nanotube dispersions

Speaker: Liwei Chen <chenl1@ohio.edu>

Authors: Dan Wang, Liwei Chen (Department of Chemistry and Biochemistry Ohio University, Athens, OH)

Track on Top-down Meets Bottom-up: 11:40 AM – 12:55 PM Saturday, April 21:

- **Description:** *Talks & posters in this track combine bottom-up self-assembly with top-down methods such as lithography or an external patterning force (e.g., electromagnetic field or chemical gradient).*
- **Track Chair:** [Marya Lieberman](#) <mlioberm@nd.edu>, Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN

Duration: (1 Keynote Talk + 2 other talks)= 35+2*25 min. = 85 min

Location: Ballroom 1

Keynote Talk: Structured Polymer Layers on Solids by Chemical Nanolithography

Speaker: Michael Grunze <michael.grunze@urz.uni-heidelberg.de>
Authors: Marin Steenackers, Ursula Schmelmer, Alexander Kuller, Armin Golzhauser, Rainer Jordan, Michael Grunze (Dept of Applied Physical Chemistry, Heidelberg University, Heidelberg, Germany)

Invited Talk: Template-Directed Growth of Nanomaterials

Speaker: Yujie Xiong <yjxiong@u.washington.edu>
Authors: Yujie Xiong and Younan Xia (Department of Chemistry, University of Washington, Seattle, WA)

Invited Talk: Top-down Meets Bottom-up: Improvement of the Optical Properties of Self-assembled Colloidal Photonic Crystal Films through the Use of Patterned Substrates

Speaker: Evangellos Vekris <evekris@chem.utoronto.ca>
Authors: Evangellos Vekris and Geoffrey Ozin (Department of Chemistry, University of Toronto, Toronto, Canada)

Break: 12:55 PM - 1:30 PM Saturday, April 21

Track Self-assembly of Peptide-Protein Nanostructures: 1:30 PM - 4:10 PM Saturday, April 21

Track on Self-assembly of Peptide-Protein Nanostructures

- **Track Chair:** [Mehmet Sarikaya](mailto:sarikaya@u.washington.edu) <sarikaya@u.washington.edu> (Genetically Engineered Materials Science and Engineering Center, Materials Science and Engineering, University of Washington, Seattle, WA)
- This Track is supported by [UW-MRSEC](#) via NSF

Duration: (1 keynote + 5 other talks)= 35+5*25 min. =160 min

Location: Ballroom 1

Keynote Talk: Molecular Engineering by Genetically-Designed Peptides

Speaker: [Candan Tamerler](mailto:candan@u.washington.edu) <candan@u.washington.edu> (Molecular Biology and Genetics, Istanbul Technical University, Istanbul, Turkey)
Authors: [Candan Tamerler](#), John Evans, Ram Samudrala, and Mehmet Sarikaya

Invited Talk: Peptide Dip-Pen Nanolithography and Bioinspired Assembly for Near-Field Nanophotonic Applications

Speaker: [David Ginger](mailto:ginger@chem.washington.edu) <ginger@chem.washington.edu> (Chemistry, University of Washington, Seattle, WA)

Invited Talk: Bio-active Properties of Peptide Hydrogel Surfaces

Speaker: [Joel Schneider](mailto:schneijp@udel.edu) <schneijp@udel.edu>
Authors: Daphne Salick, Juliana Restinger, Darrin Pochan, and [Joel Schneider](#) (Department of Chemistry and Biochemistry, Department of Materials Science and Engineering, University of Delaware, Newark, DE)

Invited Talk: Computational Engineering of Bionanostructures

Speaker: [Ram Samudrala](mailto:ram@compbio.washington.edu) <ram@compbio.washington.edu>, Microbiology, University of Washington, Seattle, WA)

Invited Talk: Adaptive Covalent Chemistry for the Manipulation and Assembly of Complex Macromolecules in Aqueous Solution

Speaker: [Phil E Dawson](mailto:dawson@scripps.edu) <dawson@scripps.edu> (The Scripps Research Institute, La Jolla, CA)

Authors: Tilman Hackeng (University of Maastricht, The Netherlands), Anouk Dirksen and Philip E. Dawson (Department of Cell Biology and Chemistry, The Scripps Research Institute, La Jolla, CA)

Invited Talk: Modelling specificity of peptide-surface interfaces: contrasting behaviour of hydrophobic and hydrophilic cases

Speaker: [Tiff Walsh](mailto:t.walsh@warwick.ac.uk) <t.walsh@warwick.ac.uk>

Authors: S. de Miranda Tomasio, A. A. Skelton and [T. R. Walsh](#) (Department of Chemistry and Centre for Scientific Computing, University of Warwick, Coventry, U.K.)