



PROGRAM

Location of Sessions:

Monday, September 4 – Dan Panorama Hotel, Haifa

Tuesday-Thursday, September 5-7: Technion –Israel Institute of Technology
Schulich Faculty of Chemistry (Hall 1), Haifa

Monday, September 4, 2017

Dan Panorama Hotel

08:30 – 15:30 **CPS Optional Tour – Nazareth, Capernaum** (view [tour details](#))
Departure: 08:30 Dan Panorama Hotel

16:00 - 19:00 **Registration** *Foyer*

18:00 - 19:00 **OPENING SESSION AND KEYNOTE LECTURE** *Alon Hall*

Chair: Ashraf Brik

Technion-Israel Institute of Technology, Israel

18:00 - 18:10 *Welcome and Introductory Remarks*

Ashraf Brik – CPS 2017 Chair

18:10 - 19:00 *Keynote Speaker:*

Tom W. Muir, Princeton University, USA

A Tale of Two Tails

19:00 - 21:00 **Welcome Reception** *Pythagoras Hall*

09:00 - 10:30 SESSION 1

Chair: Philip Dawson, The Scripps Research Institute, USA

09:00 - 09:30 **Donald Hilvert, ETH Zürich, Switzerland**

Reprogramming Non-Ribosomal Peptide Synthesis

09:30 - 10:00 **Matthew Pratt, University of Southern California, USA**

Chemical Approaches towards Understanding Protein O-GlcNAc Modifications

10:00 - 10:30 **Beat Fierz, EPFL, Switzerland**

Probing the Multivalent Readout of Chromatin Modification Patterns

10:30 - 11:00 **Coffee Break**

11:00 - 12:30 SESSION 2

Chair: Philip Dawson, The Scripps Research Institute, USA

11:00 - 11:30 **Jeffrey Bode, ETH Zürich, Switzerland**

Chemical Protein Synthesis with the KAHA Ligation

11:30 - 12:00 **Oleg Melnyk, CNRS, France**

Recent Advances in SEA and SeEA Chemistries

12:00 - 12:30 **Norman Metanis, The Hebrew University of Jerusalem, Israel**

Selenocysteine Chemistry and Total Chemical Synthesis Applied for Accessing Human Selenoproteins

12:30 - 13:30 **Lunch**

13:30 - 15:00 SESSION 3 - SHORT TALKS

Chair: Christian Hackenberger

FMP and Humboldt Universität Berlin, Germany

- 13:30 - 13:45 **Aymelt Itzen**, TU Munich, Germany
Enzymatic Phosphocholination of Proteins as a Tool for Protein Labelling with Derivatized CDP-Choline Nucleotides
- 13:45 - 14:00 **Dimpy Kalia**, Savitribai Phule Pune University, India
Endowing Stability to Thio-Maleimide Protein Bioconjugates
- 14:00 - 14:15 **Gonen Ashkenasy**, Ben-Gurion University of the Negev, Israel
Regio- and Stereo-Selective Protein Ligation in Prebiotic Environment
- 14:15 - 14:30 **Assaf Friedler**, The Hebrew University of Jerusalem, Israel
Synthetic Advances in Peptide Chemistry and their Applications for Inhibiting Protein Interactions
- 14:30 - 14:45 **Marcel Schmidt**, R&D - Ligation Technology, EnzyPep B.V., Geleen, Netherlands
Chemical Modification of Recombinant Proteins using Peptilgase Variants
- 14:45 - 15:00 **Vladimir Torbeev**, Université de Strasbourg, France
Mechanism of Coupled Folding and Binding of an Intrinsically Disordered Protein Studied by Chemical Protein Synthesis
- 15:00 - 15:30 Coffee Break**

15:30 - 17:30 **SESSION 4**

Chair: Christian Hackenberger

FMP and Humboldt Universität Berlin, Germany

15:30 - 16:00 **Oliver Seitz**, Humboldt University Berlin, Germany
Methods for Streamlining Total Chemical Synthesis of Proteins

16:00 - 16:30 **Matthew Francis**, UC Berkeley, USA
New Synthetic Methods for Site Selective Protein Modification

16:30 - 17:00 **Tilman M. Hackeng**, Cardiovascular Research Institute
Maastricht - University Maastricht, Netherlands
*Forced Hetero-Chemokine Marriage Reveals Onset of
Atherosclerosis*

17:00 - 17:30 **Peter Senter**, Seattle Genetics, USA
Antibody Drug Conjugates for Cancer Therapy

17:30 - 20:30 **POSTER SESSION**
(Finger Foods and Beers)
See detailed [posters list](#)

09:00 - 10:30 SESSION 5

Chair: Norman Metanis

The Hebrew University of Jerusalem, Israel

09:00 - 09:30 **Carsten Schultz**, EMBL and OHSU, Germany
New Applications of Proteins with Fast-Clicking Amino Acids

09:30 - 10:00 **Champak Chatterjee**, University of Washington, USA
Chemical Strategies to Investigate Gene Regulation by Histone Sumoylation

