SAIP2010



Contribution ID: 293

Type: Poster

Modelling of the reaction mechanism during laser assisted conversion of methane and carbon dioxide

The direct excitation of CO2 and CH4 using a nanosecond pulsed laser was investigated for chemical reaction activation. Results from this study show that carbon dioxide and methane can be activated successfully using nanosecond laser pulses at 355 nm. The results collected from the various experiments were used to create a model of the possible reaction mechanisms using Molecular Modelling.

Primary author: Mr KOTZE, FJ (North-West University)

Co-authors: Dr DU PLESSIS, A (Centre for Scientific and Industrial Research; North-West University); Prof. STRYDOM, CA (North-West University); Dr LACHMAN, G (Nort-West University); Dr BOTHA, L (Centre for Scientific and Industrial Research)

Presenter: Mr KOTZE, FJ (North-West University)

Track Classification: Track C - Lasers, Optics and Spectroscopy