

Activity & Progress Reporting

Section Autumn Meeting - 26th October 2021

<p>1. Chapter/Affinity Group:</p>	<p>UK and Ireland IEEE Sensors Chapter, CH08804 - United Kingdom and Ireland Section Chapter, SEN39</p>
<p>2. Committee Members</p>	<p>Sillas Hadjiloucas (Chair)</p>
<p>3. Reporting Officer:</p>	<p>Sillas Hadjiloucas</p>
<p>4. Overview of current plan and activities:</p>	<p>i. Organise meetings</p> <p>In collaboration with Control Systems Group: Presentation of port-Hamiltonian formulations for classical thermodynamics by Arjan van Der Schaft, Zoom meeting.</p> <p>DL Program: Invitation to Ravinder Dahiya School of Engineering, University of Glasgow, Scotland to give a lecture on Large Area Electronic Skin or Tactile Skin in Robotics and Medical Applications, at a venue preferably in Manchester (bridging the distance between the North and the South) or Zoom meeting.</p> <p>DL Program: Invitation to Ashwin A. Seshia Professor of Microsystems Technology, University of Cambridge, Cambridge, England to give a lecture on Vibrating Beam MEMS Accelerometers for Gravity and Seismic Measurements or Nonlinear Dynamics in Microelectromechanical Systems. Lecture to take place in Reading or London or Manchester or Zoom meeting.</p> <p>Collaborations with other chapters to organise meetings:</p> <p>Discussions with Prof Izzet Kale, College Institute & Research Director, Director, Applied DSP & VLSI Research Group, College of Design, Creative & Digital Industries, University of Westminster, London for a CAS04/IM09 co-sponsored collaborative meeting.</p> <p>Possible titles of topics discussed: 'Fractional order circuits and controllers for sensors and measurement systems', 'Bond graph theory for hybrid circuits and sensing systems', 'Memristive circuits and systems and their applications to Measurement and Sensing', 'Order reduction methods in circuit theory and measurement systems', 'port-Hamiltonian formulations of non-linear electrical circuits and non-linear feedback sensing systems'.</p> <p>Plans for an optical fibres sensors virtual meeting with contributors from the recently published IEEE Press (Wiley) book 'Optical Fibre Sensors Fundamentals for Development of Optimized Devices' (Eds. I. Del Villar and I. R. Matias), involvement of IEEE Sensors Council –Young professionals with Wern Kam, Optical Fibre Sensors Research Centre, University of Limerick</p> <p>Trying to finalise dates for presentations on the above topics.</p>

<p>5. Key Achievements and member value/services to date:</p>	<ul style="list-style-type: none"> • Young Professionals Development Programme (IEEE Sensors Council) activity promoted by Sinead O'Keefe: • 26 July, Dr. Martina Prendergast, University of Limerick, 'Proposal Writing Skills' • 27 July, Prof. Zeynep Celik, University of Texas at Arlington, 'Journal Article Writing Skills' • 28 July Bruce Hecht, VG2PLAY, 'Innovation and Entrepreneurship for Researchers' • 29 July, Prof. Sandro Carrara, Swiss Federal Institute of Technology, EPFL, 'Effective Peer Review of Articles' • WISE workshop 2021(with New South Wales Chapter) Women in Sensors Workshop on August 25 from 14:30-16:30 UTC+10. (IEEE Sensors Council) • IEEE INTERNATIONAL CONFERENCE ON SENSORS AND NANOTECHNOLOGY 2021 (SENNANO 2021), Malaysia Section Chapter, IEEE NANO and IEEE Sensors Council: S. Hadjiloucas delivered an invited presentation on the 22nd of September 'Overview of novel measurement and identification methodologies for advancing nanotechnology'
<p>6. Key Challenges:</p>	<ul style="list-style-type: none"> • Covid-19 has overloaded people's calendar as there is too much time spent on new courses delivered remotely in most academic institutions.
<p>7. Deficits/Required Resources:</p>	<ul style="list-style-type: none"> • Elections: To be discussed with Mona/Eduardo
<p>8. Actions/Support requested from the Section:</p>	<ul style="list-style-type: none"> • Assistance with publicising some of these events across different chapters once these are finalised
<p>9. Action Plan:</p>	<p>Dates still need to be finalised for these actions, depends on availability of speakers</p>