

We invite you to the Post-Conference Workshop: iMOD groundwater model of Ganga basin.

### Faculty

The workshop is organized by Deltares, an independent institute for applied research in the field of water and subsurface based in Delft, The Netherlands, and National Institute of Hydrology, Roorkee.

Training during the workshop would be given by international modelling experts, among others Frans Roelofsen, MSc ([frans.roelofsen@deltares.nl](mailto:frans.roelofsen@deltares.nl)) Hydrogeologist, advisor/researcher, iMOD developer and iMOD trainer and responsible for the Ganga groundwater model within the World Bank project on Strategic Basin Planning for Ganga River Basin in India.

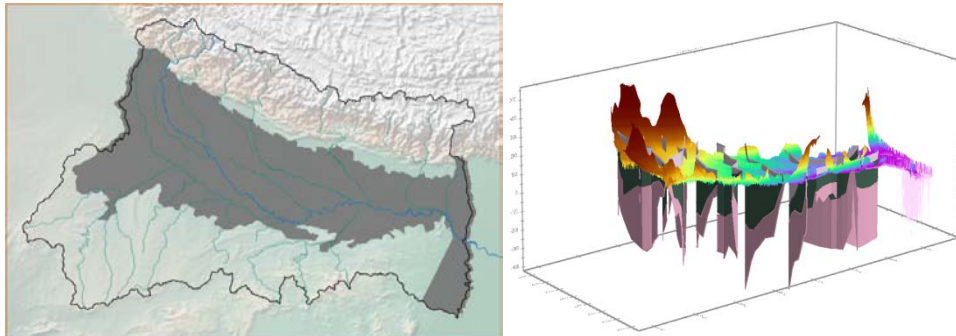


Figure 1a) the Ganga groundwater model area in iMOD (grey) within the Ganga Basin (black polygon) and b) a 3D model of the Ganga Aquifer system

### Purpose of the workshop

The purpose of this workshop is to provide an introduction to (i) the free and open-source Deltares groundwater and geo-modelling tool iMOD, which is an easy to use Graphical User Interface for Deltares-version of MODFLOW and (ii) the Ganga groundwater model developed using iMOD. To achieve this, the workshop is a combination of plenary- and hands-on sessions. A tutorial will guide the participant step-by-step in viewing and editing the Ganga model input, do groundwater flow calculations and display the results. At the end of this workshop, participants will have a running version of iMOD on their laptop, understand the main components of the Ganga model, have basic skills in operating iMOD and have sufficient information on how to continue use iMOD after the workshop.

### Workshop program

Morning – part 1 9:30 – 10:45 am	Welcome, introduction Plenary Session: Introduction groundwater flow modelling Plenary Session: iMOD introduction
Morning – part 2 11 am – 1 pm	Tutorial: iMOD getting started Plenary Session: Introduction to the Ganga groundwater model
1 - 2 pm	Lunch break
Afternoon – part 1 2 – 3:30 pm	Plenary Session: Introduction modelling with iMOD Tutorial: analyze, edit and run the Ganga groundwater model
Afternoon – part 2 3:45 – 4:30 pm	Plenary Session: discussion Closing session

## Who should attend

The workshop is open for all hydrogeologists interested in numerical groundwater modeling and learning about the Ganga Basin groundwater model.

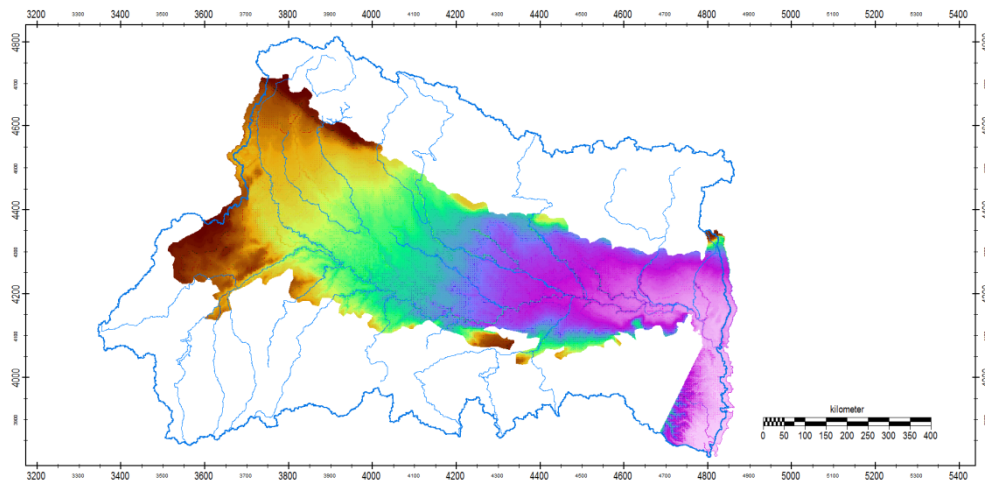


Figure 2 Calculated groundwater head of the Ganga Basin (1km scale)

## Preparation by participants prior to the workshop

iMOD is open source software with the most recent **iMOD executable available free of charge**. To work with iMOD and get hands-on experience on using the groundwater modeling software, **users should bring their own laptops to the workshop**.

- Your laptop should have following minimum configuration:
  - o Windows version installed, both a 32- or 64-bits system is OK
  - o 512 MB internal memory (2,045MB recommended) and 200 MB available on hard disk
  - o PDF reader installed
  - o A graphics adapter with 32MB video memory and screen resolution of 800-600 (minimum)
  - o A graphical card that supports OpenGL such as an ATI Radeon HD or NVIDIA graphical card is necessary to use the 3D rendering.
- Please register on the iMOD website to get the free iMOD executable and tutorials (prior to joining the workshop), as follows:
  - o Go to [oss.deltares.nl](http://oss.deltares.nl),
  - o select Community "iMOD"
  - o from page "Get Started" submit the iMOD request form
  - o You will receive an e-mail containing download specifications and installation instructions
  - o Install iMOD on your laptop (no administrator rights necessary)

## Registration

Conference delegates should register for the workshop by sending an email to [igwc2017@gmail.com](mailto:igwc2017@gmail.com) with the subject title 'Registration for Groundwater Modeling Workshop' **before November 15, 2017**. The email should contain your name, designation, address, email id and amount of registration fee paid for the conference.

## Workshop fee

**Participation in the groundwater modeling workshop is open only for delegates who have paid the conference registration fee. No additional fee shall be charged for the workshop.**