Francois Baneyx: "Building an Energy Frontiers Research Center: CSSAS, the Center for the Science of Synthesis Across Scales"

The Center for the Science of Synthesis Across Scales (CSSAS) is a class of 2018 Energy Frontier Research Center (EFRC) supported by the US Department of Energy with an anticipated S10.75M over four years. This multidisciplinary effort involves 13 researchers at 3 universities (University of Washington, University of California at San Diego, and the University of Chicago) and 2 national laboratories (Pacific Northwest and Oak Ridge National Laboratories). **The mission of CSSAS is to harness the complex functionality of hierarchical materials by mastering the design of high-information-content macromolecular building blocks that predictively self-assemble into responsive, reconfigurable, self-healing materials, and direct the formation and organization of inorganic components.** In this presentation, I will discuss the genesis of CSSAS, its structure, and how its scientific goals address key knowledge gaps.

Prof. Francois Baneyx is the Charles W.H. Matthaei Professor of Chemical Engineering, an Adjunct Professor of Bioengineering, the Director of CoMotion, and the Interim Vice Provost for Innovation at the University of Washington. He graduated Ingénieur, E.N.S.I.G.C. from Toulouse in 1987, earned his Ph.D. from the University of Texas, Austin in 1991, and completed his postdoctoral fellowsip at Du Pont in Wilmington in 1991. His research lies at the intersection of engineering, biology and nanotechnology. His current areas of focus include protein-aided materials synthesis and assembly, bionanoelectronics and bioinspired energy conversion, designed protein arrays, among other areas.