

## **Architects and engineers: creative builders of the smart city**

**Prof. Mark Burry**

Smart cities are an amalgam of many skill bases including social sciences, planning, politics and governance, and the creative contributions of architects and engineers. What are 'smart cities' – is their creation really confined to the 21<sup>st</sup> Century and beyond?

Professor Mark Burry aims to clarify matters by looking at digitally driven smart buildings and future cities. At the same time, his keynote address will muddy the waters a little by considering the smart city in the historical context of Barcelona, one of the world's most advanced 'smart cities'. His talk will take an historical detour by looking at aspects of the engineer Ildefonso Cerdà and architect Antoni Gaudí's far-reaching contributions. Drawing from his 37 years as senior architect for the completion of Gaudí's masterpiece, the Sagrada Família Basilica, acknowledged internationally leading building site of innovation in both design and building Professor Burry will delve into predigital considerations of smart cities and smart buildings. Gaudí (1852-1926) left his successors a profoundly complex unfinished building to puzzle over, situated in the middle of the Cerdà's (1815-1876) remarkable 1859 Barcelona urban expansion with its characteristic grid. Underlying Cerdà's intervention is a degree of smart thinking which, on the one hand, cautions contemporary architects and engineers not employ too much hyperbole in any claim they might be tempted to make for the modernity of the smart city being here, now and future. On the other hand, Professor Burry will argue that by looking at these two remarkable historical figures, contemporary smart city builders can assume greater confidence in claiming that their smart cities contribution is more than a fashionable 'fad'.