

INSTITUTE FOR ADVANCED LEARNING AND RESEARCH

“FORGING THE FUTURE”

SOUTHERN PIEDMONT TECHNOLOGY COUNCIL
NOVEMBER 10, 2009



IALR VISION

The Institute will enable economic and community transformation in Southern Virginia

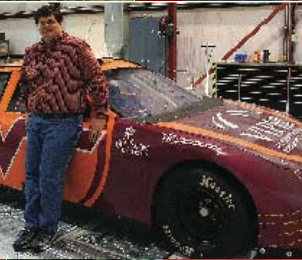
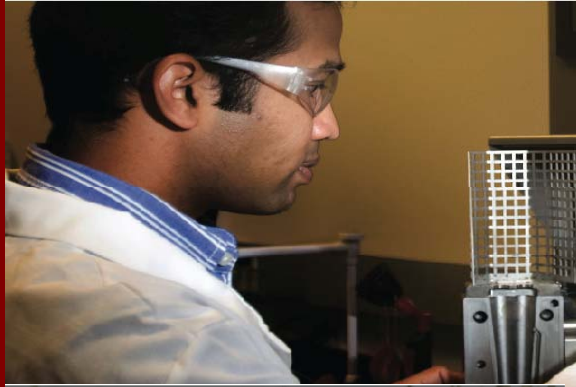
IALR MISSION

The Institute for Advanced Learning and Research develops and attracts technology and talent critical to Southern Virginia's economic prosperity

MAJOR NICHE FOR IALR

RESEARCH TO MARKET

FORGING THE FUTURE



THE INSTITUTE CONFERENCE CENTER



THE INSTITUTE FOR
ADVANCED LEARNING
AND RESEARCH

Education

Academics and Outreach

- Developing seamless educational pathways in strategic areas aligned with the Institute's Research Centers. These pathways will allow students to complete associate, bachelor, and graduate programs while never having to leave the area.
- Offering market driven programs to meet the needs of area citizens and businesses
- Expanding opportunities for life-long learning in an effort to meet individuals' needs for professional growth and development



The Institute for Sustainable and Renewable Resources (ISRR)

The Institute for Sustainable and Renewable Resources (ISRR) is jointly affiliated with the Departments of Horticulture and Forestry at Virginia Polytechnic Institute and State University (Virginia Tech). The ISRR has brought together expertise in plant tissue culture, plant molecular biology, genomics, molecular breeding and information technology to facilitate the development and propagation of novel ornamental, crop and forestry plant varieties.



SUSTAINABLE ENERGY TECHNOLOGY CENTER - SEnTeC



PERFORMANCE ENGINEERING

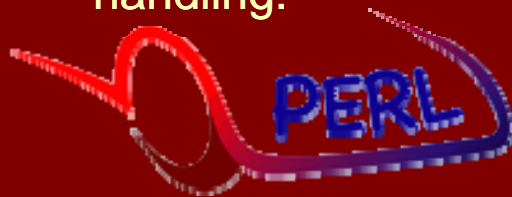
- Bio-Inspired Technology Laboratory
- Computational Multi-Physics Systems Laboratory
- Performance Engineering Laboratory
- Vehicle Terrain Performance Laboratory
- Virginia Institute Performance Engineering Research



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Performance Engineering Research Laboratory (PERL)

The Mission of the PERL is to enhance the performance of sport, military, industrial, and commercial vehicles with the development and application of innovative and adaptive control strategies. Our goal is to advance the state-of-the-art in vehicle suspension design, testing, and optimization with breakthrough innovations for improving vehicle ride and handling.



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Vehicle Terrain Performance Laboratory (VTPL)

The VTPL has adopted a holistic approach toward its research, investigating all aspects of vehicle-terrain interactions, and using a broad range of measurement, analysis, and modeling tools. This approach allows the researchers to broaden their expertise while gaining a deeper understanding of the fundamental issues that are involved in improving vehicle system performance.



Virginia Institute for Performance Engineering and Research (VIPER)

VIPER is a national center for ground vehicle performance testing, engineering & research services specializing in racing, advance technology and performance vehicles. Boasting world-class testing equipment, VIPER delivers cutting-edge performance to its motorsports, military and automotive industry clients.



Commercial Impact of IALR Research Centers

- Commercial Testing
- Technology Transfer
- Research and Development Dollars
- Number of College Educated Residents, Workers, and Visitors
- Private R&D Facilities



“ [IALR is a] growing influence on the local economy and a symbol of the change Danville needs as we transfer from a tobacco and textile community. ”

— Jeremy Stratton,
Director of Economic Development,
City of Danville, VA

