

**Distinguished Lecturer Visit by Prof. Robert Kozma  
at IEEE SMC Society UKRI Chapter, Belfast, 2-5, September, 2024**

**Summary**

Prof. Robert Kozma visited Ulster University, Belfast, North Ireland, UK on September 2-5, 2024, where he delivered his IEEE SMC Society Distinguished Lecture on September 4, titled "Sustainable Artificial Intelligence" to the SMCS United Kingdom Republic of Ireland Chapter, in Belfast, organized by Professor Huiru (Jane) Zheng, Ulster University. The SMCS DLP visit has been successful in supporting the UKRI Chapter and its members, and promoting the goals of the IEEE SMC Society. The support of the SMC Society, the DLP Program, coordinated by Dr MariaGrazia Dotoli, VP for Membership of SMCS is greatly appreciated.

**Brief Overview of the IEEE SMCS UKRI Chapter**

The UK and Ireland Chapter came into existence in 2002 and since then they have organised a series of successful annual conferences at various universities including Reading, Ulster, City University, Sheffield Hallam, University College Dublin, Middlesex, Birmingham and Limerick. The UK and Ireland SMC Chapter Chair is responsible for the efficient running of the Chapter in the best interests of IEEE, IEEE Systems Man and Cybernetics Society and local UK and Ireland SMC Chapter Members. The SMCS has 135 members in UK and Ireland Section. The Chapter have also coordinated events with other groups, including one with INCOSE on Engineering Sustainable Systems, and hosted Distinguished Lectures.



The current Chapter Committee include: Chair: Prof Huiru (Jane) Zheng; Vice Chair: Dr Idongesit Ekerete; Secretary: Dr Matias Garcia-Constantino; Treasurer: Dr Aftab Ali.

**SMCS DLP Talk by Dr. Robert Kozma**

The distinguished lecture has been held on September 4, 1:30pm-2:30pm, at Connor Lecture Theatre, BA Building, Ulster University, Belfast. The talk explored the challenges to AI and Artificial General Intelligence (AGI) in today's explosively developing computer technology. The talk addressed the concept of "superintelligence," when the performance of AI systems may reach and possibly exceed human performance on specific tasks. These developments require huge amounts of resources, including data, computing, and energy, which is not sustainable. The talk outlined crucial insights from brain studies, and introduces system designs combining the benefits of deep learning and neuromorphic technologies. Following the talk, attendees engaged in extensive discussions, gaining valuable insights into the future of sustainable artificial intelligence.

The talk has been hybrid, online and in person. In total, there were around 70 attendees, and an estimated 20 IEEE members. Audience included researchers from European Countries, UK, Ireland, and China. The talk strongly promoted the SMCS and IEEE during the SMC28 annual workshop, with

special attention to the student membership. After the conference, there is one PhD student joined the society immediately.



### UKRI SMC28 Chapter Workshop

The talk has been followed by the IEEE UK & Ireland SMC Chapter Workshop, chaired by Prof. Huiru Zheng, where chapter members provided brief overview on their work. The DLP Speaker, Dr Kozma, talked about the benefits of joining IEEE SMC Society, with special attention to young generations, to build on the excellent networking possibilities at IEEE events, workshops, conferences, available scholarships, and producing top quality research published in SMCS flagship Transactions and other journal outlets. Contributions to the Transactions as authors, and also as editors are encouraged.



Following the IEEE SMC Society Distinguished Lecturer Talk, and the UKRI SMC28 Workshop, the attendees joined in an informal coffee together social session.