

# An integrated approach to alluvial aquifer characterisation and groundwater data management

18-19 March 2016  
India International Centre, Delhi



## Expected Audience (by invitation or nomination)

A maximum of 25 scientists from CGWB and state groundwater boards involved in monitoring, measurement, and assessment of alluvial aquifers and groundwater resources in northwestern India.

## The Venue

India International Centre (Conference Room 1)  
40, Max Mueller Marg  
Delhi 110003  
INDIA

## Aims

- To provide training and hands-on practical experience in new approaches to alluvial aquifer mapping and characterisation
- To support and enhance aquifer mapping and management via NAQUIM, by enhancing the technical expertise of CGWB
- To illustrate novel uses of existing CGWB and state groundwater data sets
- To make recommendations for future CGWB and state groundwater monitoring, data collection, and data archiving



## Contacts

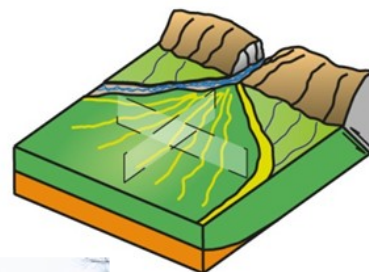
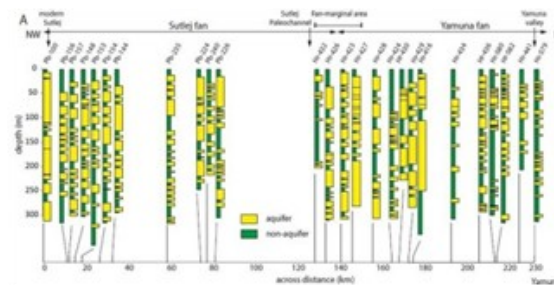
**Prof Rajiv Sinha**  
IIT Kanpur, INDIA  
[rsinha@iitk.ac.in](mailto:rsinha@iitk.ac.in)

**Prof Alexander Densmore**  
Durham University, UK  
[a.l.densmore@dur.ac.uk](mailto:a.l.densmore@dur.ac.uk)

## Schedule

## The Programme

- Integration, cleaning, and analysis of water-level data from multiple sources
- Geomorphology of alluvial aquifer systems, including analysis of satellite and topographic data
- Alluvial stratigraphy and quantitative aquifer characterisation
- Stable isotopic analysis of groundwater
- Predictive modelling of aquifer characteristics



## The Project

Funded by the Indian Ministry of Earth Sciences and the Natural Environment Research Council (UK), our project applies a wide range of approaches to develop an integrated view of the alluvial aquifer systems in northwestern India, and a regional-scale conceptual framework with which to understand both past decline and future evolu-



### 18 March

- 0930-1000 Tea
- 1000-1030 Inauguration, scope and need of the workshop, address by the chief guest
- 1030-1100 Introduction, logistics, schedule, and aims
- 1100-1230 Data integration and management, with a focus on water level data from northwestern India
- 1230-1330 Lunch
- 1330-1530 Geomorphology of aquifer systems: integration of satellite and topographic data to characterise large-scale aquifer patterns
- 1530-1600 Tea
- 1600-1730 Aquifer-body analysis and predictive modelling
- 1930- Dinner

### 19 March

- 0900-0915 Tea
- 0915-0930 Data visualisation
- 0930-1230 Alluvial stratigraphy: building the aquifer system
- 1230-1330 Lunch
- 1330-1500 Stable isotopic analysis of groundwater in northwestern India
- 1500-1530 Tea
- 1530-1630 Participant reflection on workshop outcomes, questionnaires, and drafting of recommendations (in small groups)
- 1630-1730 Summary and open discussion: groups share their recommendations
- 1730-1745 Closing remarks