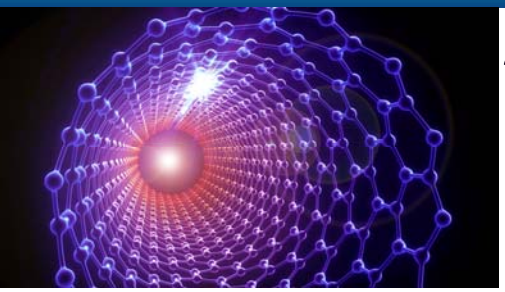


Advanced nanoparticles for optimized management of underground geological reservoirs

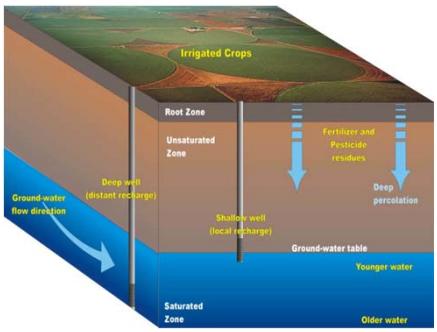
E. Stamatakis[1,2], A.K. Stubos[2]

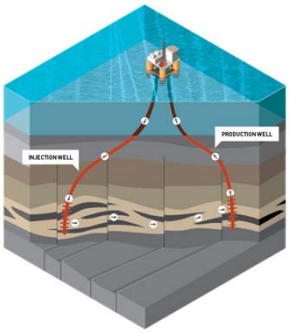
[1]*ECOCRETA, Technology & Science Park of Attika "Lefkippos", 15310 Aghia Paraskevi, Greece*

[2]*National Centre for Scientific Research Demokritos, 15310 Aghia Paraskevi, Attica, Greece*

Adopt and explore commercially a holistic multidisciplinary approach, addressing key issues for testing, evaluating and bringing to the market new nanoproducts and services for groundwater investigations

improve the description and understanding of underground geological formations, **reduce** various potential environmental risks and **demonstrate** a methodology which is capable of making predictions of computed concentration profiles of toxic organic solutes dissolved in ground waters, using **nanotracers.**

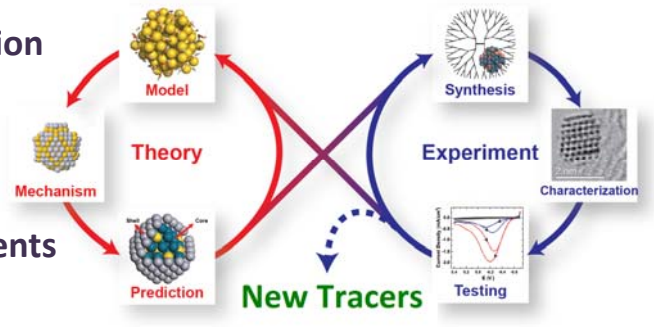




prevent scale precipitation in the near-well zone and the surface equipment of oil/gas/geothermal plants **and establish an advanced laboratory methodology** that can be used routinely for the study of scaling at specific oil & geothermal fields under reservoir conditions, using **nanoinhibitors**

With **nanotechnology** we bring

- ❖ **"green", strong, stable, friction resistant, and corrosion combatant materials.**
- ❖ **a bottom-up approach for new material design & fabrication**
- ❖ **limitless capabilities => functionalized molecular agents that "illuminate" the reservoir under extreme low concentrations.**



Contact person: **Emmanuel Stamatakis**
R&D Director, ECOCRETA
e-mail:info@ecocreta.gr; stamatakis.emmanuel@gmail.com