

## TOPIC: HOW OLD IS GROUNDWATER, AND WHY DO WE WANT TO KNOW?

Presented by: Professor Peter Cook (Flinders University)

**Time:** 12:00 pm for 12:30pm start – until 1:30pm approx.  
**Date:** Tuesday 20 February 2018  
**Where:** Pilgrim Hall (Pilgrim Uniting Church) – 12 Flinders Street Adelaide

### Synopsis:

The measurement of several tracer compounds in groundwater collectively allows us to estimate the age since water entered the saturated zone, over timescales between a few days and 20,000 years. In resource water resource management, groundwater age is often used for estimating rates of groundwater recharge, horizontal groundwater velocities, and rates of groundwater exchange with rivers and lakes.

Recent studies have combined measurements of groundwater age and contaminant concentrations to reconstruct the history of contaminant release to aquifers and to infer the susceptibility of groundwater wells to contamination. This presentation will discuss how we measure groundwater age, its uses and limitations, as well as analysis costs.

### Presenter's Bio:

Professor Cook is a Professorial Research Fellow at Flinders University. Prior to his current position, he spent 21 years with CSIRO (ultimately as a Senior Principal Research Scientist), and 5 years as the Deputy Director of the National Centre for Groundwater Research and Training. He has worked on issues related to groundwater sustainability throughout Australia and overseas, with particular focus on the estimation of aquifer recharge, quantification of groundwater discharge to streams, prediction of stream and groundwater salinisation rates, and assessment of groundwater dependent ecosystems.

## REGISTRATION

Registration for all ACLCA SA events is essential at: <http://www.aclca.org.au/sa-events>

This workshop is free and open to attend for members and invited guests only.

Join us for a light lunch from 12:00 to 12.30 pm – session will commence at 12.30pm sharp!

*Are you a member of a professional association? This course is likely to be valid for CPD points (or similar).*

**ACLCA SA INC.**  
ABN 55 072 321 737

PO BOX 243  
WEST BEACH  
SA 5024 AUSTRALIA

**T** +61 8 8353 8151  
**E** [sa@aclca.org.au](mailto:sa@aclca.org.au)