

# Job Description & Person Specification

## JOB DESCRIPTION

<b>Job title</b>	Environment & Waste Management Technologist - KTP Associate (in partnership with Sportex Ltd)
<b>School/Department</b>	School of Computing, Engineering & Physical Sciences (CEPS)
<b>Location</b>	Sportex Recycling Ltd 13-17 Abbotsinch Road Grangemouth FK3 9UX
<b>Reporting to</b>	

### Job summary

Sportex Group's mission is to become the long-term partner of choice within the synthetic sports surface market by providing a one-stop-shop service offering. Sportex is the UK's only sports surfacing specialist that offers complete lifetime services for artificial turf, including installation, maintenance, and sustainable recycling. Historically, group operating companies have provided installation & maintenance services only. The addition of end-of-life processing (recycling) services, through Sportex Recycling Ltd, is central to the above strategic vision; addressing global demand for a sustainable alternative to the current practice of illegal dumping or sending to landfill.

This post is associated with the development of a new business activity embed a combination of environmental science, waste management, operations and quality management knowledge and expertise to maximise synthetic turf recycling plant efficiency, ensure current and future regulatory compliance, and develop a blueprint for accelerated UK and EU expansion.

The School of Computing Engineering & Physical Sciences (CEPS) has around 110 academic staff and over 2,300 undergraduate and postgraduate students with sections of the School based at the Paisley, Lanarkshire, Ayr and Dumfries campuses.

This post is a practical, hands-on role, initially funded as part of a 24-month Knowledge Transfer Partnership linking staff in the Schools of Computing Engineering and Physical Sciences, Health and Life Sciences (HLS) and Business & Creative Industries (BCI) at UWS with Sportex Ltd.

The Associate will be tasked with Waste compositional analysis, value stream mapping and carbon accounting to both benchmark and ultimately optimise overall process efficiency, material recovery (yield) and re-use opportunities (for extracted sand, SBR and plastic materials). The main focus of innovation will be developing an optimised recycling process for end-of-life synthetic turf, which, by its nature, is highly variable due to a combination of factors (50+ manufacturers, material composition, type of sports played, frequency of use, environmental exposure and lifetime maintenance regimes).

Knowledge Transfer Partnership (KTP) is one of Europe's leading graduate recruitment programmes. High calibre graduates are employed to work on specific projects of strategic importance to companies, whilst being supported by a dedicated University team. All graduates spend around 10% of their time in training and development and are offered the opportunity to gain a Diploma in Management. A personal development budget is set aside specifically for this. While they are recruited by the University and work to their terms and conditions of

employment, the KTP associate will be based at the company. For more information visit <https://www.ktp-uk.org/>

## People & finance responsibilities

<b>People</b>	None
<b>Finance</b>	Project budget for consumables, chemical and microbiological analysis and training

## Key activities

<p><b>TECHNICAL:</b>          understanding, modelling, benchmarking and optimisation of a novel recycling process (from material recovery to reuse and resale);          mapping current processing flow, identifying contaminant assessment, quality management and processing requirements based on variability of incoming waste stream.          establishing evidence base for regulator approval - on site vs conventional testing using accredited laboratory, identification of regulatory standards and test validation; scope of testing (substances);          test points in process; frequency.</p> <p><b>BUSINESS / CULTURE / PROJECT MANAGEMENT:</b>          Engaging and managing multiple stakeholders (internal and external, including regulatory bodies and compliance schemes).          Acting as a boundary spanner between Sportex and UWS, delivering change and embedding environmental science, waste management and operations expertise within a business with little or no prior expertise in these areas (other than through trial-and-error development).          Development of business case for process improvements and alternative uses for extracted media to maximise recycling plant productivity.          Develop blueprint and business case for accelerated expansion post-KTP with additional recycling plants in the UK and business strategy for service delivery within the EU</p> <p>Produce Intermediate and final report and publications.</p>
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## Job scope

