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| **Project Details:** | |
| **Host Institution:** | Dublin City University |
| **Location:** | Glasnevin, Dublin 9, Ireland |
| **College/Company:** | National Centre for Sensor Research |
| **School/Unit:** | School of Chemical Sciences |
| **Website:** | www.ncsr.ie |

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| **Project Lead:** | |
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| **Email Contact:** | margaret.mccaul@dcu.ie |
| **Telephone Contact:** |  |

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| **Project Title:** |

Rapid prototyping and validation of next generation wearable sensors for personal health monitoring

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| **Brief Project Description:** |

This project will involve close interaction with team member’s (specialist mechanical and electronic engineers, analytical chemists, and microfluidics engineers) who are working on developing autonomous sensors for the non-invasive detection of sodium levels in sweat. Depleted or elevated levels of sodium in sweat can signal a range of conditions including dehydration, exercise associated hyponatremia (over-hydration) and cystic fibrosis.  The project will involve the fabrication of ion selective electrodes for (sodium, potassium, magnesium) and the integration 0f these electrodes into a 3D printed wearable platform for on-body measurements. The device will be validated within the laboratory testing prior to use in on body trials

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| **References:** |

<https://scholar.google.com/citations?user=W0W1MrkAAAAJ>

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| **Project Dates:** |

Not specified

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| **Candidate Requirements:** |

Not specified