

DATA SHEET FOR RESEARCH SCHOLAR



1. Name of the Scholar: **Satyabrata Sahoo**
2. Gender: Male
3. Department: Earth Sciences
4. Designation: JRF ☒ SRF ☐ Any other ☐
5. Permanent Address: AT-Tentulia ,P.o –Bangurigan P.S-Kakatpur Dist –Puri ,State –Odisha
pin-752118
6. Address for Communication: Department of Earth Sciences Sambalpur university Burla-
768019
7. Email ID: satya123geo@gmail.com (personal)
Satyabrata@suniv.ac.in (official)
8. Contact Number: (M)9777962449
9. Funding Agency: RGNF (UGC)
10. Date of commencement of Fellowship: 16/1/2016
11. Period of Fellowship: Five year
12. Title of the Research Work: **Sea water intrusion studies in the coastal aquifers of
Krushnaprasad block Puri district of Odisha,**
13. Name of the Guide/~~Co-Guide~~: **Dr. Jagadish Kumar Tripathy**
14. Registration Number: **195/2016/Earth sciences**
15. A Brief Abstract of your Research Work (Within 200 words):

The central objective of this piece of work is to delineate the aquifers in krushnaprasad block which are thought to be intruded by sea water and to find out the limit up to which such intrusion has occurred. The study also concentrates on its usefulness for various purposes such as drinking, irrigation, thermoelectric power generation, public supply, industrial uses, livestock etc. Now-a-days remote sensing data has proved very useful in finding our various parameters of ground water, which can indicate its quality in space & time. Satellite data from high resolution sensors can be used for preparation of various thematic maps such as geomorphological maps, hydrological maps, structural, lineament density map, drainage density, land use/land cover map etc. These parameters are fed into a GIS environment which ultimately gives groundwater prospecting map.

In my work, special efforts will be taken to collect sufficient numbers of samples, around 100, both in pre-monsoon & post monsoon periods. Thus samples will be collected from an area of 200 Sq. Kms. encompassing areas closed to the east in the Krushnaprasad block. Some of the parameters such as Temperature & pH will be measured at the well head

itself by digital kits. Chemical parameters such as TDS and ionic concentrations will be measured in the laboratory by Flame Photometer, Spectrophotometer and volumetric/titration methods. Physically, the distribution of groundwater in space can be visualized by a Panel Diagram for which litho log data will be collected from govt. agencies. The incidence of groundwater with sporadic occurrences of saline water intrusion can also be known by sounding data. The Final products of this piece of work will be utilized for the greater benefit of the human society. The Hydro-chemical data will indicate as to whether groundwater from a particular region will be useful for a particular purpose. If needed, ways and means will also be planned according to the intensity of the problem.

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

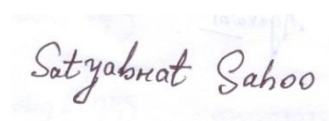
- (a) E-Sodh Sindhu from INFLIBNET
- (b) ProQuest ✓

19. Number of Papers published in referred journals with ISSN:

20. Mention any TWO of your best publications in APA standard:



Countersigned by the Research Supervisor



Signature of the Research Scholar