



Scatterings in Brief

Northwestern reports high-power laser emission

Manijeh Razeghi's group at Northwestern Univ. recently reported high-power laser emission at $\lambda = 3.4$ mm up to 6.7 W in pulse operation at $T > 80$ K from AlAsSb/InAsSb/InPAsSb/InAs semiconductor laser diodes. The lasers, grown by low pressure metal-organic chemical vapor deposition, exhibit high differential efficiency above 30% and far-field beam divergence narrower than 40° . The group predicts that a much higher optical power could be obtained from the lasers in both cw and pulsed operation.

Lasers based on II-VI semiconductor compounds are currently commercially available in the wavelength range exhibited by Northwestern's laser, but according to Razeghi, the maximum optical power has been well

below 1 mW to date. Lasers operating in the mid-IR region will be key to future applications such as free-space communication, gas spectroscopies, or missile trajectory applications.

Center for Plasma and Photon Processing

In an update to an article on the Thomas Jefferson National Accelerator Facility (*OPN*, August 1998, page 6), the state of Virginia has placed added emphasis on the importance of photonics research with its new Center for Plasma and Photon Processing. Virginia's Secretary of Commerce and Trade, Barry E. DuVal, along with the state's Center for Innovative Technology, has announced that the Applied Research Center (part of the Jefferson Center for Research *Continued on next page*