

Comment on “Surface enhanced Raman scattering of 2-cyanopyridine adsorbed on silver colloidal particles”

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Shaikh *et al* [1] have reported the SERS of 2-cyanopyridine and compared the SERS frequencies with those observed in the normal Raman spectrum. The pyridine molecule belongs to the C_{2v} point group. A substitution of a nitrile ($-C=N$) group on position 2 lowers the symmetry from C_{2v} to C_s as the authors of the above article have also specified the species (table 1 of Shaikh *et al* [1]). Unfortunately, however, in the discussion para (page 159) the authors state that “the C–C out-of-plane band at 726 cm^{-1} is active only in IR” and hence its appearance in SERC violates the selection rules. It may be noted here that only intensity alterations occur in the present case, as the modes under both the species a' and a'' are IR and Raman active.

Reference

- [1] E A Shaikh, Y Kumar and B N Khanna, *Pramana – J. Phys.* **39**, 157 (1992)