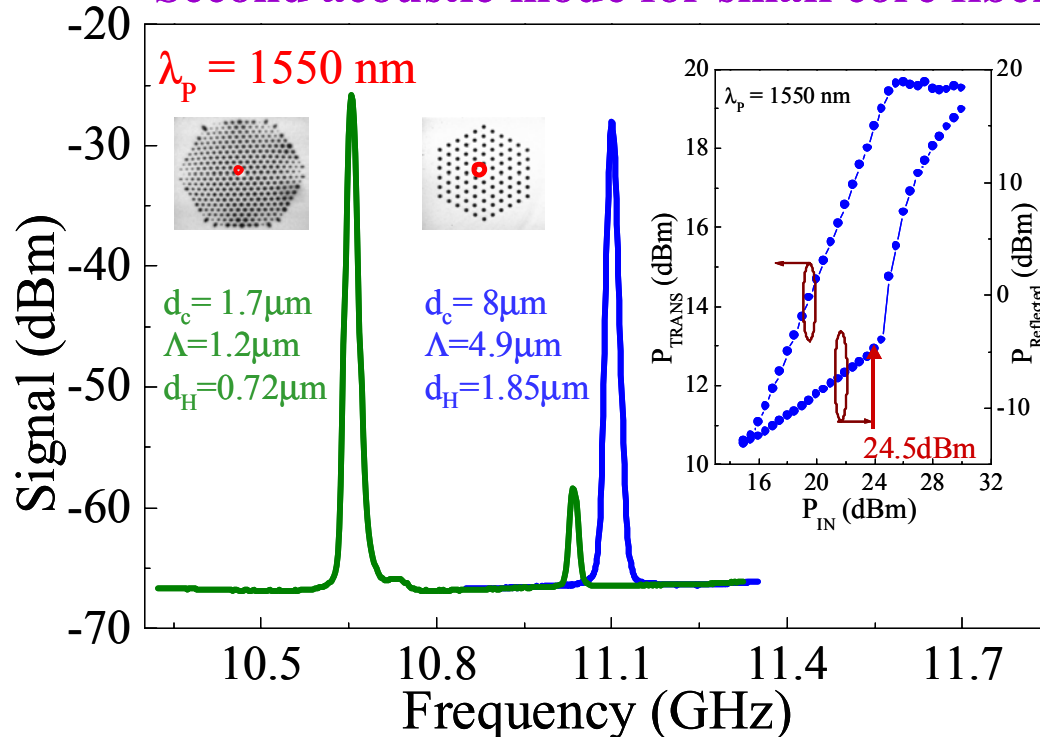


# High SBS Threshold and Efficient Lasing in Photonic Crystal Fibers

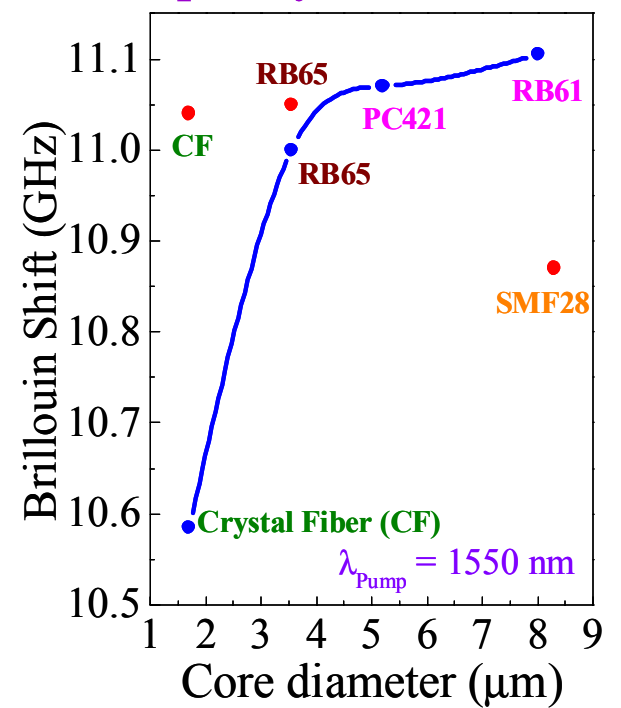
Radha K. Pattnaik and J. Toulouse, Physics Department

