List of Corrections

1. All the grammatical, typographical and spelling mistakes are attended. The rules of Indian English, a modified version of British English, have been followed for the spelling in the thesis.

2. Both soft and hard copies of the 1:25000 scale map have been attached in the thesis volume.

3. Proper care has been taken to explain the accuracy of the geochemical analysis. Two new tables viz. Table 2.09 and 2.10 have been incorporated in the corrected copy.

4. Details of the sample preparation and other technical aspects regarding this have been added in the Section 2.2.2 (p.17) and Section 2.6.2 (p.42)

5. Higher concentration of SiO$_2$ due to secondary enrichment is a common feature of Archaean province which is suggested by the examiner, has now been stated clearly which is an evidence of hydrothermal activity in different litho-members of the succession.

6. The examiner has suggested that the geochemistry of Archaean volcanics cannot be used alone for reconstruction of tectonic setting, however, the present candidate does not agree with the suggestion on the basis of the following statement: The recent studies of Li et al. (2005, 2006), Zhou et al. (2004), Polat (2009, 2013), Verma et al. (2006) and others have shown clearly with high confidence level that geochemical characteristics of recent igneous suits of varied tectonic settings act as dependable tools to decipher the magma-tectonic settings of the ancient magmatic suits preserved in different orogenic belts world over. The works of Agrawal et al. (2004, 2008) and El-Bialy and Hassen (2012) also lend strong support in using the geochemistry of the magma-tectonic models of the present settings to interpret older analogues. On the strength of the above mentioned works, in the present work geochemical analysis and interpretation on magma-
tectonic setting of the volcanic suit of the Gandhamardan Hill and adjacent areas have been carried out.

7. According to the learned examiner “Ocean island basalts (OIB) of Archaean age are rarely preserved”. It is true for the present-day basins, however, older OIBs have been recognized in the number of Precambrian fold belts and greenstone belts (see Komiya et al., 2004; Puchtel et al., 1999; Polat and Kerrich, 2006).

8. The information of Bayan Obo has been deleted since it has no relevance with the present study as suggested by the learned examiner.

9. The term ‘supracrustal’ has been replaced by ‘succession’ to resolve the confusion and necessary changes have been carried out in the reconstructed model.
Geological Map of the Gandhamardan Hill Area

- Ferruginous Shale
- Sandstone
- Iron Ore
- BIF
- Tuff
- Basic Lava
- Metagabbro and Epidiorite
- Metadolerite
- Younger Granite
- Singhbum Granite
- Strike and Dip of Bedding
- Foliation/Schistosity
- Strike and Dip of Joint
- Strike and dip of cleavage
- Trace of Fault
- Structural Discontinuity
- Motorable Road

Legend:
- Ferruginous Shale
- Sandstone
- Iron Ore
- BIF
- Tuff
- Basic Lava
- Metagabbro and Epidiorite
- Metadolerite
- Younger Granite
- Singhbum Granite
- Strike and Dip of Bedding
- Foliation/Schistosity
- Strike and Dip of Joint
- Strike and dip of cleavage
- Trace of Fault
- Structural Discontinuity
- Motorable Road