

CAMT Seminar

“Green Cloud Computing and Sustainability”

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Date: November 30th, 2022 (Wed) 16:00-17:00

Location: Main Conference Room (1st floor), Bldg. A12

Center for Atomic and Molecular Technologies (CAMT)

& Webex Link (hybrid)

Abstract

Public sector organisations in the UK are facing increased pressure to move their operations into the cloud, both from stakeholders and the Department for Business, Energy, and Industrial Strategy. And for good reason: cloud computing is capable of improving energy efficiency by 93%, and producing 98% fewer greenhouse gas emissions than on premises IT infrastructure, according to the Microsoft-WSP collaborative study. Cloud computing is a highly scalable and cost-effective infrastructure for running high performance computing (HPC), enterprise and Web applications. However, the growing demand for Cloud infrastructure has drastically increased the energy consumption of data centers, which has become a critical issue. High energy consumption not only translates to high operational cost, which reduces the profit margin of Cloud providers, but also leads to high carbon emissions which are not environmentally friendly. Hence, energy-efficient solutions are required to minimize the impact of Cloud computing on the environment. In order to design such solutions, deep analysis of Cloud is required with respect to their power efficiency. Thus, in this talk, we will discuss the implication of these new solutions for the green economy.

(Host: Satoshi Hamaguchi Ext:7913)