



## **Stimulated Emission from polymers**

We are using the OPO as an excitation source to measure stimulated emission from polymer materials and study optical gain dependence. Conjugated polymers is a new class of electronic and lasing materials in which chemical and morphological structures are a critical factor of determining their electronic and optical properties. My research interest is the interfacial energy structures of nano-heterojunctions and their effects on charge transport and dynamic processes of excited states in polymer materials and devices. The research includes polymer synthesis, device fabrication, and electro-optical spectroscopic characterization.

Solid-State Tunable Cavity Lasing in  
Poly(paraphenylene Vinylene) Derivative Alternating  
Block Co-Polymer  
N.D. Kumar, J.D. Bhawalker, P.N. Prasad, F.E.  
Karasz, and B. Hu  
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