



Indian Institute of Technology Kanpur

INSTITUTE LECTURE SERIES

July 10, 2023 (Monday) | 5.00 pm | LH - 01

Speaker: Professor Perumal Nithiarasu

Talk Title: Building digital twins - Fundamental challenges

About the Speaker



Professor P. Nithiarasu currently holds the Associate Dean for Research, Innovation and Impact for Science and Engineering position at Swansea University. Previously he held various roles, including the Deputy Head of Engineering, Dean for Academic Leadership and Head of the Zienkiewicz Centre for Computational Engineering. His research areas include computational engineering, especially healthcare engineering.

Professor Nithiarasu is particularly interested in digital twins and translational biomedical engineering and has extensively published in computational engineering. Professor Nithiarasu is the editor-in-chief of the International Journal for Numerical Methods in Biomedical Engineering, published by Wiley-Blackwell.

Abstract of the Talk

Digital twin technology is emerging as a potential solution for complex engineering problems needing comprehensive designs and long-term monitoring and control. This talk will define a digital twin or twinning and show some examples, including healthcare and energy applications. This talk will also identify this area's significant challenges and speculate potential solutions. In addition, the speaker will discuss digital twins as devices for solving personalised health challenges, especially cardiovascular challenges.

All are cordially invited to attend

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