

GRAPES LEADERSHIP



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& Founding Director, UA



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GRAPES Center

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GRAPES.UAPower.Group

Locations

University of Arkansas
University of Wisconsin—Milwaukee
University of South Carolina

GRAPES MEMBERS



Powering Business Worldwide



Entergy



OUR POWER IS IN OUR PEOPLE

WattEV



ITRI
Industrial Technology
Research Institute



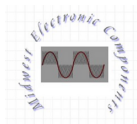
A Finmeccanica Company



Typhoon HIL



Arkansas Public Service Commission



Electric Cooperatives
of Arkansas

PARTNER UNIVERSITIES



UNIVERSITY OF
South Carolina

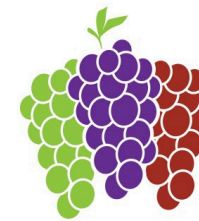


UNIVERSITY OF
ARKANSAS

UNIVERSITY of WISCONSIN



An NSF Industry/University
Cooperative Research Center



GRAPES

GRid-connected Advanced Power Electronic Systems

INVESTING IN GRAPES IS INVESTING IN YOUR FUTURE

Helping GRAPES members
exceed their customer
expectation through advanced
power systems research

RESEARCH AREAS

- Electrical Grid Stability
- Integration and Optimization of
- Energy Sources in Complex
- Distributed Power Systems
- MV Power Conversion
- MV Switchgear
- MV DC Breakers
- Fault Detection and Resiliency
- Battery Charger and UPS
- Resilient Power System Design
- Multi-objective design optimization
of products and components to
lower cost, increase power density
and improve reliability.

MEMBER BENEFITS

(vary based on Member Type)

- Federal Grant Collaboration
- Research Project Access
- Mentoring and Input
- Research Investment Leverage
- Student Access via NSF's INTERN Program
- Collaborative Network with IAB Members
- Technology Transfer Support
- Facility and Faculty Access
- Engagement with Graduate Students
- Networking with GRAPES Members
- Monthly Project Webinars
- Funding Guidance by Members
- No-cost Access to GRAPES IP
- Annual Member Meeting Attendance
- Reduced-cost University Lab Access
- Technical Consultation Availability
- Access to Investigators and Researchers
- Industry Research Funding Pooling
- Technology Roadmapping Assistance
- Presentation Opportunities at GRAPES Events
- Student Recruitment Support

Various membership levels facilitate companies with similar power system and product challenges to pool their R&D funds and expedite technology development collaboratively.



GRAPES MISSION

The Center for **GRid- connected Advanced Power Electronics Systems (GRAPES)** aims to accelerate the adoption and insertion of power electronics into medium voltage grid systems, in order to improve system stability, flexibility, robustness, and economy. Our mission is pursued through:

- Developing new technologies for advanced power electronic systems, including grid-connected distributed energy resources, power steering and routing devices, and intelligent load-side devices.
- Creating software and tools to control embedded and grid-connected power electronics, benefiting the grid and load control.
- Educating engineers to effectively use power electronic technologies, benefiting member companies and grid stability.

MEMBERSHIP VALUE

KNOWLEDGE

- Member Driven Research
- Recruit Students
- Technology Development
- Access to Professors
- Access to Publications
- Access to IP/Patents

NETWORK

- Access to Students
- Network to Company Experts
- Network to Customers
- Joint Proposal Opportunities
- Network to DOD and DOE
- Network To National Labs
- Network to Other Universities