## Journal of Materials Chemistry C



## **EDITORIAL**

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## In memoriam of Alasdair James Campbell

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The present themed collection across the *Journal of Materials Chemistry C* and *Sustainable Energy & Fuels* is commemorating Alasdair James Campbell, Professor of Solid-State Physics at Imperial College London, who sadly passed away on 27th February 2021 at the age of 59.

Alasdair, or 'Al' as he was known to his colleagues, students and friends, was an exceptional scientist who made considerable impact in the fundamental research of state-of-the-art display technologies, printed photodetectors and transistors, neuromorphic computing and organic biomedical sensors. As a physicist, he had a tremendous impact on the broad field of organic electronics, contributing fundamental research on state-of-the-art display technologies, printed photodetectors and transistors, neuromorphic computing and organic biomedical sensors. His work influenced the fields of materials chemistry, bioelectronics and materials science by

providing the mechanistic understanding and methods to exploit underlying solidstate physics phenomena.

Al's fundamental understanding of structure-property relationships in organic, inorganic and hybrid semiconductors, coupled with his deep appreciation for electronics, allowed him to push new boundaries. Amongst these were the development of large-area printing technologies, resulting in flexible organic light-emitting diodes (OLEDs), organic field-effect transistors (OFETs), and polymer-based sensors for biochemical detection.

Ever on the quest for innovation, Al's most recent research took him to the world of chiral functional materials, combining his knowledge of polyfluorenes with small chiral molecules to generate circularly polarised (CP) luminescence and absorption in OLEDs and photodetectors. Such devices have application in creating efficient displays, quantum

optics, bioimaging and encrypted communications.

The commemorative collection across *Journal of Materials Chemistry C* and *Sustainable Energy & Fuels* covers the topics that were at the core of Al's scientific activity, covering the fields where he had impact: organic electronics (OLEDs, OFETs and photodetectors), charge transport in organic semiconductors, chiral optoelectronic materials, neuromorphic computing, and biomedical sensors based on organic materials, to celebrate Al's life and science. His friends, students and colleagues will forever remember Al's science, his kindness and his humour.

We deeply thank David Lidzey, University of Sheffield, and Jessica Wade, Stuart Higgins, Sandrine Heutz and Matthew Fuchter, Imperial College London, for their help in bringing this collection together.

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