

Computer Supported Collaborative Design: Technologies, Systems, and Applications

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Industries and societies today require new technologies to address increasingly complex design issues for products, structures, buildings, systems, processes, and services while meeting the high expectation of customers. Computer Supported Collaborative Design (CSCD) has emerged in response to this requirement. With the rapid advancement of Internet and Web-based technologies, CSCD was a very active R&D area in the past two decades and progressed dramatically. To achieve its full potential, more and more research and commercial CSCD systems have been recently developed. The depth and breadth of these systems and applications are far beyond the traditional definition of concurrent engineering. CSCD is carried out not only among multidisciplinary design teams within the same company, but also across the boundaries of companies and time zones, with increased numbers of customers and suppliers involved in the process. This talk presents a comprehensive overview of this R&D area, particularly CSCD technologies, systems, and applications. Research challenges and opportunities on CSCD will also be discussed and highlighted.