INTERPORE FlashNews

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Shell joining InterPore as Institutional Member

Imprint

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Small news items on a short notice are welcome. Please submit articles to **newsletter@interpore.org**.

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Shell recently joined InterPore with an institutional membership. Steffen Berg, Project Leader in the Rock & Fluids Physics team at Shell, initiated the membership. He explains: “InterPore has been on our radar screen as an important R&D network for some time. Since I met Majid Hassanizadeh from Utrecht University at a summer school on interfacial area in porous media flows in 2009, I continued to collaborate with Majid, who did not miss any opportunity to promote InterPore. The Dutch InterPore Meeting 2011 finally convinced Shell to join, as we realized that there are many common interests concerning the understanding of porous media flows."

Shell's interests in porous media flows are very broad ranging from fundamental aspects of single and multiphase flow to complex processes relevant to, e.g., enhanced oil recovery and reactive transport during CO_2 sequestration. At Shell, research is typically conducted in interdisciplinary teams, including both experiments and modeling. Shell considers innovation, technology competence and strong R&D capabilities as critical success factors. This strategy is reflected in a sustainable R&D investment of more than US$ 1 Billion/year over the last years, more than any other International Oil Company.

Steffen Berg

While Shell is already well linked into industry R&D networks, InterPore offers competence in more fundamental subject matters. With declining "easy oil", the production of hydrocarbons becomes more challenging, requiring innovative technical solutions and sophisticated processes, which calls for deep scientific insight. Past experience has shown that the right combination of theoretical insight, advanced modelling and experimentation is the key to success. A current example, gaining more and more momentum, is the theme of "Digital Rock". In this case, advances in imaging technology (e.g. micro computed tomography) combined with the dramatic increase in computational power is used to measure and model multiphase flow at the pore scale. The goals are ambitious: The initial aim is to reliably predict two-phase flow properties in porous rock, but in the longer term we are looking to applying this approach to increase the recovery factor from our reservoirs and to reliably sequester CO_2. Shell seeks to complement its strong in-house R&D capabilities through active partnering and *Open Innovation* schemes. Leveraging internal and external ideas helps to enhance quality and accelerate technology development. Steffen Berg concludes: "Especially in the Netherlands, there are many groups doing excellent research in porous media flows. InterPore helps Shell to get connected more closely to these groups."