

QUALITY CONTROL & RELIABILITY ENGINEERING DIVISION



MANUFACTURING & DESIGN DIVISION

Institute of Industrial and Systems Engineers Quality Control & Reliability Engineering (QCRE) Division and Manufacturing and Design (M&D) Division 2021-2022 Joint Webinar Series

IISE Quality Control & Reliability Engineering (QCRE) division and Manufacturing and Design (M&D) Division would like to invite you to attend our webinar on Wednesday, March 30, 9 PM – 10 PM, Eastern Time. **Registration Link:** <u>https://us06web.zoom.us/webinar/register/WN_cAJLcngrQKyjh88foA0Kaw</u> **Time:** March. 30, Wednesday, 9 PM –10 PM, Eastern Time. Click to add this event to your <u>Google calendar</u>

Title: Some practical procedures for quality and reliability monitoring of industrial processes

Presenter: Dr. Min Xie

Chair Professor of Industrial Engineering, City University of Hong Kong, HK SAR Asia Region VP-Asia of IISE

Abstract: Statistical control charts have been widely used in industries for the monitoring of products and process quality. In this talk, we will discuss some simple procedures that are developed to address some problems with traditional monitoring procedures when applied to high quality processes and in reliability related monitoring. We will review some of those procedures and discuss their applicability in different contexts. Event monitoring is very important in various scenarios such as the occurrences of equipment breakdowns, system failures, road accidents, natural disasters etc. For such events, other than the occurrence frequency, event magnitude is also of great interest and importance. Control charts are also developed for monitoring event frequency and event magnitude. We will also provide some discussion on data and measurement accuracy issues and in intelligent manufacturing for possible future research and in applications.

Biography: Dr. Min Xie completed his undergraduate and postgraduate studies in Sweden with a direct MSc from Royal Inst of Technology in Sweden in 1984 and PhD at Linkoping University in 1987. He joined the National University of Singapore in 1991 as one of the first recipients of the prestigious Lee Kuan Yew Fellowship. In May 2011, he moved to City University of Hong Kong as Chair professor of industrial engineering. Prof Xie has published over 300 journal papers and 8 books, including "Statistical Models and Control Charts for High Quality Processes" by Kluwer Academic "Software Reliability Modelling" by World Scientific, "Weibull Models" by John Wiley, "Stochastic Aging and Dependence for Reliability" by Springer. He is a department editor of IISE



Transactions, and serves on the editorial board of over 10 other international journals. He recently coauthored "Cyber-Physical Distributed Systems: Modeling, Reliability Analysis and Applications" that will be published by Wiley later this year. Prof Xie is a fellow of IEEE since 2006 and recently elected Asia Region VP-Asia of IISE.



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