



2019 Research Summit of STARS in West Virginia

STARS: Students, Teachers, And ResearcherS

8 Meeting Location: Erikson Alumni Center, West Virginia University

1 Alumni Dr, Morgantown, WV 26505

Barnette Board of Governors Room: **Oral Presentation, Breakfast & Luncheon**

WVU Dean's Suite: Poster, **Breakfast & Luncheon**

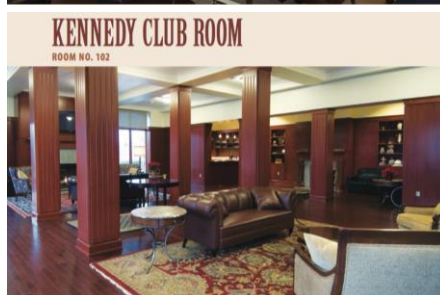
Kennedy Club Room: **Greeting and Networking**



BARNETTE BOARD OF GOVERNOR'S ROOM
ROOM NO. 110-111



WVU DEAN'S SUITE
ROOM NO. 115



KENNEDY CLUB ROOM
ROOM NO. 102





9 Agenda on November 16th

Research Summit of STARs in West Virginia

Time	Activity	Note
8:30 am	Arrival and registration; Name Badge & Brochure of the workshop	
8:30-9:00 am	Continental breakfast; Barnette Board of Governors Room; WVU Dean's Suite	

9.1 Oral Presentations

Oral Presentation	Barnette Board of Governors Room	
9:00-9:10 am	Opening remarks: Prof. Sheena Murphy , Assoc. Vice President for Research Development	WVU-RC
Session 1	WVU-Engineering, Moderator: Prof. Xueyan Song	Statler College
9:10-9:25 am	Prof. Xueyan Song: Research from Fossil Fuel to Renewable Power Generation, Together, We Build A Stronger Energetic Foundation for Future Scientists and Engineers	WVU-MAE
9:25-9:40 am	Prof. Scott Wayne: STEM, Transportation and the Environment	WVU-MAE
9:40-9:55 am	Prof. Jason Gross: Robotics Research at WVU	WVU-MAE
9:55-10:10 am	Prof. Thorsten Wuest: Additive Manufacturing - Unleashing Freedom of Design & Imagination	WVU-IEM
10:10-10:25 am	Prof. Margaret Bennewitz: Tumor and Blood Cell Tracking with Fluorescence Imaging	WVU-CBE
10:25-10:50 am	Coffee Break and networking	
Session 2	WVU-Physics, Moderator: Prof. Cheng Cen	WVU-Physics
10:50-11:05 am	Prof. Cheng Cen: Visualizing the Wonderful Quantum Matters	WVU-Physics
11:05-11:20 am	Prof. Alan Bristow: Photonics: A Path to Light the Future	WVU-Physics
11:20-11:35 am	Prof. Edward Flag: Intro to Quantum Computing	WVU-Physics
11:35-11:50 am	Prof. Yanjun Ma: Thin Film Engineering: From Fundamental Science to Applications	WVU-Physics
11:50-12:05 pm	Prof. Lian Li: Seeing Atoms with A Scanning Tunneling Microscope	WVU-Physics





12:10-1:30 pm Lunch and networking, Barnette Board of Governors Room, WVU Dean's Suite

Session 3

Live Demo of "Atomic Force Microscopy", by Prof. Cheng Cen WVU-Physics

1:10-1:30 pm

Session 4

**Marshall University, WVU-tech, Oak Hill High School,
Moderator: Prof. Ever Barbero**

1:30-1:45 pm **Prof. Michael L. Norton:** It's a Small World Marshall University

1:45-2:00 pm **Prof. Winnie Hsiao-Wen Fu:** Racing and Flying at WVU Tech WVU-Tech

2:10-2:15 pm **Kimberly Cortines:** Fayette County Students Soar in Aerospace Engineering Oak Hill High School

Session 5

Students Session, Moderator: Prof. Ever Barbero

2:15-2:25 **Ellena Gemmen:** Plan and Achieve Career Goals at WVU: Education and Research Centered on Oxide Ceramics for Power Generation WVU-MAE Undergraduate honor student

2:25-2:40 **Andre Fernandes & Geoffroy Gauneau:** From Gas Station to Spacecrafts, The Power of Thermoelectric WVU-MAE, Master student, GRA

2:40-2:50 **Cesar-Octavio Romo-De-La-Cruz:** Oxide Ceramics: From Your Kitchen to Our Labs, The Art and Science of Making Ceramics Pancakes for Power Generation WVU-MAE, Ph.D.

2:50-3:00 **Connor Jack:** Transportation Emissions and Life Cycle Cost Research at WVU WVU-MAE, Master

3:00-3:10 **Ryan Watson:** Robust Algorithms for Robotic Applications WVU-MAE, Ph.D.

3:10-3:20 **Remarks, Interim Dean, Prof. Earl Scime**





9.2 Display and demo throughout the workshop

Technical supports for presentations and demos throughout the workshop by Kelsey Crawford, Joshua Bintrim, Dr. Yun Chen

- **Thermoelectric generator**, Contact is Cesar Romo de la Cruz.
- **Robotics and Drone Videos on Large TV**, Contact is Ryan Watson.
- **EcoCAR**, Contact is: Benton Morris.
- **FASE**, Contact is: Tanner Miller.
- **RC airplane**, WVU-Tech, Contact is Prof. Bernhard Bettig

9.3 Poster Presentation Session

9.5 Poster Judges: High School Teachers

Moderators and lead of Poster Judges:

Mrs. Sandy Hinerman,

Prof. Michael Norton,

Prof. Bernhard Bettig

3:20-4:00 pm

22 posters

by students, and students' groups from WVU, WVU Tech

4:00-4:10 pm

Poster Awards Announcement:

Interim Dean **Prof. Earl Scime**

9.6 Lab tour

4:20-4:30 pm

Travel from Alumni Center to Engineering Science Building

4:30-5:00 pm

Engineering Lab Tours, for those attending for lab tour. Labs include (1) ECO Car Lab. (2). Thermometric Materials and Devices Lab. (3). Transmission electron microscopy lab.

9.7 Workshop Closure

4:10-4:20 pm

Non-Morgantown Invitees Check out

High school teachers and high school students: Please see your STARS cluster coordinators (listed in Section 9.8) to receive the featured WV-STARs items during your





check out.

4:20-4:30 pm

Departure, for those not attending engineering lab tour

5:00 pm

Engineering Lab Tours, for those attending for lab tour; Departure after lab-tour

Hotel and Parking

- ✓ The workshop will provide breakfast, lunch on Saturday, Nov 16th.
- ✓ Parking on Saturday will be free.
- ✓ Hotel accommodations will be provided by the Hampton Inn, Morgantown, which is close to the Erikson Alumni Center. The address of the hotel is copied below.

Hampton Inn Morgantown
1053 Van Voorhis Rd, Morgantown,
WV 26505
Phone: (304) 599-1200

A block of rooms has been reserved for workshop invitees. The reservation code is “WV Workshop”.

