

JOINT SEMINAR

**Permissioned Blockchains and Databases**

By

**Dr. C. Mohan**

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IBM Almaden Research Center

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Date: 7 April 2017 (Friday)

Time: 2:00pm

Venue: IAS Lecture Theatre, Lo Ka Chung Building

**Abstract**

Blockchain (distributed ledger), the underlying technology of Bitcoin, has become very popular for use in commercial or permissioned environments. Computer companies like IBM and Microsoft, and many key players in different vertical industry segments have recognized the applicability of blockchains in environments other than cryptocurrencies. IBM did some pioneering work by architecting and implementing Fabric, and then open sourcing it. Now Fabric is being enhanced via the Hyperledger Consortium as part of the Linux Foundation. While there is no standard in the blockchain space currently, all the ongoing efforts involve some combination of database, transaction, encryption, consensus and other distributed systems technologies. Dr. Mohan will focus on how the functionality of traditional and modern data stores are being utilized or not utilized in the different blockchain projects. Since most of the blockchain efforts are still in a nascent state, he believes the time is right for database researchers and practitioners to get more deeply involved.

**Speaker's Profile**

Dr. C. Mohan has been an IBM researcher for 35 years in the database area, impacting both IBM and non-IBM products, the research and academic communities, and standards, especially with his invention of the ARIES family of database locking and recovery algorithms, and the Presumed Abort commit protocol. This IBM (1997) and ACM/IEEE (2002) Fellow, served as the IBM India Chief Scientist from 2006-2009, and received the ACM SIGMOD Innovation Award (1996), the VLDB 10 Year Best Paper Award (1999) and numerous IBM awards. He was elected to the US and Indian National Academies of Engineering (2009), named an IBM Master Inventor (1997), Distinguished Alumnus of IIT Madras (1977), and Distinguished Visiting Professor at China's Tsinghua University (2016). He is an inventor of 47 patents, and is currently focused on Big Data, HTAP and Blockchain technologies. He has served on the advisory board of IEEE Spectrum, among other conference and journal boards. Dr. Mohan is a frequent speaker in North America, Europe and India, and has given talks in 40 countries. He is very active on social media with a huge network of followers.



**All are Welcome!**

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