



CHARLOTTE RESEARCH INSTITUTE



University
Portal for Technology;
The Business Partner

Barry Burks, Ph.D.
Associate Director
Charlotte Research Institute





Sponsors of the Fifth International Hydrail Conference

Charlotte Research Institute

University of North Carolina at Charlotte

Hydrogen Economy Advancement Team

Mooresville South Iredell Chamber of Commerce

Appalachian State University Energy Center

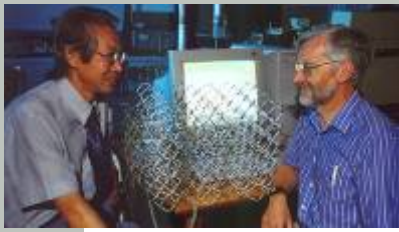
Centralina Council of Governments

Charlotte Area Transit System

*Stan Thompson, Jason Hoyle, Karen Ford, Gail Keene,
Clare Cook Faggart, Lolita Gonzales, Ken Paulus*



CHARLOTTE RESEARCH INSTITUTE



UNC Charlotte





CHARLOTTE RESEARCH INSTITUTE

UNC Charlotte

- 23,300 students
 - 20% graduate students
- 4500 Graduates per year
 - Over 75,000 alumni
- Programs: 89 undergraduate, 61 MS, 18 Ph.D.
- \$40 Million in yearly expense of Research Dollars.
- *UNC Charlotte is the Research University for the Charlotte Region.*





CRI Summary

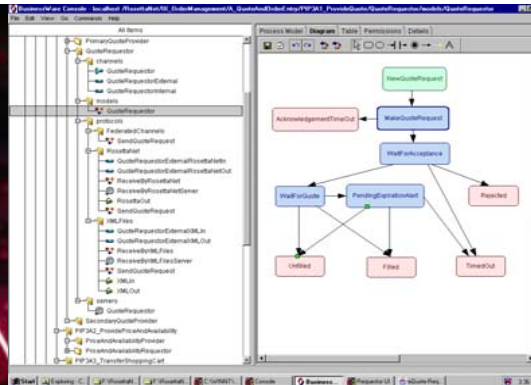
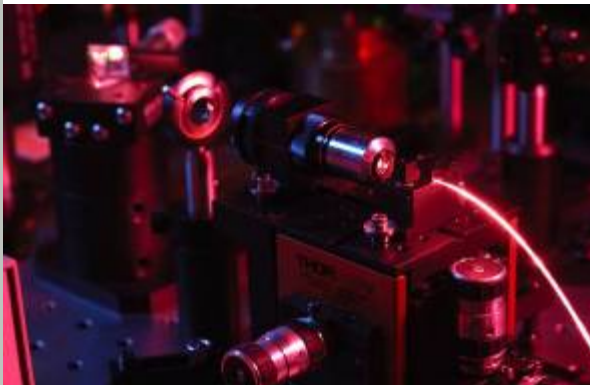
- University
Portal for Science and Engineering
The Business Partner
- Created in 2000 – Strong Business Support
- Mission
 - Connect Research to Business
 - Market Results and Partnerships
 - Access to Millennial Campus





Internationally Known Research Centers

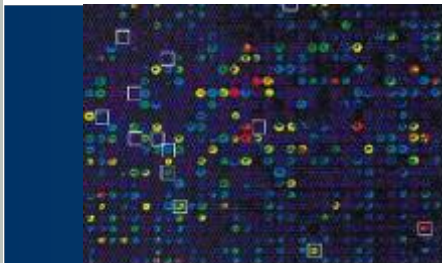
- Optoelectronics
 - *Harnessing the Power of Light*
- eBusiness Technology
 - *Making eBusiness More Efficient, Consumer-friendly, and Secure*
- Precision Metrology
 - *Good Things Come in Small Packages*





