Welcome
David Tyler
Department Head

Address to the Class of 2020
Marina Guenza
Professor

Concluding Remarks
David Tyler
Department Head

Presentation of Degree Candidates
Graduate Slide Roll
2020 UNDERGRADUATE AWARDS IN CHEMISTRY

American Institute of Chemists Foundation Award
Outstanding Senior
Makenna L. Pennel and Dan A. Tudorica

LeRoy H. Klemm Award for Excellence in Undergraduate Chemical Research
Dylan J. Bardgett, Rachel E. Lutz, Emma J. Mullen, and Makenna L. Pennel

Richard M. Noyes Physical Chemistry Achievement Award
Jake D. Olsen

Warner Peticolas Award for Excellence in Undergraduate Chemical Research in Physical Chemistry
Madelyn N. Scott

American Chemical Society Analytical Chemistry Award
Makenna L. Pennel

American Chemical Society Inorganic Division Award
Dylan J. Bardgett

American Chemical Society Organic Chemistry Award
Zachary R. Garrison

American Chemical Society Physical Chemistry Award
Zachary M. Miller

Biochemistry Achievement Award
Dan A. Tudorica

Chemical Biology Achievement Award
Rachel E. Lutz and Emma J. Mullen

Inorganic Chemistry Achievement Award
Dylan J. Bardgett

Materials Chemistry Achievement Award
Makenna L. Pennel

Organic Chemistry Achievement Award
Peiguan Brian Sun
DEGREE CANDIDATES

Biochemistry Baccalaureate Candidates

Hussein M. Al-Zubieri 1, 4, 5
Zachary D. Basham 5
Jared Z. Brandon
Benjamin R. Camel
Patrick J. Connor 5
Janiel Elizarraga-Oregel
Zachary R. Garrison 5
Alexis K. Green
Saskia M. Ilcisin
Olivia M. Lang
Rachel E. Lutz 2, 4, 5

Tristan C. McKibben
Sabrina M. Miller
Emma J. Mullen 1, 4, 5
Robin A. Nagy
Peregrine D. Painter 3, 5
Haleigh E. Patten-Trujillo
Matthew S. Stevens
Ryan T. Swan
Christian K. Tamashiro 1, 4
Dan A. Tudorica 1, 4, 5
Alexandria E. Wong 1, 4, 5

Chemistry Baccalaureate Candidates

Maria F. Anderson
Dylan J. Bardgett 1, 4, 5
Lya Carini
Jie Chen
James T. Gray
Evan R. Hanks
Kristen N. Hodge 3
Eli A. Jaffe 4, 5
Taryn M. Kam 3, 5
Jiaming Li

Jordan A. Mildon
Zachary M. Miller 5
Timothy J. Murphy
Nathan T. Nguyen
Jake D. Olsen 2, 5
Makenna L. Pennel 1, 4, 5
Madelyn N. Scott 3, 4, 5
Sara A. Staudhammer
Peiguan Brian Sun 4, 5
Tristan D. Zeryck

1 Summa cum laude  2 Magna cum laude  3 Cum laude  4 Phi Beta Kappa  5 Department honors
Master of Science Candidates

Myriam Jackelyn Castañeda  
Alison S. Chang  
Anh T. Do  
Alec N. Gallman  
Alison Guan  
Aaron M. Miller  
James H. Riddell

Advanced Materials Analysis and Characterization Program

Sean F. Harris | Samtec, Colorado Springs, CO  
Aleia K. Kim | Covalent Metrology, Sunnyvale, CA  
Alexandra L. Kuo | Archaeometry Laboratory, University of Missouri, Columbia, MO  
Andrew Lam | Thermo Fisher Scientific, Hillsboro, OR  
Jenna Valdez | nLight, Portland, OR

Knight Campus Internship Program

Molecular Sensors

Lydia H. Griggs | Thermo Fisher Scientific, Eugene, OR  
Kayla R. Jones | Cascade Chemistry, Eugene, OR  
Bradley J. Lopes | Stowers Institute for Medical Research, Kansas City, MO  
Emma C. Olson | OHSU Knight Cancer Early Detection Advanced Research Center, Portland, OR  
Rex Putnam | Serán Biosciences, Bend, OR  
Andromeda M. Wheeler | Thermo Fisher Scientific, Eugene, OR

Photovoltaic and Semiconductor Device Processing

Shannon S. Fender | Los Alamos National Laboratory, Los Alamos, NM  
Grant S. Hall | MKS Instruments (ESI), Portland, OR  
Julie R. Hempleman | Thermo Fisher Scientific, Hillsboro, OR  
Tiffany M. Nakama-Fukuhara | Thermo Fisher Scientific, Hillsboro, OR  
Taylor C. Petersen | FormFactor, Beaverton, OR
Master of Science Candidates

