

The request

We are working with a global manufacturer utilising porous and/or non-porous ceramics. Our client is interested in seeking **new and/or innovative ceramic materials** that they could adopt in their products.

Any methods and processes that enable the client to **manipulate and/or modify the properties of ceramics** to provide the following functionalities (but are not limited to) would be of interest:

- Surface texturing to allow the control of hydrophobic and/or hydrophilic property of ceramics
- Methods to enable the creation of microchannels in ceramics (e.g., in microfluidics application)
- Transparent ceramics
- Self-cleaning ceramics
- Self-healing ceramics
- Antibacterial ceramics
- Ceramics that can withstand high temperature difference (e.g., 0 to 250 °C in less than 0.5 seconds)
- Conductive and non-conductive (heat and electric) ceramics

The ceramic material would ideally be suited for application at working temperature range of 200-500°C with short term survivability at 700°C.

Technologies from industries such as medical, biomedical, energy/renewables, filtration, defence, printing, consumer goods, watch making etc. would be of interest.

We are seeking experts with R&D capabilities in ceramic materials and the associated forming techniques to understand:

- What up-and coming research activities are in the space
- Current limitations and/or challenges in developing ceramics with the functionalities listed above

Please send preliminary information on any proposed opportunity to Diane Kolonko via diane@strategicallies.co.uk