



Spring 2014 Industrial Affiliates Workshop Agenda

Pre-Program

Monday, March 3

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| 10:30-11:45 a.m. | The University of Arizona Student Optics Chapter Meeting with SPIE
RSVP required | Meinel 821 |
| Noon-1:30 p.m. | Women in Optics Presents: Launching Your Career Panel Discussion
RSVP required | Meinel 821 |
| 4-6 p.m. | Corporate Showcase and Career Fair | SUMC North Ballroom |
| 6-7 p.m. | Dinner
By invitation only | |
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Program

Tuesday, March 4

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| 7:45 a.m. | Welcome Breakfast
By invitation only | 8th Floor Breakout Area |
| 8:45 a.m. | Group Photo | 3rd Floor Lobby |
| 9 a.m. | Workshop Overview | Meinel 307 |
| 9:05 a.m. | UA Research Overview
Jennifer K. Barton, UA Associate Vice President for Research, UA Interim Vice President for Research and Professor of Biomedical Engineering, Electrical and Computer Engineering, Optical Sciences, Agricultural and Biosystems Engineering, and the BIO5 Institute | Meinel 307 |
| 9:15 a.m. | Faculty and Student Presentations | Meinel 307 |
| 9:15-9:30 a.m. | Jennifer K. Barton
"Miniature Optical Endoscopes for Early Detection of Cancer" | |
| 9:30-9:45 a.m. | Weston Welge, Ph.D. Student (advised by Jennifer K. Barton)
"Miniature Optical Endoscopes for Colon Imaging" | |
| 9:45-10 a.m. | Tyler Tate, Ph.D. Student (advised by Jennifer K. Barton)
"Really Miniature Optical Endoscopes for Ovary Imaging" | |
| 10-10:15 a.m. | Nasser Peyghambarian, Chair of Photonics and Lasers, Professor of Optical Sciences and Material Science and Engineering, and Director of the NSF Engineering Research Center for Integrated Access Networks
"Photonics Devices and Optical Communication Systems" | |
| 10:15-10:30 a.m. | Seyed Mehravar, M.S. Student (advised by Khanh Kieu)
"Label-Free Multiphoton Imaging Using a Compact Femtosecond Fiber Laser Mode-Locked by Carbon Nanotube Saturable Absorber" | |

10:30-10:45 a.m.	Alexander Miles, Ph.D. Student (advised by Robert A. Norwood) "Scalable High-Speed Optical Cross Connect"	
10:45 a.m.	Refreshment Break	3rd Floor Lobby
11:05 a.m.	Senior Design Presentations	Meinel 307
11:05-11:20 a.m.	Robert G. Lepore, Adjunct Instructor in AME, and Gerald D. Pine, Adjunct Instructor in SIE "UA Senior Capstone"	
11:20-11:35 a.m.	Alexander Felli, B.S. in OSE Student, and Justin Mortara, B.S. in ECE Student "NASA R.I.S.A. Camera"	
11:35-11:50 a.m.	Michael Portugal, B.S. in OSE Student, and Patrick Thrasher, B.S. in OSE Student "Specular Black Baffle Design"	
Noon-12:15 p.m.	Transportation to University Marriott Hotel	Meet in 3rd Floor Lobby
12:15 p.m.	Lunch and Industrial Affiliate Elevator Speeches	Marriott Sabino Room
1 p.m.	Poster Session	Marriott Canyon C Room
1:45 p.m.	Return to Meinel Building	
2:15 p.m.	Future Trends in Optics Education	Meinel 307
2:15-2:45 p.m.	Chih Yu Huang, Ph.D. Student (advised by Rongguang Liang) "Freeform Optics: Design, Fabrication and Testing"	
2:45-3 p.m.	Jim H. Burge, Professor of Optical Sciences and Astronomy "Practical Optics Workshop"	
3-3:15 p.m.	R. John Koschel, Associate Dean of Academic Programs and Professor of Optical Sciences "A Project-Based Course in Illumination Design"	
3:15 p.m.	Refreshment Break	3rd Floor Lobby
3:35 p.m.	Plenary Talk	Meinel 307
	Mark A. Neifeld, Professor of Optical Sciences and Electrical and Computer Engineering "Thoughts on Computational Imaging"	
4:20 p.m.	Research Presentation	Meinel 307
	Nan Zhu, Postdoctoral Research Associate (Primary investigator Rongguang Liang) "A Wearable Fluorescence Goggle System for Real-Time Image-Guided Surgery"	
4:40 p.m.	Job-Seeking 101 Session	3rd Floor Lobby
5:30 p.m.	Networking Mixer	3rd Floor Lobby

Wednesday, March 5

8 a.m.	Continental Breakfast	3rd Floor Lobby
8:30 a.m.	Faculty and Student Presentations	Meinel 307
8:30-8:45 a.m.	Raymond K. Kostuk, Professor of Electrical and Computer Engineering and Optical Sciences "Challenges and Opportunities for Optics in Photovoltaic Energy Systems"	
8:45-9 a.m.	Juan Manuel Russo, Ph.D. Student in ECE (advised by Raymond K. Kostuk) "Grating-Over-Lens Holographic Spectrum Splitting Concentration Photovoltaic Technology"	
9-9:15 a.m.	Shelby Vorndran, Ph.D. Student (advised by Raymond K. Kostuk) "Holographic Spectrum Splitting System for Hybrid Solar Electric/Biofuel Operation"	

9:15-9:30 a.m.	Tom D. Milster, Professor of Optical Sciences and Electrical and Computer Engineering "Topics in Physical Optics"	
9:30-9:45 a.m.	Blake Coughenour, Ph.D. Student (advised by J. Roger P. Angel) "Concentration Photovoltaic Technology at the Steward Observatory Solar Lab"	
9:45 a.m.	Guided Tour of Steward Observatory Solar Lab	Meet in 3rd Floor Lobby
10:30 a.m.	Return to Meinel Building for Refreshments	3rd Floor Lobby
10:50 a.m.	Student Five-Minute Presentations	Meinel 307
10:50-10:55 a.m.	Victoria Chan, Ph.D. Student (advised by Eustace L. Dereniak) "Design and Application of the Snapshot Hyperspectral Imaging Fourier Transform Spectrometer for Spectropolarimetry and Biomedical Imaging"	
10:55-11 a.m.	Han Zhang, Ph.D. Student (advised by Leilei Peng) "Superresolution Microscopy with Nonlinear Structured Illumination"	
11-11:05 a.m.	Alejandro Maldonado, Ph.D. Student (advised by Jim H. Burge) "SPOTS: The Auxiliary Lens Deflectometry Device for Surface Metrology"	
11:05-11:10 a.m.	Vaibhav Bora, Ph.D. Student (advised by Harrison H. Barrett) "Measurement of Fano Factor in Scintillation Detectors"	
11:10-11:15 a.m.	Eric Herman, M.S. Student (advised by José Sasián) "Aberration Considerations in Lens Tolerancing"	
11:15-11:20 a.m.	John Davis, B.S. in OSE "Optical Fabrication Techniques for 8.4-meter Monolithic Telescope Mirrors"	
11:20-11:25 a.m.	Yuhao Wang, Ph.D. Student (advised by José Sasián) "Advanced Theory of Field Curvature"	
11:25-11:30 a.m.	Laura Coyle, Ph.D. Student (advised by Jim H. Burge) "Higher-Order Calibration of CGH-Based Interferometers"	
11:30 a.m.	Workshop Evaluation and Feedback Session	Meinel 307
Noon	Pizza Party Lunch and Farewell	3rd Floor Lobby
1 p.m.	Individual Company Interviews and End of Formal Workshop	