Homi Bhabha National Institute

Recommendations of the Viva Voce Committee

As members of the Viva Voce Committee, we certify that we have read the dissertation prepared by Apurav Guleria entitled "Radiation chemical studies of microheterogeneous media and their role in the templated synthesis of CdSe nanoparticles with tuned morphology and optical properties" and recommend that it may be accepted as fulfilling the thesis requirement for the award of Degree of Doctor of Philosophy.

Chairman – Dr. D. K. Palit

Guide/Convener – Dr. Soumyakanti Adhikari

External Examiner - Dr. Anil Kumar

Member 1 – Dr. D. B. Naik

Member 1 – Dr. S. Kapoor

Member 1 – Dr. P. A. Hassan

External Member – Prof. A. Datta

Date: 19.10.2015

Final approval and acceptance of this thesis is contingent upon the candidate’s submission of the final copies of the thesis to HBNI.

I/We hereby certify that I/we have read this thesis prepared under my/our direction and recommend that it may be accepted as fulfilling the thesis requirement.

Date: October 19, 2015

Place: HBNI, Mumbai

Dr. Soumyakanti Adhikari

(Guide)
Government of India
Bhabha Atomic Research Centre
Radiation & Photochemistry Division

Ref: HBNI/BARC/Ph.D./CHEM01201104001

October 19, 2015

Sub: Certification regarding the incorporation of corrections suggested by the examiners for the Ph.D thesis of Mr. Apurav Guleria in Chemical Sciences, HBNI.

This is to certify that Mr. Apurav Guleria has incorporated all the necessary suggestions/corrections made by the external examiners. The summary of these changes are provided on separate sheets.

[Signature]
Dr. Soumyakanti Adhikari
(Ph.D. advisor of Apurav Guleria)

Dean
HBNI
Suggestions of Reviewer_1 (Prof. Anil Kumar, IIT Roorkee, Uttarakhand)

Comment:

The overall presentation of thesis is very good except some minor corrections in the description of figures (Figs. 6.11, 6.19, 6.20 and 6.22) and Scheme 6.2 (uppermost R.H.S. image); scale bar needs to be shown in Fig. 6.18 and there are some minor typographical errors (marked on the thesis). These errors of minor nature can be rectified at the time of viva-voce examination. Interpretation of data obtained is in general satisfactory.

Reply:

As asked by the reviewer, the corrections have been made in the respective places in revised thesis which are mentioned below:

Fig.6.11: Page no. 216, Scale bar dimensions has been provided in the caption
Fig.6.19: Page no. 230, Scale bar dimensions has been provided in the caption
Fig.6.20: Page no. 231, Scale bar dimensions has been provided in the caption
Fig.6.22: Page no. 233, Scale bar dimensions has been provided in the caption
Scheme 6.2: Page no.234, Caption of the R.H.S image has been modified
Fig.6.18: Page no. 227, Scale bar dimensions has been provided in the caption

All the typographical errors have been rectified in the revised thesis as asked by the Reviewer and the corrections have been mentioned below along with the page numbers:

Page no. 50: pseudo-first-order
Page no. 104: Stokes shift
Page no. 203: The word ‘refined’ has been replaced by ‘resolved’
Page no. 240: Space between numerical figure and cm\(^{-1}\) has been provided
Page no. 241: The word ‘maneuver’ has been replaced by ‘manipulate’
Page no. 254: Space between words ‘above mentioned’ has been provided; Syntax mistakes (such as comma) has been rectified
Page no. 275: The word ‘condition’ has been replaced by ‘conditions’
Page no. 285: Syntax mistakes (such as comma) has been rectified