Knight Campus Internship Program

Polymer Science

Dakotah K. Ballard | Lonza, Bend, OR
Morgan E. Bergstrom | Gates Corporation, Littleton, CO
Aileen Esther Calletano | WR Grace, Albany, OR
Matthew Carman | FormFactor, Beaverton, OR
Auston L. Clemens | Lawrence Livermore National Laboratory, Livermore, CA
Carey J. Cling | Serán Biosciences, Bend, OR
Lauren E. Dornan | Emerald Kalama, Kalama, WA
Pilar Gonzalez | CHEM INC, Fontana, CA
Michelle A. Gross | Lonza, Bend, OR
Kei Inoue | Lonza, Bend, OR
Coleman F. Johnson | Lonza, Bend, OR
Gregory J. Marquino | WR Grace, Albany, OR
Jangaba A. Massaquoi | Intel Corporation, Portland, OR
Lauren C. Naatz | Los Alamos National Laboratory, Los Alamos, NM
Samuel L. Roland | Nike, Portland, OR
Natasha C. Story | Los Alamos National Laboratory, Los Alamos, NM
Dayton M. Towata | WR Grace, Albany, OR
Camille H. Wong | Los Alamos National Laboratory, Los Alamos, NM
Doctoral Candidates

Connor J. Balzer
The Effects of WISH/DIP/SPIN90 and WASP Family Proteins Regulation of Arp2/3 Complex on Actin Network Architecture and Dynamics
Advisor: Professor Bradley Nolen

Andrew P. Carpenter
Molecular Structure and Bonding at Nanoemulsion Surfaces
Advisor: Professor Geraldine Richmond

Matthew M. Cerda
Development of Chemical Tools for Studying Reactive Sulfur Species
Advisor: Professor Michael Pluth

Sean P. Cleary
Fourier Transform Analysis for the Characterization of Mass Heterogeneity of Intact Protein Complexes Using Native Mass Spectrometry
Advisor: Professor James Prell

Curtis E. Colwell
Synthesis of Strained Carbon Nanotube Fragments and a New Tool for Molecular Strain Analysis
Advisor: Professor Ramesh Jasti

Dmitri Leo M. Cordova
Self-Assembly Behavior of Modulated Elemental Reactants
Advisor: Professor David Johnson

Micah Donor
Fundamental and Quantitative Analysis of Gas-Phase Protein Structure and Structural Transitions Using Ion Mobility-Mass Spectrometry
Advisor: Professor James Prell

Justin J. Dressler
Utilizing the Indeno[1,2-b]fluorene Scaffold to Access Stable and Tunable Diradicals
Advisor: Professor Michael Haley
Doctoral Candidates

**Kira E. Egelhofer Ruegger**
*Interfacial Layer-Modified Solar Cell Contacts: Quantifying the Impact of Spiro-OMeTAD and Its Additives on Charge Transfer, Selectivity, Recombination, and Open-Circuit Voltage*

*Advisor: Professor Mark Lonergan*

**Danielle M. Hamann**
*Investigating the Influence of Nanoarchitecture and Atoms/ Unit Area on Constituent Structure and Transport Properties of Nanolaminate Heterostructures*

*Advisor: Professor David Johnson*

**Joseph L. Harman**
*Evolutionary and Mechanistic Studies of the Multifunctional Innate Immune Protein S100A9*

*Advisor: Professor Michael Harms*

**Ryan W. Holly**
*Defining the Molecular Mechanisms that Govern Par-3 Mediated Polarization of the Par-complex*

*Advisor: Professor Kenneth Prehoda*

**Alexis J. Kiessling**
*Time-Dependent Approaches and Their Utility: Dynamical Formulations of Two-Dimensional Electronic Spectroscopy Signals and Electronic Structure Theory*

*Advisor: Professor Jeffrey Cina*

**Erik J. Leonhardt**
*Cycloparaphenylenes as Building Blocks for Self-Assembled Nanotube-like Structures*

*Advisor: Professor Ramesh Jasti*

**Carolyn M. Levinn**
*Expanding the Sulfur Chemical Toolbox: Synthesis and Study of Small Molecule COS Donors and H2S Probes*

*Advisor: Professor Michael Pluth*
Doctoral Candidates

Terri C. Lovell
*Nano hoops: A New Molecular Architecture for Fluorescent Probe Development*
Advisor: Professor Ramesh Jasti

Ngoc Minh Phan
*Synthesis of Disulfide, Thioether, and Hydrocarbon Cyclophanes Using Self-Assembly, Covalent Capture, and Photochemical Sulfur Extrusion*
Advisor: Professor Darren Johnson

William K. Storck
*Characterization of LSD Complex Function, Histone Exchange, and Regulation of a Tryptophan Catabolism Gene Pair in Neurospora crassa*
Advisor: Professor Eric Selker

Jesse W. Wilson
*Native Ion Mobility-Mass Spectrometry Techniques for Characterizing the Structure and Lipid Binding of Bacterial Pore-Forming Toxins*
Advisor: Professor James Prell

Kelly S. Wilson
*Development of a Broadband Single-Shot Transient Absorption Spectrometer*
Advisor: Professor Cathy Wong
UNIVERSITY OF OREGON

Michael H. Schill, President
Patrick C. Phillips, Provost and Senior Vice President
Bruce Blonigen, Tykeson Dean of Arts and Sciences,
College of Arts and Sciences

ALUMNI ASSOCIATION

To learn more about the UO Alumni Association,
visit alumni.uoregon.edu