NEWS OF THE WEEK

OCTOBER 7, 2024

DEPARTMENT'S SEMINAR/EVENTS

- Congratulations to CBE's AIChE student chapter for winning the 2023-2024 Outstanding Student Chapter Award
- Building a better space suit

DEPARTMENT'S SEMINAR/EVENTS

CNS Seminar

Dr. Damian Renggli, MIT

Tuesday, October 8, 20024 at 10:00 AM in 366 CLB

"Interfacial Phenomena in Action: Probing Membrane Fluidity and Developing Nanoemulsions for Plant-Based Foods"

CBE Seminar Series

at 10:00 AM in 102 Colburn Lab (unless otherwise noted)

Dimitris Vlassopoulos, University of Crete

Friday, October 11, 2024

"Exploring the Role of Macromolecular Loops in Tailoring the Properties of Soft Materials"

 Shuwen Yue, Cornell University Friday, October 18, 2024

"Physics-inspired Machine Learning Potentials for Thermodynamic and Dynamic Properties of

Electrolyte Solutions" ° Srikanth Pilla, University of Delaware

"Atoms to Autos: Bridging Fundamental Science with Applied Engineering to Enable Sustainable Technologies Transforming the Mobility Industry"

Friday, November 15, 2024

° Yeongseon Jang, University of Florida

Friday, December 6, 2024

"Engineering Globular Protein Vesicles for Protein-Powered Synthetic Minimal Cells"

OTHER DEPARTMENT EVENTS:

Organic Reactions Lecture

Dr. Aleksandr Zhukoviskly, University of North Carolina at Chapel Hill Wednesday, October 9, 20024 at 4:00 PM in 219 BRL See attached for mor information

CCM Seminar Speaker Series

Dr. Nicholas Rorrer, National Renewable Energy Laboratory

Tuesday, November 12, 20024 at 11:00 AM in 101 Academy Street, Room 106 "Scaling Recyclable and Dynamic Thermosets: From Beaker to Wind blade and Beyond"

JOBS/RECRUITING

Position: Tenure-track Assistant Professor Position, Chemical Engineering

Brief description: The Chemical Engineering Department in the College of Engineering at the University of California, Santa Barbara is seeking applications as part of an external faculty search with a start date of July 1, 2025 or later. At a minimum, applicants must have completed all requirements for a PhD (or equivalent) except the dissertation (or equivalent) in Chemical Engineering or a closely related field.

New Jersey Institute of Technology

Position: Tenure-Track Assistant Professor, Materials Engineering **Brief description**: The Otto H. York Department of Chemical and Materials Engineering at the New

Jersey Institute of Technology invites applications for a faculty position at the rank of Assistant Professor with an expected start date of Fall 2025. We are seeking highly qualified candidates with a Ph.D. degree in Materials Science and Engineering or a closely related field. The successful candidates should have a proven track record of research accomplishments and a commitment to teaching excellence. Preference will be for candidates with expertise in smart metallurgy. Outstanding candidates with expertise in other areas of materials science and engineering will also be considered. Candidates focusing on experimental as well as theoretical and computational research are welcome. Candidates from under-represented groups are especially encouraged to apply.

The University of Tennessee, Knoxville Position: Assistant Professor, Chemical and Biomolecular Engineering

Brief description: The Department of Chemical and Biomolecular Engineering at the University of

Tennessee, Knoxville invites applications for a tenure-track faculty position at the assistant professor level. All areas of chemical and biomolecular engineering are of interest. Successful candidates will demonstrate potential to develop an impactful research program, teach undergraduate and graduate courses, and engage in service to the department, university, and professional community. A Ph.D. or equivalent doctoral-level degree in chemical engineering or a related field is required.

Position: Assistant or Associate Professor, Chemical and Biomolecular Engineering

The University of South Alabama

Brief description: The University of South Alabama invites applications for two positions at the rank

of Assistant or Associate Professor in the Department of Chemical and Biomolecular Engineering in all areas related to chemical, biomolecular, and biomedical engineering. Minimum qualifications include an earned doctorate in Chemical Engineering, Biomolecular Engineering, or a closely related field and evidence of a commitment to teaching and research. For consideration of the rank of Associate Professor, candidates must demonstrate an established record of research and scholarly productivity. Successful candidates must show a commitment to excellence in teaching and research; potential to grow a nationally-competitive research program; exceptional verbal, organizational, and interpersonal skills; and a desire and ability to collaborate effectively across disciplines. Michigan State University

