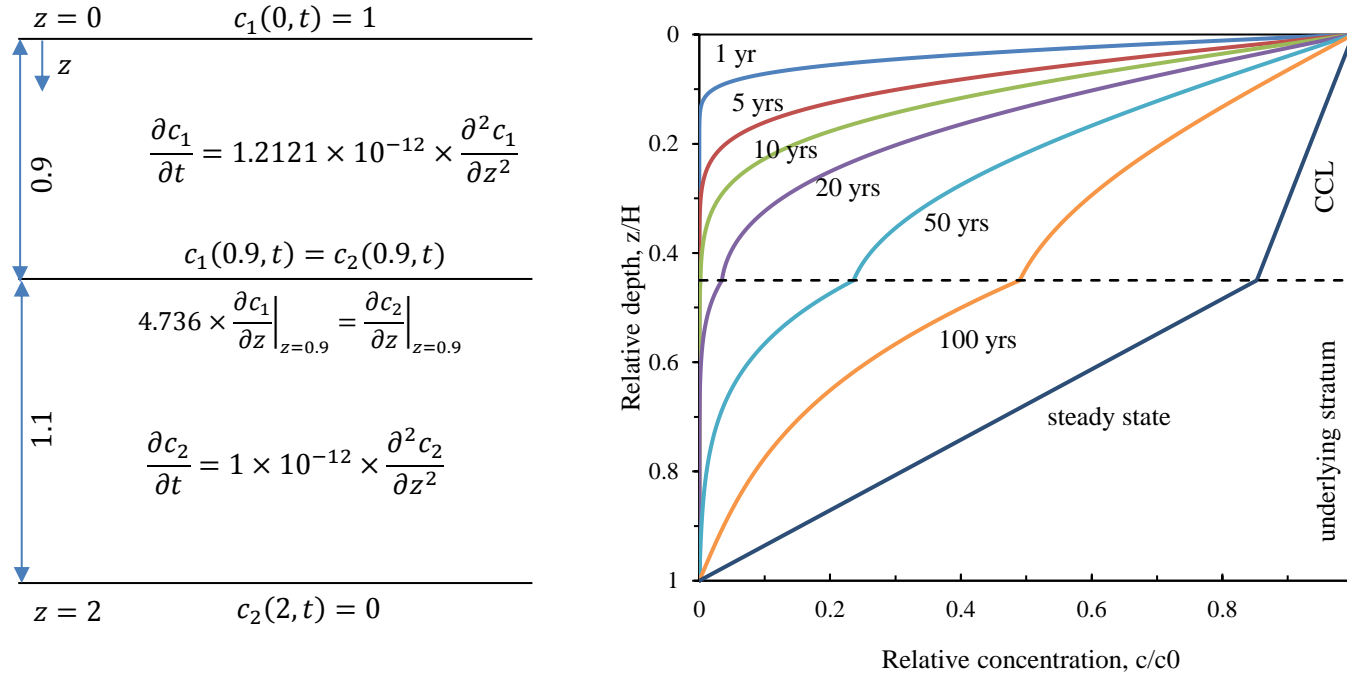


### Leachate diffusion from two-layer soil

compacted clay liner or CCL is at the top, natural stratum with thickness  $h_2$  at the bottom. Leachate seeps from the top and reaches the bottom.



**Figure 1.** Problem statement (left) and analytical solution using Fourier series (right)

Find  $c_1(z, t)$  and  $c_2(z, t)$  at  $t=(1, 5, 10, 20, 50, 100 \text{ and } 1000) \times (365 \times 86400)$

#### Reference

Li, Y. C., & Cleall, P. J. (2010). Analytical solutions for contaminant diffusion in double-layered porous media. *Journal of Geotechnical and Geoenvironmental Engineering*, 136(11), 1542-1554.

[https://ascelibrary.org/doi/abs/10.1061/\(ASCE\)GT.1943-5606.0000365](https://ascelibrary.org/doi/abs/10.1061/(ASCE)GT.1943-5606.0000365)