PHASE CONJUGATION BY STIMULATED SCATTERING
FROM ORGANIC LIQUIDS

A. M. Azzeer*, V. Masilamani, M. S. Salhi, and A. Al-Dwayyan

Department of Physics, College of Science
King Saud University
Riyadh, Saudi Arabia

ABSTRACT

This paper reports the phase conjugation (PC) or wave front reversal obtained under stimulated scattering of a frequency-doubled Nd:YAG laser from 30 organic liquids of different functional group. Some of them produce PC by Stimulated Brillouin Scattering (SBS) and some by Stimulated Raman Scattering (SRS). The back scattered Raman line is stronger than the back-scattered pump line in certain liquids and not so in others.