Newer Research Initiatives

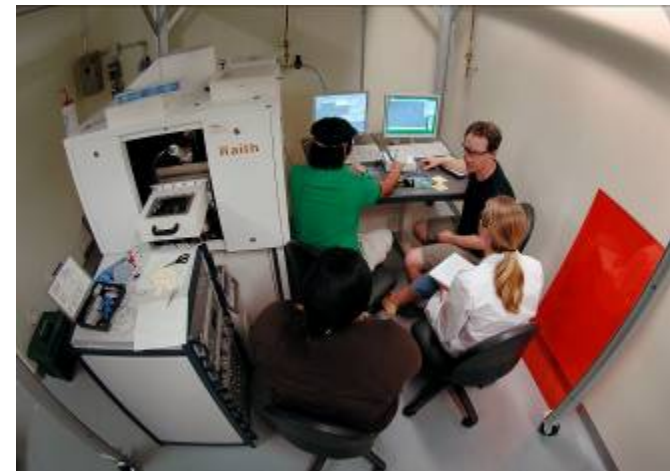
- Energy Production and Infrastructure
- Bioinformatics
- Nanoscale Science
- Biomedical Engineering Systems
- Translational Medical Research
- Motorsports and Automotive Engineering
- Sustainability Initiative





Millennial Campus

- The CRI campus is a geographically defined part of UNC Charlotte known as a Millennial Campus
- State of North Carolina legislation allows partnership activities with private sector partners.
 - Space use
 - Equipment Use
 - Commercial Development





The screenshot shows the homepage of the Charlotte Research Institute website. At the top left is the UNC Charlotte logo and the text "UNC CHARLOTTE CHARLOTTE RESEARCH INSTITUTE". A search bar is located to the right of the logo. Below the search bar is a vertical navigation menu with the following items: HOME, ABOUT CRI, CRI CAMPUS, CRI RESEARCH CENTERS, USER FACILITIES, FUNDING PROGRAMS, PARTNERSHIPS, NEWS & EVENTS, and CONTACT US. The main content area features a large image of a person in silhouette holding a glowing device, with the text "Powered Up To Bring Innovation To Market". Below this is a section titled "technology, innovation & commercialization" with a sub-header "The Charlotte Research Institute, part of the University of North Carolina at Charlotte, helps the region's economy by facilitating partnerships between the University's applied research programs and government agencies, industry and academia." A horizontal bar lists "Research Centers" with sub-sections: PRECISION METROLOGY, OPTOELECTRONICS & OPTICAL COMMUNICATIONS, BUSINESS TECHNOLOGY INSTITUTE, and BIOINFORMATICS. Below this are three columns: "MAP" showing a map of Charlotte with the CRI location marked; "LATEST NEWS" with two news items from 2005: "CRI HOSTS U.S. DEPARTMENT OF EDUCATION" and "NATIONAL INSTRUMENT LABVIEW SOFTWARE"; and "CRI SUCCESSES" with details on "PROJECT: NOVEL LIGHT EMITTING DIODES", including funding from the US Department of Energy, DARPA, and NIST, and partners like GE Research Lab and General Dynamics. The footer contains a navigation bar with links to HOME, ABOUT CRI, CRI CAMPUS, CRI RESEARCH CENTERS, USER FACILITIES, FUNDING PROGRAMS, PARTNERSHIPS, NEWS & EVENTS, and CONTACT US, along with the text "©2004 CHARLOTTE RESEARCH INSTITUTE TERMS & CONDITIONS | PRIVACY POLICY | SITE MAP".



EPIC: Focus Areas

- Power Systems Engineering
 - Fundamentals of power generation and distribution, Quality and reliability of energy systems, [Alternative energy](#)
- Power System Infrastructure
 - Specification, construction, operation, maintenance, and improvement of power generation and distribution infrastructure, Management of input fuel and [waste streams](#)
- Power Plant Engineering
 - Design, integration, operation, optimization, maintenance, renovation and decommissioning of the components and subsystems in a power plant



Welcome to UNC Charlotte

- *The Charlotte Region and UNC Charlotte are Strongly Committed to Growth of the Energy Industry*
- *EPIC is a catalyst to develop the technical workforce, engineering knowledge and focused research services that create safe, reliable and efficient energy*
- *CRI is honored to host the Fifth International Hydrail Conference June 11-12, 2009.*
- *Welcome to UNC Charlotte!*