M E G H Í V Ó

Az MTA Atommagkutató Intézet előadótermében
(Debrecen, Poroszlay út 6., XII. ép. III. em.)

2017. december 7-én, 11:00-kor

Surface water-groundwater interactions and their effect on aquatic biogeochemistry

Előadó: Dr. Henrietta Dulai
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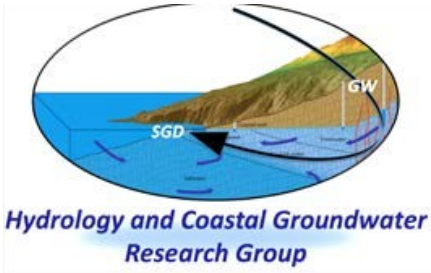
Surface water-groundwater interactions are a well-recognized part of the global water cycle. These processes occur along coastal margins, streams, lakes and are responsible for water as well as geochemical exchange. Groundwater discharge to surface water bodies has been recognized as an important pathway for nutrients, greenhouse gases, trace metals, and other contaminants of emerging concern. Clear linkages have been documented between land use, especially anthropogenic perturbation, and groundwater-derived solute fluxes to streams, ponds and the coastal ocean. There is increasing interest in this process and its effects on ecosystems, ocean chemical budgets, and water quality. Coastal groundwater discharge, for example is responsible for delivering twice as much water to the oceans as rivers and correspondingly more nutrients and other chemical compounds. Yet, groundwater fluxes are highly variable in space and time, and are hard to locate and quantify. We use natural radionuclides and stable isotopes as tracers to study the spatial and temporal variability of groundwater discharge and its components. Technical advances allow us to map larger regions and look at high-resolution temporal changes in discharge. An overview of the processes at play and specific examples from coastal and stream studies will be presented.



A szeminárium előtt 10:30-tól tea.

Gácsi Zoltán