

Spectroscopy, handmaiden to fullerene studies
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Optical and mass spectroscopic techniques have proved to be essential in fullerene studies. These will be discussed and illustrated in the following contexts:

- 1) Astrophysics: the search for fullerenes in interstellar, circumstellar and meteoritic media,
- 2) Visible and UV absorption and emission optical spectroscopies and Raman and infrared spectroscopies as probes of the structure of fullerenes and their derivatives,
- 3) Fullerene spectroscopies as probes of condensed phase environments and solid state properties,
- 4) Excited states and transients: spectroscopy applied to photophysical and photochemical reaction studies of fullerenes and their derivatives,
- 5) The involvement of spectroscopy in biological and medical applications of fullerenes.

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