

**Membrane Science, Engineering and Technology Center
Research Project Presentation Schedule: Monday, April 23, 2018
Pennsylvania State University**

Ongoing Projects: 15-minute oral reports for each current research project will be presented in the following order, allowing 5 minutes for discussion and questions after the presentation and an additional 5 minutes for the IAB representatives to fill out the feedback forms; final presentations are 20-minutes long with questions postponed until the evening poster session.

Session Chair: Ranil Wickramasinghe

8:00 am

1. New Real-Time Methodology for Detection of Fouling in Gas Separation Membranes Project #15-4

Faculty:	Victor Bright	CU Mechanical Engineering
	Juliet Gopinath	CU Electrical Engineering
	Alan Greenberg	CU Mechanical Engineering
Post Doc:	Mo Zohrabi	CU Electrical Engineering
Graduate Student:	Omkar Supekar	CU Mechanical Engineering
	Phillip Nystrom	CU Mechanical Engineering

8:25 pm

2. Selective Separation of Industrial Relevant Metal Ions From High TDS Water using Water-Enhanced Electrodeionization Project #17-4

Faculty:	Jamie Hestekin	UA Chemical Engineering
Graduate Student:	Humeyra Ulusoy-Erol	UA Chemical Engineering

8:50 pm

3. Modeling Tools for Membrane Process Project #17-5

Faculty:	David Ford	UA Chemical Engineering
	Xianghong Qian	UA Biomedical Engineering
	Paul Millett	UA Mechanical Engineering
Post Doc:	Yuanhui Tang	UA Chemical Engineering
Graduate Student:	Michael Cervellere	UA Mechanical Engineering

9:15 pm

4. Graphene Oxide (GO) Membrane-based Breathable Fabric Project 16-2

Faculty:	Kamalesh Sirkar	NJIT Chemical Engineering
	Zafar Iqbal	NJIT Chemical Engineering
Post-Doc	John Chau	NJIT Chemical Engineering
Graduate Student:	Cheng Peng	NJIT Chemical Engineering

Coffee Break (9:40 – 10:00 am)

Session Chair: Yifu Ding

10:00 am

5. Membrane Filtration for Wastewater Treatment

Project #17-7

Faculty:	Ranil Wickramasinghe	UA Chemical Engineering
	Xianghong Qian	UA Biomedical Engineering
	Marty Matlock	UA Biological Engineering
Graduate	Zahra Anari	UA Chemical Engineering

10:25 am

6. 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

10:50 am

**7. Development and Characterization of Composite Membranes
For Use in Countercurrent Solvent Extraction**

Project #17-3

Faculty:	Kamalesh Sirkar	NJIT Chemical Engineering
Post Doc:	John Chau	NJIT Chemical Engineering
Graduate Student:	Lydia Rodrigues	NJIT Chemical Engineering

11:15 am

8. Membrane-based Removal of Ammonia from Waste Stream and its Recovery

Project #16-1

Faculty:	Kamalesh Sirkar	NJIT Chemical Engineering
Post-Doc	John Chau	NJIT Chemical Engineering
Graduate Student:	Philip Aligwe	NJIT Chemical Engineering

11:40 am

**9. Imaging and Quantifying Chemically Modified Polymer Membrane Properties
at Nanoscale**

Project #15-3

Faculty:	Wen Zhang	NJIT Civil Engineering
	Somenath Mitra	NJIT Civil Engineering
Graduate Student:	Wanyi Fu	NJIT Chemical Engineering

12:05 pm

10. Assessment of Virus Clearance for Biopharmaceutical Manufacture

Project #15-6

Faculty:	Ranil Wickramasinghe	UA Chemical Engineering
	Xianhong Qian	UA Biomedical Engineering
Graduate Student:	Namila	UA Biomedical Engineering
Undergraduate Student:	Davar Sasongko	UA Chemical Engineering

Lunch (12:30 – 1:30 pm)

Facilities Tour (1:30– 3:00 pm)

Coffee Break (3:00 – 3:15 pm)

IAB Closed Session (3:15-4:15)

Session Chair: Kam Sirkar

Sponsor Spotlight (4:15 – 4:30)

4:30 pm

11. Membrane-based Separation Processes for TDS in O&G Produced Water Project #13-6 Final

Faculty:	Ranil Wickramasinghe	UA Chemical Engineering
Graduate Student:	Kamyar Sardari	UA Chemical Engineering

4:55 pm

12. Membrane-based Recovery of Fats, Oils and Grease (FOG) from Poultry Processing Wastewaters (PPW) Project #13-8 Final

Faculty:	Ranil Wickramasinghe	UA Chemical Engineering
Graduate Students:	Kamyar Sardari	UA Chemical Engineering

5:20 pm

13. Mapping Membrane Tortuosity Using High Throughput 3D Nanoparticle Tracking Project #17-2 Final

Faculty:	Dan Schwartz	CU Chemical Engineering
Graduate Students:	Yu Cai	CU Chemical Engineering

5:45 pm

14. The Role of Particle Deformation in Porous Medium Project #17-8 Final

Faculty:	Franck Vernerey	CU Mechanical Engineering
	John Pellegrino	CU Mechanical Engineering
Graduate Student:	Robert Wagner	CU Mechanical Engineering