Defense, Military, and Security

Investing in North Carolina’s research enterprise where it starts.

Designing Organic Electronics

Carbon-based materials inspire the next generation of electronics

Carbon electronics may offer new opportunities to address energy, defense, and manufacturing challenges. Traditional silicon-based materials are rapidly approaching their fundamental limits in terms of miniaturization and capacity. The work of Professor Ade and his colleagues will focus on carbon materials characterization and manufacturing. Investigators envision fundamental science advances that will open the door to revolutionary computing approaches, truly renewable energy sources, and self-sustaining systems such as self-powered greenhouses and integrated solar cell/algae growth ponds.

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