

City of Materials: Interacting in a Virtual World

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The City of Materials website (www.cityofmaterials.com) is an interactive environment where students of all ages can experience how Materials Science and Engineering impacts their daily lives. The corner stone of the site is the City Tour game, where students are free to roam the city finding the connection between everyday items and the materials concepts behind them (for example, table salt and its face-centered cubic crystal structure). Alternatively, visitors can take on the challenge of solving the City's mysteries at the Austen Detective Agency and the Griffith CSI Lab. Cases are solved by gathering samples, analyzing 'clues' in a fully stocked virtual lab (working stereoscope, tensile tester, FTIR, image analysis, chromatography and pH workstations), and logically arriving at a solution. The web community also offers podcasts written by college students to introduce a myriad of ideas in an easy listening format on Materials Radio, fun hands-on activities that enable students to experiment in their own home, and a basic introduction to materials science as well as a wide array of links to other sites. Combined, the City of Materials offers a fun and exciting virtual hands-on method for students to explore a variety of materials issues.