



Taking Nanotechnological Remediation Processes from Lab Scale to End User Applications for the Restoration of a Clean Environment

NanoRem is designed to unlock the potential of nanoremediation and to support both the appropriate use of nanotechnology in restoring land and aquifer resources and the development of the knowledge-based economy at a world leading level for the benefit of a wide range of users in the EU environmental sector. NanoRem uniquely takes a holistic approach to examining how the potential for nanoremediation can be developed and applied in practice, to enhance a stronger development of nanoremediation markets and applications in the EU. NanoRem's ambitious objectives are:

- 1** Identification of the most appropriate nanoremediation technological approaches to achieve a step change in practical remediation performance. Development of lower cost production techniques and production at commercially relevant scales, also for large scale applications.
- 2** Development of a comprehensive tool box for field scale observation of nanoremediation performance and determination of the fate of NPs in the subsurface, including analytical methods, field measurement devices, decision support and numerical tools.
- 3** Dissemination and dialogue with key stakeholder interests to ensure that research, development and demonstration meets end-user and regulatory requirements and information and knowledge is shared widely across the EU.
- 4** Determination of the mobility and migration potential of nanoparticles in the subsurface, and their potential to cause harm, focusing on the NP types most likely to be adopted into practical use in the EU.
- 5** Provide applications at representative scales including field sites to validate cost, performance, and fate and transport findings.



The NanoRem consortium is multidisciplinary, cross-sectoral and transnational. It includes 28 partners from **12 countries** organized in **11 work packages**. The consortium includes **18 of the leading nanoremediation research groups** in the EU, **10 industry and service providers** (8 SMEs) and one organisation with policy and regulatory interest.