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SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	Physical Review & Research International
Manuscript Number:	MS: 2012 PRRI 2808
Title of the Manuscript:	Spectroscopic properties of HALS doped polycarbonate by fluorescence spectroscopy

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)

The paper was revised according to suggestion of reviewer so it is now possible to reproduce the experiments. However, the main problems of the paper namely the observation of fluorescence of the thermally and mechanically degraded PC and prodegradation effect of known long-term (light) stabilizers of type of HALS at aging of polycarbonate were not treated completely.

The intensity of fluorescence of degraded PC is not compared with any fluorescence standard and the pro-degradation effect is ascribed to the not well defined destruction products of HALS due to processing (possible quinones).

O the other hand, the data related to the processing of the PC and proper choice of long term stabilizer might be of considerable interest to the processing community of PC and therefore this paper is worth of publishing.

Authors' response to final evaluator's comments

Discussing and solving a problem in one article is almost impossible. There are a lot of topics which are under investigation and discussion since tenth of years, and are still missing explicit answers. exactly is the problem here, we got the HALS material for stabilisation, and we planned to study the stabilization, but we found that it is under certain conditions which recommended by the manufacturer, this HALS is lead to degradation of polymers instead of protection or stabilize against UV. I think such information is worth to be published. Of course this was not the only experiment we performed. Tinuvin 770 and Tinuvin 123 were used in other polymers or blend; surprisingly we got the same results even when the polymers processed very gently. We tried to give some explanation for this effect and to find out what are the direct reasons for this opposite interaction. For sure this is not the end of discussion and it will be a matter for further investigation even by other authors. Thank you for accepting the article for publication in your journal.

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