

DATA SHEET FOR RESEARCH SCHOLARS



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8. Contact Number: (M)9437876856
9. Funding Agency: DST-INSPIRE
10. Date of commencement of Fellowship: 29th July 2016
11. Period of Fellowship: 5 years
12. Title of the Research Work: Hyperspectral Behaviour of the Iron-oxide ore minerals of Odisha- A Remote sensing Approach
13. Name of the Guide: Dr. Jagadish Kumar Tripathy
14. Registration Number: 196/2016/Earth Sc
15. A Brief Abstract of your Research Work (Within 200 words):

India is known for having a bounty of mineral resources which are required for the economic and industrial development of a country. Odisha is not far off so far as its mineral resources are concerned. Ore minerals such as hematite, magnetite, pyrolusite, psilomelane, chromite etc are richly available in Odisha. The spectral behaviour of these ore minerals can go a long way not only in identifying the individual minerals but also be helpful in analysing the properties of the combining metals in the same ore mineral body. Iron bearing oxide ore minerals such as magnetite and hematite from different places of Odisha are collected for spectral behaviour test by spectro radiometers working in the hyperspectral regions and hyperspectral data from sensors such as HYPERION and ASTER corresponding to those mineralised regions will be collected and verified with the previously recorded data from the laboratory. Comparison between these two data sets collected from two different sources will shed light on the reflecting behaviour of metal oxides in the field conditions as well as in laboratory conditions. The data recorded in the laboratory conditions will be helpful in bringing out special corrections on the data recorded in the field conditions. That particular correction is the standard result which can be taken as a reference and can be applied to any set up data those are collected from the sensors in the field conditions.

16. Status of Research Work:

- (a) Writing the synopsis ☐
- (b) Review of Literature ☐

- (c) Data Collection ☒
- (d) Data Analysis ☐
- (e) Writing the draft thesis ☐

17. Do you have your profile in the following research networks?

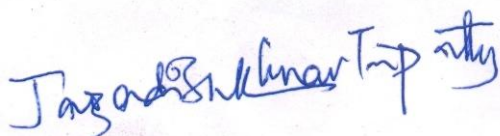
- (a) Google Scholar
- (b) Research Gate ☒
- (c) Academia

18. Do you access the following e-resources subscribed by the university

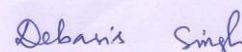
- (a) E-Sodh Sindhu from INFLIBNET ☐
- (b) ProQuest ☒

19. Number of Papers published in referred journals with ISSN: No

20. Mention any TWO of your best publications in APA standard: No



Countersigned by the Research Supervisor



Signature of the Research Scholar