10:00 - 10:30 **Lei Liu**, Tsinghua University, China
Some Methodology Studies for Chemical Protein Synthesis

10:30 - 11:00 **Coffee Break**

11:00 - 12:30 SESSION 6

Chair: Norman Metanis

The Hebrew University of Jerusalem, Israel

11:00 - 11:30 **Yasuhiro Kajihara**, Osaka University, Japan
New Approach for Chemical Synthesis of Glycoproteins

11:30 - 12:00 **Carlo Unverzagt**, University of Bayreuth, Germany
Chemical and Enzymatic Synthesis of Glycoproteins

12:00 - 12:30 **Christian Becker**, University of Vienna, Austria
Semisynthetic Posttranslationally Modified Proteins implicated in Neurodegeneration

12:30 – 13:15 **Lunch**

13:15 - 14:45 SESSION 7

Chair: Christian Becker, University of Vienna, Austria

13:15 - 13:45 **Xuechen Li**, The University of Hong Kong, Hong Kong
*New Developments of Chemical Ligation Methods for
Convergent Protein Synthesis*

13:45 - 14:15 **Henning D. Mootz**, University of Muenster, Germany
*New Intein Tools for Protein Semi-Synthesis and Functional
Control*

14:15 - 14:45 **Yaowen Wu**, Max Planck Institute of Molecular Physiology,
Germany
Probing Protein Function by Semisynthetic Strategies

14:45 – 15:00 Coffee Break

15:00 - 19:00 CPS Tour to Akko

Departure: From the Technion

Return: Dan Panorama and Haifa Bay View Hotels

Dinner on Your Own

Note: Before returning to the hotels, the bus will make a stop at the German Colony, and those wishing to stay in that restored and trendy area for dinner, may return to the hotel on their own.

09:00 - 10:30 **SESSION 8**

Chair: Champak Chatterjee, University of Washington, USA

09:00 - 9:30 **Annette G. Beck-Sickinger, Leipzig University, Germany**
Trafficking of G Protein Coupled Receptors: Specific Labelling of Membrane Proteins and Physiological Impact

09:30 - 10:00 **Paul Alewood, The University of Queensland, Australia**
 Δ -Myrtoxin-Mp1a is a Helical Heterodimer from the Venom of the Jack Jumper ant with Antimicrobial, Membrane Disrupting and Nociceptive Activities

10:00 - 10:30 **Seth Horne, University of Pittsburgh, USA**
Application of Chemical Protein Synthesis to Probe Structural and Functional Consequences of Altered Backbone Connectivity

10:30 - 11:00 **Coffee Break**

11:00 - 12:30 **SESSION 9**

Chair: Champak Chatterjee, University of Washington, USA

11:00 - 11:30 **Deborah Fass, Weizmann Institute of Science, Israel**
Post-translational Peptide Bonds Provide Insights into Protein Structure

11:30 - 12:00 **Michael Kay, University of Utah, USA**
Chemical and Computational Tools for Large Protein Syntheses

12:00 - 12:30 **Philip Dawson, The Scripps Research Institute, USA**
A Broad Set of Protein Manipulations Arising from a Single Remarkable Amino Acid Side Chain

12:30 - 13:30 **Lunch**

13:30 - 15:00 **SESSION 10**

Chair: Jeffery Bode, ETH Zürich, Switzerland

- 13:30 - 14:00 **Bradley Pentelute**, MIT, USA
Cysteine Arylation to Engineer and Discover Proteins
- 14:00 - 14:30 **Peng Chen**, Peking University, China
Bioorthogonal Cleavage Reactions in Living Systems
- 14:30 - 15:00 **Neal Devaraj**, University of California, San Diego, USA
Synthesizing Membranes by Adapting Chemoselective Tools from Peptide Chemistry

15:00 - 15:30 **Coffee Break**

15:30 - 17:30 **SESSION 11**

Chair: Jeffery Bode, ETH Zürich, Switzerland

- 15:30 - 16:00 **Andreas Marx**, University of Konstanz, Germany
Protein Conjugation for Mimicry of Posttranslational Modifications...and more
- 16:00 - 16:30 **Richard Payne**, The University of Sydney, Australia
Accelerated Protein Synthesis via Selenium-Mediated Ligation Chemistry
- 16:30 - 17:00 **Christian Hackenberger**, FMP and Humboldt Universität Berlin, Germany
The Power of Chemoselectivity: New Reactions for the Synthesis of Functional Protein Conjugates
- 17:00 - 17:30 **Ronald T. Raines**, Massachusetts Institute of Technology, USA
Diazo Compounds: Versatile Tools for Chemical Biology

17:30 - 17:40 **CLOSING REMARKS - Ashraf Brik**

19:30 - 21:30 **Gala Dinner** (*Dan Carmel Hotel - 87 Hanassi Blvd., Haifa*)

Friday, September 8, 2017

08:30 - 16:30 **CPS Optional Tour to Jerusalem** (view [tour details](#))
Departure: 08:30 from the Dan Panorama Hotel .
Tour ends in Tel-Aviv, at the Metropolitan Hotel.