

Abstract Submitted

for the Annual Meeting of the
Div. of At., Mol. and Opt. Physics

16-19 May, 1993

Meeting Date

Suggested title of session
in which paper should be placed
Electron Collisions

UV Fluorescence of Buckminsterfullerenes, S. Trajmar,
S. Wang, K. Man, Jet Propulsion Laboratory, California
Institute of Technology and M.A. Khakoo, Department of
Physics, California State University. Electron-impact induced
UV fluorescence was observed from gaseous pure C₆₀ and C₇₀
buckminsterfullerenes. The emission appears in the 275 to 340
nm wavelength region and is shown to originate from radiative
decay of the ionic species C₆₀⁺ and C₇₀⁺. Emission spectra at
impact energies ranging from 20 to 100 eV and onset values
and excitation functions for the five emission features appearing
in the emission spectra will be presented. The emission
characteristics of the two species are, in general, very similar
but there are differences in the relative emission intensities and
their dependence on impact energy.

Sandor Trajmar!

Signature of AIP Member

- (X) Prefer Poster Session
() Prefer Standard Session
() No preference

Same name typewritten
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