

Sunday November 15, 2015

Session chair:

Prof. Hans Ulrich STILZ
(NOVO NORDISK, Cambridge, United States)

09:00 Opening

Prof. Hans Ulrich STILZ (NOVO NORDISK, Cambridge, United States)
Prof. Koen AUGUSTYNS (UNIVERSITY OF ANTWERP, Antwerp, Belgium)
Dr Gene VAISBERG (CHEMBRIDGE CORPORATION, San Diego, United States)
Dr Raphael NUDELMAN (TEVA PHARMACEUTICAL INDUSTRIES, Petah Tikva, Israel)

09:30 Directed Evolution of Stereoselective Enzymes: A Prolific Source of Catalysts for Asymmetric Reactions

Prof. Manfred T. REETZ
(MAX PLANCK INSTITUT FÜR KOHLENFORSCHUNG, Mulheim / Ruhr, Germany)

10:20 Coffee break and Exhibition**10:50 Studying and Targeting Deubiquitinases**

Prof. Ashraf BRIK
(TECHNION-ISRAEL INSTITUTE OF TECHNOLOGY, Haifa, Israel)

11:35 Setting a Course for Biomedical Innovation in the 21st Century

Dr Alan D. PALKOWITZ
(ELI LILLY & CO.)

12:20 Lunch and Exhibition**Session chair:**

Dr Raphael NUDELMAN
(TEVA PHARMACEUTICAL INDUSTRIES, Petah Tikva, Israel)

14:00 Traceless Transition Metal Catalysis for Synthetic Applications

Prof. Valentine P. ANANIKOV
(ZELINSKY INSTITUTE OF ORGANIC CHEMISTRY, Moscow, Russia)

14:45 Protein Imprinted Polymers. What's the Problem Here?

Dr Bernard S. GREEN
(SEMOREX TECHNOLOGIES, Ness Ziona, Israel)

15:30 OC01 - A Synthetic and Predictive Approach to Unsymmetrical Biphenols by Iron-Catalyzed Chelated Radical-Anion Oxidative Coupling

Dr Doron PAPPO
(BEN-GURION UNIVERSITY, Beer Sheva, Israel)

15:45 Coffee break and Exhibition**16:15 OC02 - Development of Novel Nuclear Receptor Modulators Based on Silyl Functionality as Hydrophobic Core Structure**

Dr Shinya FUJII
(UNIVERSITY OF TOKYO, Tokyo, Japan)

16:30 Chemical Research in Space and under Microgravity Conditions

Programme

Dr Shimon AMSELEM
(SPACEPHARMA, Herzliya Pituach, Israel)

17:15 Targeted Cancer Diagnosis and Therapy with Peptide Conjugates

Prof. Annette BECK-SICKINGER
(LEIPZIG UNIVERSITY, Leipzig, Germany)

18:00 Closing of the day

19:30 Welcome Reception

Monday November 16, 2015

Session chair:

Dr Gene VAISBERG
(CHEMBRIDGE CORPORATION, San Diego, United States)

- 08:30 Crystalline Sponge Method as Applied to Pharmaceutical Studies**
Prof. Makoto FUJITA
(UNIVERSITY OF TOKYO, Tokyo, Japan)
- 09:15 Stimuli-Responsive Drug Carriers for Controlled Delivery and Nano-Medicine Applications**
Prof. Itamar WILLNER
(THE HEBREW UNIVERSITY OF JERUSALEM, Jerusalem, Israel)
- 10:05 Coffee break and Exhibition**
- 10:35 Quinone-Methide Species - a Gateway to Functional Molecular Systems**
Prof. Doron SHABAT
(TEL AVIV UNIVERSITY, Tel Aviv, Israel)
- 11:20 Exploration of Innovative Chemical Space for Biological Screening: the European Lead Factory Perspective**
Dr Fabrizio GIORDANETTO
(TAROS CHEMICALS, New York, United States)
- 12:05 OC04 - Hypervalent Iodine Fluoroalkylating Reagents - Going Beyond Trifluoromethylation**
Ms Julie CHARPENTIER
(ETH ZÜRICH, Zürich, Switzerland)
- 12:20 Lunch and Exhibition**

Session Poster Session

- 13:00 Poster session (even numbers)**

Session Company Workshops

- 13:00 Moving from Small Molecule Patent Searching to Patent Evaluation - Applications of SciFinder with PatentPak**

Mr Paul PETERS
(CAS, Hannover, Germany)

Session chair:

Dr Doron PAPPO
(BEN-GURION UNIVERSITY, Beer Sheva, Israel)

- 14:00 The Art of Building Small**
Prof. Ben FERINGA
(UNIVERSITY OF GRONINGEN, Groningen, The Netherlands)
- 14:45 Personalized Medicine - Will it Really Happen?**
Dr Aharon SCHWARTZ
(SCHWARTZ INNOVATIONS, Mevaseret Zion, Israel)
- 15:30 OC05 - Multi-Responsive Polymeric Assemblies**

Programme

Dr Roey AMIR
(SCHOOL OF CHEMISTRY - TEL AVIV UNIVERSITY, Tel Aviv, Israel)

15:45 **Coffee break and Exhibition**

16:15 **Expanding Medicinal Chemistry Space: The Compact Module Initiative and Beyond**

Dr Jean-Marc PLANCHER
(F. HOFFMANN-LA ROCHE, Basel, Switzerland)

17:00 **Assembly Line Synthesis**

Prof. Varinder K. AGGARWAL
(UNIVERSITY OF BRISTOL, Bristol, United Kingdom)

17:45 **Closing of the day**

Tuesday November 17, 2015

Session chair:

