

Issue 75

Stay informed about what's happening in the nanoHUB community by exploring upcoming events, new resources, and community news.

Upcoming Events

Building a nanoHUB Graphical Interface for Exploring Protein Dynamics and Spectroscopy: the PigmentHunter App

Date and time

Thursday, April 4, 2024; 12:30 - 1:30 p.m. EDT

In this webinar, Chemistry Ph.D. candidate, Safa Ahad, will introduce [PigmentHunter](#), an online nanoHUB tool that enables “point-and-click” Molecular Dynamics (MD)-based simulation of excitonic spectra of chlorophyll proteins based on Protein Data Bank (PDB) structures. PigmentHunter utilizes and illustrates the extent of nanoHUB’s capabilities with application development.

Built using a Jupyter Notebook environment, PigmentHunter uses nanoHUB to link a graphical user interface to a high-performance computing backend. This tool classifies recognized pigments in the protein complexes and runs gas-phase molecular dynamics to build excitonic models and predict their optical spectra. We will discuss how current excitonic theories were implemented into this novel interface as well as its different computational and experimental applications.

[Register here](#)

Purdue University Day of Giving

We are officially one month away from Purdue Day of Giving! nanoHUB was developed through the Network for Computational Nanotechnology (NCN) which is based at Purdue University. As a university that believes in giant leaps and endless possibilities, it's the perfect home for nanoHUB.



Join us Wednesday, April 24, for [#PurdueDayofGiving](#) as we raise funds to support the sustainability of nanoHUB. Every dollar makes a difference and helps us continue providing an open and free platform for computational research, education, and collaboration.

Keep an eye out for our emails and social media posts leading up to April 24. There are multiple ways for you to increase your impact throughout the month and on Purdue Day of Giving, including sharing our emails and social media posts with your networks. We will have a donation URL unique to nanoHUB that goes live on April 24, which we will share at that time. If you'd like to make a donation to nanoHUB before then, [you can do so here](#).

New on nanoHUB

Connecting Holistic Admissions, Diversity and Student Success

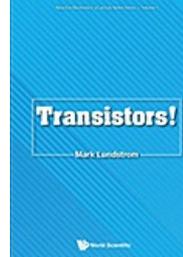
Graduate programs are increasingly adopting holistic admissions as a way to clearly see applicant potential, fairly admit qualified students, and achieve diversity goals. But there's more to holistic admissions than just considering everything an applicant can bring to a program. [In this presentation](#), by Associate Dean for Strategic Initiatives at Georgia State University, [John Augusto](#), learn about the full breadth of practices that promote fairness and mitigate bias. Walk away with strategies that can help you achieve your enrollment goals.



Transistors! Textbook by Mark Lundstrom

Transistors! by founding nanoHUB Director, and Purdue University Chief Semiconductor Officer, Mark Lundstrom, is [now available on nanoHUB](#).

As we begin a new era, in which making transistors smaller will no longer be a major driving force for progress, it's time to look back at what we've learned in transistor research. Today there is a need to convey as simply and clearly as possible the essential physics of the device that makes modern electronics possible.



This volume does just that by rearranging the familiar topics and distilling the most essential among them, while adding the most recent approaches which have become crucial to the discussion. To follow the lectures, readers need only a basic understanding of semiconductor physics. Familiarity with transistors and electronic circuits is helpful, but not assumed.

For more from Mark Lundstrom, check out his [recent talk](#) discussing how semiconductor technology will meet the insatiable appetite that artificial intelligence has for more computing, more memory, and faster communication, in the context of the Chips and Science Act and the R&D programs that are just beginning to roll out.

Micro-Electronics Security Training Center (MEST) Webinar Seminar Series

This course is a compilation of all the webinars offered by the [MEST Center](#). MEST webinars provide comprehensive coverage for professional workforce development of security topics – from devices, architectures, to integrated circuits, to platforms, and to large systems. Webinars are generally a one-hour presentation by a subject matter expert followed by a brief Q&A session.



To gain a better understanding of the learning experience, we strongly encourage you to complete the associated pre and post-learning experience surveys for each webinar.

nanoHUB Community News

Total Solar Eclipse Viewing Event at Indianapolis Motor Speedway (IMS), presented by Purdue University

Just after 3 PM ET on April 8, 2024, Indianapolis will experience darkness for 3 minutes, 44 seconds as the moon completely covers the sun while passing between the Earth and sun.



To celebrate this once-in-a-generation event, IMS will host an exciting day of programming and festivities that will feature Purdue experts, alumni, students and more in Indianapolis, Indiana. Because of its ideal viewing location within the path of totality, IMS is one of three primary partner locations where NASA will stage a live broadcast of its eclipse coverage.

Purdue will also be hosting watch parties on campus. All are welcome to attend the events. Learn more about the total solar eclipse and Purdue events [here](#). Tickets and more information for The Total Solar Eclipse Event at IMS presented by Purdue University are available [here](#).

Do you have a suggestion or nanoHUB success story you'd like to share? Use our [Contact Us form](#) and you may see your submission in a future newsletter!

How can you support nanoHUB? Check out our [donation page](#) to learn more.

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