## High SBS threshold

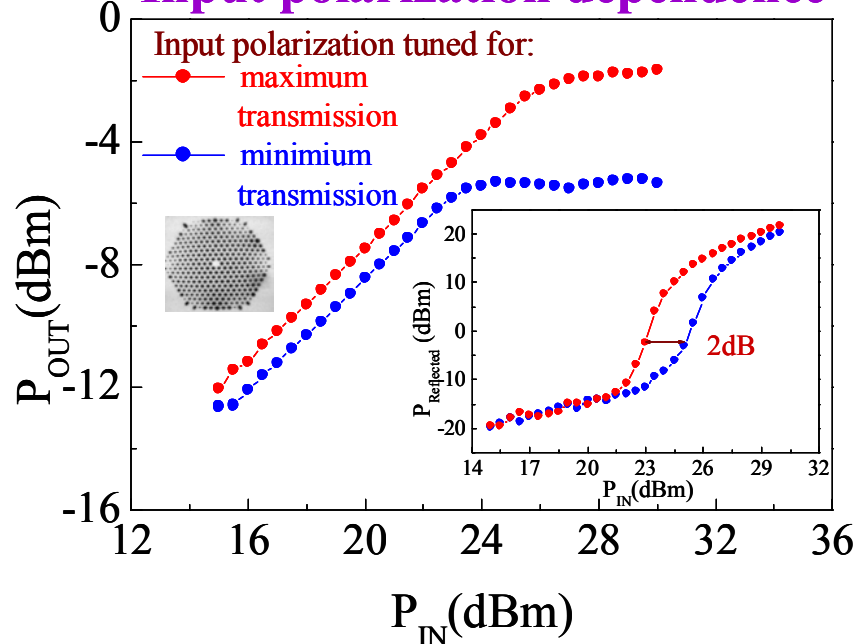
## Second acoustic mode for small core fiber



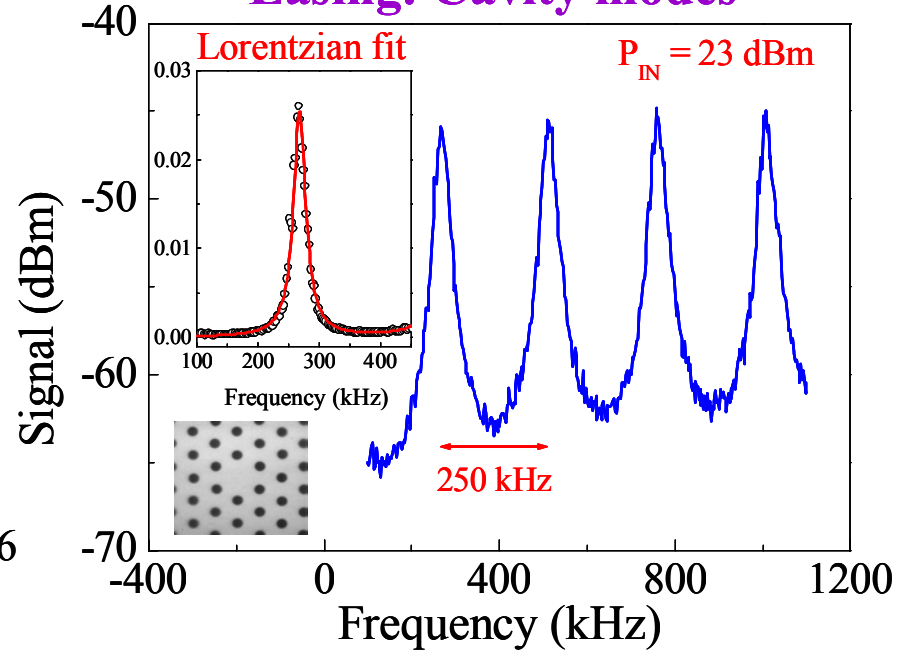
## Frequency shift with core



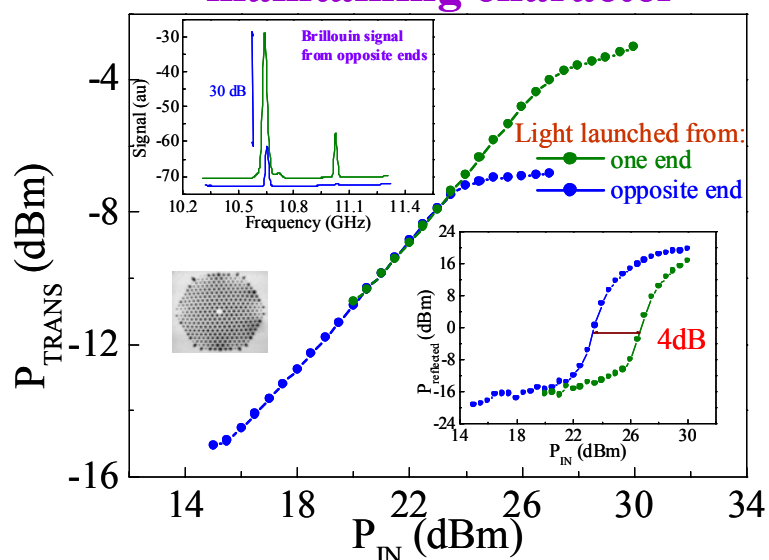
## Input polarization dependence



## Lasing: Cavity modes



## Non uniform polarization maintaining character



## Characteristics of photonic crystal fiber

- Higher SBS threshold.
- Polarization sensitive.
- Efficient confinement for lasing.