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# **Sensors for Extreme Environments**

Guest Editors:

#### Message from the Guest Editors

**Prof. Dr. Alton Horsfall** Department of Engineering, University of Durham, Durham DH1 3LE, UK

**Dr. Brian Johnson** Littelfuse, Chicago, IL, USA

Deadline for manuscript submissions: closed (31 December 2019) Dear Colleagues,

Microelectronic sensors have revolutionised our understanding of the world in which we live. Based on the phenomenal advances in silicon technology, it is possible to sense a vast array of systems, analyse the data, and transmit them across the world. However, the material properties of silicon limit its application to benign environments, precluding it from a wide range of applications relevant to industry and scientific exploration. Extreme environments, characterised by temperatures over 175°C, high radiation flux or chemically aggressive species, are found in automotive, aerospace, nuclear, space geothermal, and oil and gas applications. These are not accessible to conventional silicon-based technology and so, knowledge of these environments is lacking. This Special Issue of Sensors is dedicated to the challenges of sensing in these extreme environments and welcomes submissions describing all aspects of the field, from fundamental sensor technology and system level challenges to the failure of conventional technology in these environments and specific challenges of emerging disciplines.









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#### **Editor-in-Chief**

#### Message from the Editor-in-Chief

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