Prof. Koen AUGUSTYNS
(UNIVERSITY OF ANTWERP, Antwerp, Belgium)

- 08:30 Harnessing Fluorine - Induced Ion - Dipole Attractive Forces in Enantioselective Catalysis**
Prof. Amir H. HOVEYDA
(BOSTON COLLEGE, Chestnut Hill, United States)
- 09:15 Drug Discovery in the Ubiquitin Pathway : the E3 Ligases**
Dr Philippe NAKACHE
(METABOMED, Yavne, Israel)
- 10:00 OC06 - Computational Discovery of Liposomal Drugs: from in Silico Predictions to in Vivo Validation**
Prof. Amiram GOLDBLUM
(HEBREW UNIVERSITY OF JERUSALEM, Jerusalem, Israel)
- 10:15 Coffee break and Exhibition**
- 10:45 Tailor-made Enzymes –Nature's and Ours**
Dr Dan TAWFIK
(WEIZMANN INSTITUTE OF SCIENCE, Rehovot, Israel)
- 11:30 Discovery of a Potent and Selective Reversible BTK Inhibitor for the Treatment of Autoimmune Diseases**
Dr Robert PULZ
(NOVARTIS PHARMA, Basel, Switzerland)
- 12:15 Prize Ceremony**
- 12:20 EFMC Prize for a Young Medicinal Chemist in Academia
Achieving Intra-BET Selectivity of BET Bromodomain Chemical Probes: Bump-And Hole and PROTAC Approaches**
Prof. Alessio CIULLI
(UNIVERSITY OF DUNDEE, Dundee, United Kingdom)
- 12:35 EFMC Prize for a Young Medicinal Chemist in Industry
Structure-Based Drug Design with G Protein-Coupled Receptors**
Dr Steve ANDREWS
(HEPTARES, Welwyn Garden City, United Kingdom)
- 12:50 Lunch and Exhibition**

Session Poster Session

- 13:15 Poster Session (odd numbers)**

Session Company Workshops

- 13:15 Data-Driven Approaches to Medicinal Chemistry**
Mr Joannis TELIORIDIS
(ELSEVIER, Issy les Moulineaux , France)
- 14:15 Free afternoon**

15:00 Excursions

Wednesday November 18, 2015

Session chair:

Dr Micha FRIDMAN
(TEL AVIV UNIVERSITY, Ramat Aviv, Tel Aviv, Israel)

- 08:30 Versatile Iridium Catalysts for a Broad Range of Asymmetric Transformations**
Prof. Erick M. CARREIRA
(ETH ZÜRICH, Zürich, Switzerland)
- 09:20 Challenges and Synthetic Ingenuity in the Generic World**
Dr Lilach HEDVATI
(TEVA, Petah-Tiqva, Israel)
- 10:00 OC07 - Synthesis and Application of Unnatural Proline Analogues: Advanced Building Blocks for Medicinal Chemistry**
Dr Pavel MYKHAILIUK
(ENAMINE, Kyiv, Ukraine)
- 10:15 Coffee break and Exhibition**
- 10:45 Evolving GPCRs to Favorable Biophysical Properties: Enabling Drug Screening and Structural Studies**
Prof. Andreas PLÜCKTHUN
(UNIVERSITY OF ZÜRICH, Zurich, Switzerland)
- 11:35 The Power of Integrated Technological Platforms to Advance Science and Medicine**
Dr Berta STRULOVICI
(WEIZMANN INSTITUTE OF SCIENCE, Rehovot, Israel)
- 12:15 OC08 - Necrosis: Cellular Mechanisms and Treatment**
Prof. Amnon ALBECK
(BAR ILAN UNIVERSITY, Ramat Gan, Israel)
- 12:45 Lunch and Exhibition**

Session chair:

Prof. Ilan MAREK
(ISRAEL INSTITUTE OF TECHNOLOGY, Haifa, Israel)

- 14:00 OC09 - Catalytic Asymmetric Synthesis of Caprazamycin B and Caprazol**
Dr Takumi WATANABE
(INSTITUTE OF MICROBIAL CHEMISTRY (BIKAKEN), Tokyo, Japan)
- 14:15 OC10 - Synthesis of Archazolid F and Other Novel Archazolids: Highly Potent V-AtPase Inhibitors**
Mr Stephan SCHEEFF
(UNIVERSITY OF BONN, Bonn, Germany)
- 14:30 OC11 - Protecting Group-Free Strategies for The Synthesis of Nucleosides**
Mr Mike DOWNEY
(INSTITUTE OF ORGANIC CHEMISTRY AND BIOCHEMISTRY, Prague-6, Czech Republic)
- 14:45 OC12 - Development of Anti-Influenza Drugs**
Prof. Jim-Min FANG
(NATIONAL TAIWAN UNIVERSITY, Taipei, Taiwan)

Programme

15:00 **OC13 - Cross Metathesis of Sulfonamides and Sulfoxides**

Mr Adam RAJKIEWICZ
(UNIVERSITY OF WARSAW, Warsaw, Poland)

15:15 **Coffee break and Exhibition**

15:45 **The Barry Cohen Award for Excellence in Medicinal Chemistry Prize Ceremony**

Synthesis-Informed Design Directed at Transformative Therapies: Eradication of Hiv/Aids, Alzheimer's Disease and Resistant Cancer

Prof. Paul A. WENDER
(STANFORD UNIVERSITY, Stanford, United States)

16:30 **Closing remarks**

Prof. Ilan MAREK
(ISRAEL INSTITUTE OF TECHNOLOGY, Haifa, Israel)

20:00 **Banquet**