Position: Professor- Tenure, Chemical Engineering and Materials Science

- Brief description: The College of Engineering at Michigan State University (MSU) invites applications for a tenure-system faculty position in the Department of Chemical Engineering and Materials Science (ChEMS). We encourage applications for appointment at the rank of Assistant Professor and will consider exceptional candidates for appointment at the rank of Associate or (Full) Professor. Position: Professor- Tenure, Chemical Engineering and Materials Science
- **Brief description**: The College of Engineering at Michigan State University (MSU) invites applications for multiple tenure-system faculty positions in the Department of Chemical Engineering and Materials Science (ChEMS) in the areas related to Semiconductor Science and Engineering. We encourage applications for appointment at the rank of Assistant Professor and will consider exceptional candidates for appointment at the rank of Associate or (Full) Professor. This position is supported through Michigan State University's Global Impact Initiative, designed to address global grand challenges and national priorities through the creation of over 100 new faculty positions in some of the most promising – and critical – fields of research. University of California, Los Angeles (UCLA)

Position: Tenure-Track Assistant Professor, Chemical and Biomolecular Engineering **Brief description**: Building upon its commitment to foster an inclusive environment and promote the

success of underrepresented students, the Department of Chemical and Biomolecular Engineering at the UCLA Henry Samueli School of Engineering and Applied Science invites applications for a tenuretrack faculty position at the Assistant Professor level. This search is for exceptional faculty candidates in all areas of chemical engineering as well as disciplines related to chemical and biomolecular engineering.

Virginia Tech

Position: Assistant Professor, Chemical Engineering

of both fundamental and applied research.

<u>website</u>, so be sure to check it regularly.

Brief description: The Department of Chemical Engineering at Virginia Tech seeks applications for tenure track faculty position at the rank of Assistant Professor with research focused on macromolecular science and engineering. Research areas that are relevant to advanced/additive manufacturing of soft matter, health and/or medicine are particularly encouraged. We are seeking candidates motivated to contribute to a collegial, interdisciplinary community with a strong tradition

All available positions can be found on the Chemical & Biomolecular Engineering opportunity





ALEKSANDR ZHUKOVISKLY Ph.D
UNIVERISTY OF NORTH CAROLINA
AT CHAPEL HILL
WEDNESDAY
OCTOBER 9TH, 2024 @4:00
219 BRL

ORGANIC REACTIONS LECTURE

"Advancing the logic of polymer synthesis, modification, and degradation"

The polymer backbone is fundamental to the polymer's identity and properties. My seminar will focus on the development of metathesis mechanisms to access heteroatom-rich polymer backbones, new editing tools to transform existing polymer backbones into different ones, and both strategies and tactics to depolymerize commodity polymeric materials into valuable small molecules. Specifically, I will discuss iridium-guanidinate catalyzed ring-opening metathesis of cyclic carbodiimides and the current directions toward diazene metathesis, as well as an array of rearrangement transformations—including Ireland-Claisen and aza-Cope—applied to edit the backbones of polymers. Besides the focus on polymer backbones, retrosynthetic logic applied to polymeric materials will be another common thread woven throughout this seminar, as it is a central element of the research in the Zhukhovitskiy group.

Aleksandr (Alex) V. Zhukhovitskiy was born in Dnipro, Ukraine and immigrated to the US at the age of 11. He completed his undergraduate studies in Chemistry, Mathematics, and the Integrated Science Program at Northwestern University, earning a joint BA/MS degree in Chemistry in 2011. From 2011 till 2016, Alex conducted doctoral research in the laboratory of Professor Jeremiah A. Johnson in the Department of Chemistry at the Massachusetts Institute of Technology, and from 2016 till 2019, carried out postdoctoral research in Professor F. Dean Toste's group in the Department of Chemistry at the University of California, Berkeley. In 2019, Alex started his research group in the Department of Chemistry at the University of North Carolina at Chapel Hill, where he is currently an Assistant Professor and William R. Kenan Jr. Faculty Fellow. Research in the Zhukhovitskiy group (www.zhukogroup.com) is focused on addressing fundamental challenges in polymer chemistry by implementing and advancing organic, inorganic, organometallic, and supramolecular chemistry methods. Applications of this research include polymer sustainability, tissue engineering, and solar energy capture and conversion. For his group's work, Alex has been recognized with the Army Research Office, Air Force Office of Scientific Research, Department of Energy, and National Science Foundation Early Career Awards, as well as the PMSE Early Investigator Award, 3M Non-Tenured Faculty Award and the Thieme Chemistry Journals Award.

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