

Mentor Meeting Schedule
Membrane Science, Engineering & Technology (MAST) Center
Tuesday, April 24, 2018
Session #1: 9:30-10:00 am

- 1. *Imaging and Quantifying Chemically Modified Polymer Membrane Properties at Nanoscale* **Project #15-3****

Faculty: Wen Zhang, NJIT Civil & Environmental Engineering
Somenath Mitra, NJIT Chemistry & Environmental Science

Graduate Student: Wanyi Fu, NJIT Civil & Environmental Engineering

Primary Mentor: Tina Carbrello, Millipore

Original Project End Date: 8/31/18

- 2. *Membrane-based Removal of Ammonia from Waste Stream and its Recovery* **Project #16-1****

Faculty: Kamallesh Sirkar, NJIT Chemical, Biological & Pharmaceutical Engineering

Post Doc: John Cau, NJIT Chemical, Biological & Pharmaceutical Engineering

Graduate Student: Philip Aligwe, NJIT Chemical Biological & Pharmaceutical Engineering

Primary Mentors: Raj Rajagopalan and Christian Canlas, W.R. Grace

Original Project End Date: 1/31/2019

- 3. *Nanopore Tuning in Lyotropic Liquid Crystal Membrane Materials for Optimized Water Vapor Transport and Selective Rejection of CWA Stimulants of Interest to DTRA* **Project #16-3****

Faculty: Richard Noble, CU Chemical & Biological Engineering
Douglas Gin, CU Chemical & Biological Engineering

Graduate Student: Michael McGrath, CU Chemical & Biological Engineering
Greg Dwulet, CU Chemistry & Biochemistry

Primary Mentor: Tracee Whitfield, DTRA II

Original Project End Date: 6/30/19

- 4. *Assessment of Virus Clearance for Biopharmaceutical Manufacture* **Project #15-6****

Faculty: Ranil Wickramasinghe, UA Chemical Engineering
Xianghong Qian, UA Biomedical Engineering

Graduate Student: Namila, UA Biomedical Engineering

Undergrad Student: Davar Sasongko, UA Chemical Engineering

Primary Mentor: Nripen Singh, Bristol Meyers Squibb

Original Project End Date: 06/30/2018

Session #2: 10:00-10:30 am

- 5. Adsorptive and Destructive Mixed Matrix Membranes for CB Protection** **Project #15-1**
Faculty: Kamalesh Sirkar, NJIT Chemical, Biological & Pharmaceutical Engineering
Boris Khusid, NJIT Chemical, Biological & Pharmaceutical Engineering
Post Doc: John Chau, NJIT Chemical, Biological & Pharmaceutical Engineering
Graduate Student: Yufeng Song, NJIT Chemical, Biological & Pharmaceutical Engineering
Primary Mentor: Tracee Whitfield, DTRA
Original Project End Date: 6/30/18
- 6. New Real-Time Methodology for Detection of Fouling in Gas Separation Membranes** **Project #15-4**
Faculty: Victor Bright, CU Mechanical Engineering
Juliet Gopinath, CU Bioengineering
Alan Greenberg, CU Mechanical Engineering
Post Doc: Mo Zohrabi, CU Electrical Engineering
Graduate Students: Omkar Supekar, CU Mechanical Engineering
Phillip Nystrom, CU Mechanical Engineering
Primary Mentor: Joseph Swisher/Abhoyjit Bhowan, EPRI
Original Project End Date: 8/31/18
- 7. Forward Osmosis for Water Treatment and Recovery** **Project #16-4**
Faculty: Ranil Wickramasinghe, UA Chemical Engineering
Graduate Student: Yu-Hsuan Chiao, UA Chemical Engineering
Primary Mentor: Albert Chiao, Membrane Science
Original Project End Date: 6/30/19
- 8. Modeling Tools for Membrane Process** **Project #17-5**
Faculty: David Ford, UA Chemical Engineering Graduate
Xianhong Qian, UA Biomedical Engineering
Paul Millett, UA Mechanical Engineering
Post Doc: Yuanhui Tang, UA Chemical Engineering
Student: Michael Cervellere, UA Mechanical Engineering
Primary Mentor: Derek Dehn, 3M
Original Project End Date: 1/31/20

Session #3: 10:30-11:00 am

- 9. Graphene Oxide (GO) Membrane-based Breathable Fabric** **Project #16-2**
Faculty: Kamalesh Sirkar, NJIT Chemical, Biological & Pharmaceutical Engineering
Zafar Iqbal, NJIT Chemistry & Environmental Science
Post-Doc: John Chau, NJIT Chemical, Biological & Pharmaceutical Engineering
Graduate Student: Cheng Peng, NJIT Material Science & Engineering
Primary Mentor: Tracee Whitfield, DTRA II
Original Project End Date: 8/31/19
- 10. Robustness and Plugging of Virus Filters** **Project #16-5**
Faculty: Ranil Wickramasinghe, UA Chemical Engineering
Xianghong Qian, UA Biomedical Engineering
Graduate Student: Da Zhang, UA Chemical Engineering
Primary Mentor: Daniel Strauss, Asahi Kasei
Original Project End Date: 6/30/19
- 11. Unknown Title** **Project #18-1**
Faculty: Ranil Wickramasinghe, UA Chemical Engineering

Graduate Student:
Primary Mentor:
Original Project End Date:
- 12. Development and Characterization of Composite Membranes for Use in Countercurrent Solvent Extraction** **Project #17-3**
Faculty: Kamalesh Sirkar, NJIT Chemical, Biological & Pharmaceutical Engineering
Post-Doc: John Chau, NJIT Chemical, Biological & Pharmaceutical Engineering
Graduate Student: Lydia Rodrigues, NJIT Chemical, Biological & Pharmaceutical Engineering
Primary Mentor: John Ahern, Los Alamos National Laboratory
Original Project End Date: 12/31/19

Session #4: 11:00-11:30 am

- 13. *Selective Separation of Industrial Relevant Metal Ions from High TDS Water Using Wafer-Enhanced Electrodeionization*** **Project #17-4**
Faculty: Jamie Hestekin, UA Chemical Engineering
Graduate Student: Humeyra Ulusoy-Erol, UA Chemical Engineering
Primary Mentor: Abhoyjit S. Bhowm/ Joseph Swisher, EPRI
Original Project End Date: 1/31/20
- 14. *Membrane Filtration for Wastewater Treatment*** **Project #17-7**
Faculty: Ranil Wickramasinghe, UA Chemical Engineering
Xianghong Qian, UA Biomedical Engineering
Marty Matlock, UA Biological & Agricultural Engineering
Graduate Student: Zahra Anari, UA Chemical Engineering
Primary Mentor: Todd Low/Leonard Obaldo, Hawaii
Original Project End Date: 6/30/20
- 15. *Novel Nanofiltration for Isolation of Pharmaceutical Compounds*** **Project #17-6**
Faculty: Kamallesh Sirkar, NJIT Chemical, Biological & Pharmaceutical Engineering
Post Doc: John Chau, NJIT Chemical, Biological & Pharmaceutical Engineering
Primary Mentor: Ken Pennisi, Compact Membrane Systems
Original Project End Date: 6/30/19
- 16. *Coupled UV-Membrane and Oxidant Membrane Process for Decreased Biofouling and Enhanced Flux in Water Reclamation Applications*** **Project #17-1**
Faculty: Karl Linden, CU Civil & Environmental Engineering
Post-Doc: Joanna Murphy, CU Environmental Engineering
Primary Mentor: Zaid Chowdhury/ Steven Jones/Mike Watts, Garver
Original Project End Date: 12/31/2019