



June 29 – July 1, 2026  
ROSENTHAL PAVILION  
NEW YORK UNIVERSITY



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### Monday, June 29

11:00 am Arrival and Check-in, Hemmerdinger Hall, Silver Ctr. for Arts & Science, 31 Washington Pl.

**11:30 am Welcome Lunch and Poster Session**

1:30 pm Break

2:00 pm Arrival and Check-in, Rosenthal Pavilion, Kimmel Center, 60 Washington Sq. South

**Session I Chair: Glen Hocky, New York University**

2:10 pm Welcoming Remarks:  
Stefano Martiniani, ChemAI co-Organizer, Assoc. Prof. of Physics, Chemistry and Math  
James Canary, Dean for Science  
Juan de Pablo, Exec VP for Global Science and Tech, Exec Dean of the Tandon School of Engineering

2:40 pm Andrew White, Edison Scientific  
*Training a scientific reasoning model for chemistry*

3:15 pm Shuwen Yue, Cornell University  
*Physics Informed Active Learning for Machine Learning Interatomic Potentials*

3:50 pm Break

4:10 pm Carles Domingo-Enrich, Microsoft Research  
*Rare Event Analysis via Stochastic Optimal Control*

4:30 pm Jan-Willem van de Meent, University of Amsterdam  
*Title TBA*

5:05 pm Ge Sun, New York University  
*HiPoly: A hierarchical polymer-native AI framework for property prediction and generative design*

5:30 pm Break

**6:00 pm C&EN Welcome Reception and AI Panel Discussion**



Join *Chemical & Engineering News* for networking and an off-the-record discussion about translating chemistry AI research to the commercial realm. [Register here](#) by June 20. White Oak Tavern, 21 Waverly Pl.

8:30 pm Adjourn

## Tuesday, June 30

9:00 am Continental Breakfast, Informal networking

**Session IIa** **Chair: Yingkai Zhang, New York University**

9:20 am Welcoming Remarks: Gregory Weiss, NYU Chemistry Department Chair

9:30 am Connor Coley, MIT  
*Chemistry-tailored AI for small molecule design, synthesis, and analysis*

10:05 am Peter Bolhuis, University of Amsterdam  
*Transition path sampling-based learning of reaction coordinates and MLIPs for molecular rare events*

10:40 am Philipp Höllmer, New York University  
*Open Materials Generation with Inference-Time Reinforcement Learning*

11:00 am Break

**Session IIb** **Chair: Yuanqing Wang, New York University, University of Toronto**

11:20 am Ellen Zhong, Princeton University  
*Atomic Diffusion Models for Small Molecule Structure Elucidation from NMR Spectra*

11:55 am Victor Batista, Yale University  
*Title TBA*

12:30 pm Mark Tuckerman, New York University  
*Title TBA*

1:05 pm Recess

**Session IIIa** **Chair: Muhammad Hasyim, New York University**

2:20 pm Mohammed AlQuraishi, Columbia University  
*Latents-Based Conformational Control in OpenFold3*

2:55 pm Marta Skreta, Mila / Université de Montréal  
*General Multimodal Protein Design Enables DNA-Encoding of Chemistry*

3:15 pm Pilar Cossio, Flatiron Institute  
*Inferring probability distributions of RNAs using cryo-EM simulation-based inference*

3:50 pm Michael Chen, New York University, University of Kentucky  
*Sampling Free Energy Landscapes of Ionic Colloidal Crystal Systems using Machine-Learned Proxy Collective Variables and Potentials*

4:10 pm Break

**Session IIIb** **Chair: Rui Wang, New York University, Rochester Institute of Technology**

4:30 pm Justin Smith, NVIDIA  
*Building accelerated AI infrastructure for chemistry and materials simulation*

5:05 pm Adam Lahouari, New York University  
*From Foundation Models to Free Energies: An Automated Pipeline for Machine Learning Interatomic Potentials*

5:25 pm Chatipat Lorpaiboon, Flatiron Institute  
*Towards a foundational model for the committor*

5:45 pm Boris Kozinsky, Harvard University  
*Machine Learning Foundation Models of Microscopic Interactions in Materials*

6:20 pm Adjourn

## Wednesday, July 1

9:00 am Continental Breakfast

<b>Session IVa</b>	<b>Chair: Stefano Martiniani, New York University</b>
9:20 am	Welcoming Remarks
9:30 am	Kirill Neklyudov, Mila <i>Steering Generative Models: From Mathematics to Biomolecular Design</i>
10:05 am	Bettina Keller, Freie Universität Berlin <i>A Machine-Learned Symbolic Committor for a Chemical Reaction: Retinal Isomerization</i>
10:40 am	Liwei Chang, Schrödinger, Inc. <i>Leveraging the principles learned by AlphaFold for protein folding pathway predictions and beyond</i>

11:00 am Break

<b>Session IVb</b>	<b>Chair: Mark Tuckerman, New York University</b>
11:20 am	Stefan Chmiela, Technische Universität Berlin <i>Accelerating Molecular Dynamics with Implicit Machine Learning</i>
11:55 pm	Joseph A. Morrone, IBM T.J. Watson Research Center <i>Multi-View Biomedical Foundation Models for molecular property prediction</i>
12:15 pm	Rocío Mercado Oropeza, Chalmers University of Technology <i>The data bottleneck in AI-driven molecular design: from agentic extraction to structured benchmarks</i>
12:50 pm	Minhuan Li, Flatiron Institute <i>Beyond Pixel Overlap: Optimal Transport for Reconstructing Flexible Biomolecules from Noisy Data</i>

1:10 pm Recess

<b>Session V</b>	<b>Chair: Michael Chen, New York University, University of Kentucky</b>
2:40 pm	John Chodera, Achira <i>Title TBA</i>
3:15 pm	Todd Martinez, Stanford University <i>Learning For and From Excited State Molecular Dynamics</i>
3:50 pm	Benjamin Miller, Meta <i>Modern approaches in symmetry for crystals and enhanced sampling for molecules</i>

4:30 pm Adjourn