23. Sarah Bogen (Capital Univ.), Auldon Francis (Univ. of Tennessee), Jessica Robins (Univ. of Tennessee), Annet Westhoek (Univ. of Wisconsin). Agent-based model for Johne’s disease dynamics in a dairy herd.

24. James Dillon (University of Scranton), Weijje Li (Luther College), Andre Perez (Univ. of Texas-El Paso). Modeling protein translation and genome evolution.

25. Sarah Collier (Univ. of Dayton), Olatomiwa Lasebikan (Fisk Univ.), Yanjie Liu (Univ. of Tennessee). Modeling the evolution of male sexual imprinting.


TN-SCORE Posters

27. Steven Bell (Tennessee State Univ.). A spotlight on alternative energy.


29. Kevin Huerto (Univ. of Tennessee). Supramolecular brushes for solid polymer electrolytes.

30. Phillip Johnson (Union Univ.). Polarization curve analysis of vanadium redox flow batteries using current interrupt method.

31. Evan Ornouski (Bethel College). Purification and comparison of H₂ evolution between wild type and mutant hydrogenases of R. eutropha.

32. Megan Schutt (Univ. of Tennessee). Hydrogen ion activity in all-vanadium redox flow battery (VRFB).

33. Dylan Wood (Austin Peay State Univ.) Spectrophotometric studies of vanadium permeation through ionomer membranes.
**Schedule**

From 10:00-11:00 Odd-Numbered Posters Are Presented
From 11:00-12:00 Even-Numbered Posters Are Presented

**CURRENT Posters**

1. Izabela Biedo (Rensselaer Polytechnic Institute). **Calculating locational marginal price and optimal dispatch using a graphical user interface.**

2. Lily Hoang (Univ. of Tennessee). **Cascaded H-bridge multilevel converters.**

3. David Herbert (Rensselaer Polytechnic Institute). **Multi-level cascaded solar inverter simulation.**

4. Yamil E. Rivera (Universidad del Turabo). **Control analysis of photovoltaic power generation and conversion from direct to alternate current.**

5. Jacob Shelton (Univ. of Tennessee), Viktor Dimitrovski (Pellissippi State Community College). **Expanding on smart home system by implementing HVAC control.**


7. Xiandi (Charles) Zhang (Cornell Univ.). **Nature’s effect on the power grid.**

8. Nick Dueber (Univ. California-Berkeley), Trushna Patel (Univ. of Tennessee). **Modeling and analyzing uncertainty in grid behavior.**

9. Shawn Cox (Univ. of Tennessee). **Performance testing of parallelized linear algebra packages.**

10. Millner Callaway (Bearden Middle School). **Inquiry-based unit on forces in nature for Knox County middle school students.**

11. Matthew Milligan (Farragut High School). **Modeling power grid dynamics in high school physics.**

12. Carolynn Clemons (Halls High School). **High school biology I TEAM/inquiry-based renewable resources module.**

13. Joe Foy (West High School). **Bringing power technologies into high school classrooms: first steps.**

14. Frank Wood (L&N STEM Academy). **Scientific research, a vehicle for a Tennessee high school robotics class.**

15. Stephanie Steren-Ruta (West High School), Syeda Faiza Islam (Farragut High School). **Securing the smart grid by intrusion detection algorithm based Bayes’ theorem.**


17. Jacob Walker (Farragut High School). **Compressed Air Energy Storage.**

18. Lawrence Wang (Farragut High School). **Optimization of PHEV battery fast-charging mechanisms.**

19. Emmanuel Gyebison (West High School), Demetrios Bovopoulos (West High School), Jacob Armstrong (West High School). **Analysis of load and calculated available wind power using data from the Bonneville Power Administration.**

**NIMBioS Posters**

20. Frances Hall (Earlham College), Jessica Welch (Univ. of Tennessee), Dawn Woodard (Appalachian State Univ.). **The effects of constituent monoterpenes of Monarda on sporulation and germ tube growth of Beauveria bassiana.**

21. Elena Crosley (Bowdoin College), Arielle Nivens (Maryville College), Ilan Rubin (Cornell Univ.). **Spatially explicit model of Salmonella transmission in grower pigs.**

22. Kelly Hennessey (St. Olaf College), Vedaste Mutambuka (Univ. of Arkansas-Little Rock), Anthony Rhoads (McKendree Univ.). **Estimating rates of HIV recombination during first months post infection.**