

## Chemical Engineering

Session **F**

Room: 106 Spalding Lab

|                |                                                                                                                                            |                                                                                                                 |                                                                                                                                                                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1:00 - 1:20 PM | <b>Paxton N. Boyce</b><br>University of California,<br>Santa Barbara<br><i>Carl F. Braun WAVE Fellow</i>                                   | Controlling mist formation in<br>droplet impact using<br>megasupramolecules                                     | Julia A. Kornfield<br><i>Warren and Katharine Schlinger</i><br>Professor of Chemical<br>Engineering<br>Sativik Verma<br>Graduate Student in Chemical<br>Engineering                                                                                    |
| 1:20 - 1:40 PM | <b>Emily Jiang</b><br>Caltech<br><i>John Stauffer SURF Fellow</i>                                                                          | Particle sedimentation in<br>Newtonian and non-Newtonian<br>fluids                                              | Sujit Datta<br>Professor of Chemical<br>Engineering, Bioengineering,<br>and Biophysics<br>Mohamed Abdelgawad<br>Postdoctoral Scholar Research<br>Associate in Chemical<br>Engineering<br>Craig Singiser<br>Graduate Student in Chemical<br>Engineering |
| 1:40 - 2:00 PM | <b>Kaylah Y. Rhee</b><br>Caltech<br><i>Edward W. Hughes</i><br>SURF Fellow                                                                 | Gas compressibility in the<br>compression-driven<br>displacement of non-Newtonian<br>fluids in a capillary tube | Sujit Datta<br>Professor of Chemical<br>Engineering, Bioengineering,<br>and Biophysics<br>Mohamed Abdelgawad<br>Postdoctoral Scholar Research<br>Associate in Chemical<br>Engineering<br>Craig Singiser<br>Graduate Student in Chemical<br>Engineering |
| 2:00 - 2:20 PM | <b>Isaac L. Thompson</b><br>Caltech<br><i>David S. Koons SURF Fellow</i>                                                                   | Banding phenomena in rotating<br>viscoelastic polymer solutions                                                 | Sujit Datta<br>Professor of Chemical<br>Engineering, Bioengineering,<br>and Biophysics<br>Mohamed Abdelgawad<br>Postdoctoral Scholar Research<br>Associate in Chemical<br>Engineering<br>Craig Singiser<br>Graduate Student in Chemical<br>Engineering |
| 2:20 - 2:40 PM | <b>Dzianis Mahila</b><br>University of California,<br>Santa Barbara<br><i>Resnick Sustainability</i><br><i>Institute (RSI) WAVE Fellow</i> | Improving stability of peptide<br>displaying Tobacco Mosaic<br>Virus-Like Particles                             | Gözde S. Demirer<br><i>Clare Booth Luce Assistant</i><br>Professor of Chemical<br>Engineering<br>Andres Heredia<br>Graduate Student in Chemistry                                                                                                       |

|                |                                                                                       |                                                                                                                           |                                                                                                                                                                                                            |
|----------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2:40 - 2:50 PM | <b>BREAK</b>                                                                          |                                                                                                                           |                                                                                                                                                                                                            |
| 2:50 - 3:10 PM | <b>Carl J. Crum</b><br>Caltech<br><i>John Stauffer SURF Fellow</i>                    | Molecular dynamics simulations for nanoconfined ion transport                                                             | Kara D. Fong<br><i>Assistant Professor of Chemical Engineering; William H. Hurt Scholar</i><br>Edward Chen<br><i>Graduate Student in Chemical Engineering</i>                                              |
| 3:10 - 3:30 PM | <b>Chung Wang Lam</b><br>University of Cambridge<br><i>Caltech-Cambridge Exchange</i> | Breaking down the concentration-dependent dielectric response of lithium battery electrolytes using atomistic simulations | Kara D. Fong<br><i>Assistant Professor of Chemical Engineering; William H. Hurt Scholar</i><br>Nidhish Lella<br><i>Graduate Student in Chemical Engineering</i>                                            |
| 3:30 - 3:50 PM | <b>Ali Raza Sial</b><br>Rice University                                               | Fixing nitrogen, faster: A reproducible, high-throughput approach to lithium-mediated ammonia synthesis                   | Karthish Manthiram<br><i>Bren Professor of Chemical Engineering and Chemistry; William H. Hurt Scholar</i><br>Gangsan Lee<br><i>Postdoctoral Scholar Fellowship Trainee in Chemical Engineering</i>        |
| 3:50 - 4:10 PM | <b>Barbara S. Cao</b><br>Caltech<br><i>Joseph L. Koo and Helen C. Koo SURF Fellow</i> | Constructing a SNIPR-based genetic circuit for non-invasive acoustic imaging of glioblastoma-specific antigens            | Mikhail G. Shapiro<br><i>Max Delbrück Professor of Chemical Engineering and Medical Engineering; Investigator, Howard Hughes Medical Institute</i><br>Ann Liu<br><i>Graduate Student in Bioengineering</i> |