<b>Planning and organising</b>	The KTP Associate will work under the direction of the Company Supervisor (Luke McGeechan), the Knowledge Base Supervisor (Andrew Hursthouse) and Academic Support (Kiri Rodgers, Iain McLellan and Jim Johnston). The post holder will be responsible for planning aspects of their work and will be responsible for producing progress reports for the four-monthly Local Management Committee (LMC) Meetings. The post holder will also be responsible for organising meetings with key project stakeholders during the 24-month project.
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<b>Decision making</b>	Be proactive in identifying issues affecting project deliverables and identify solutions to support project deliverables.
<b>Working relationships – Liaison and Networking</b>	Regular communication with line managers in the company, and university and directly with company clients; environmental regulators
<b>Working relationships – Communication</b>	Internally with company staff, industrial customers and potential clients, environmental regulators, research academic and admin staff in company and university environment
<b>Working relationships – Teamwork</b>	With technical staff and research colleagues, administration and marketing in the company and University.
<b>Working relationships – Pastoral Care</b>	Line managers (Mr Luke McGeechan, Sportex and Professor Andrew Hursthouse) will be point of reference and support for the appointed Associate. A designated KTP Centre at UWS (Dr Stuart McKay) will also provide support to the appointed KTP Associate

# PERSON SPECIFICATION

## Qualifications

			<b>Evidence</b> A = Application I = Interview
<b>Essential</b>	QE1 QE2	<ul style="list-style-type: none"> <li>Minimum MSc in waste and/or environmental management or process industry related (science/engineering) subject.</li> </ul>	A
<b>Desirable</b>	QD1 QD2	<ul style="list-style-type: none"> <li>Chartered Membership of appropriate professional body (CIWM, RSC, IChemE, CIWEM etc)</li> </ul>	A

## Experience

			<b>Evidence</b> A = Application I = Interview
<b>Essential</b>	EE1 EE2	<ul style="list-style-type: none"> <li>Experienced in the process industry, waste management and understanding of R&amp;D challenges</li> </ul>	A / I
<b>Desirable</b>	ED1 ED2	<ul style="list-style-type: none"> <li>Waste analysis, materials and process optimisation, Data management / processing ensuring integrity, security and quality</li> <li>Sludge treatment, COSHH safety</li> </ul>	A / I

## Skills

			<b>Evidence</b> A = Application I = Interview
<b>Essential</b>	SE1 SE2	<ul style="list-style-type: none"> <li>Good communication and interpersonal skills including excellent numerical and writing skills, including writing Plain English documents for non-technical users</li> <li>Ability to work independently and as part of a team</li> <li>Flexible and adaptable approach</li> <li>Good negotiation / interpersonal skills</li> <li>awareness/skills in measurement of chemical composition of environmental samples;</li> <li>sampling collection and management ensuring integrity of samples, industrial context preferred;</li> <li>ability to conduct literature searches using the appropriate terms;</li> <li>good problem solving, project planning and management skills;</li> <li>the ability to present complex information to a diverse audience of stakeholders</li> <li>Working to deadlines</li> </ul>	I
<b>Desirable</b>	SD1 SD2	<ul style="list-style-type: none"> <li>Ideally have industrial process (chemical / environmental engineering) experience</li> <li>Clean Driving licence</li> <li>Well-developed project management and research organisational skills</li> <li>Attention to detail, accurate and precise</li> </ul>	A / I

		<ul style="list-style-type: none"> <li>• Willing to work flexibly to support business and project needs</li> <li>• experience of working in waste treatment &amp; processing and/or R&amp;D;</li> <li>• working in cross-disciplinary teams of varying expertise and experience</li> </ul>	
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## Knowledge

			Evidence A = Application I = Interview
<b>Essential</b>	KE1 KE2	<ul style="list-style-type: none"> <li>• An understanding of the practical implications of waste management and recycling</li> <li>• Scientific knowledge of determining chemical composition, chemical analysis and measurement science and industrial processes</li> <li>• Understanding of experimental design, waste analysis, pilot study, scale up and application, process properties and data significance and the ability to understand and process data</li> </ul>	A / I
<b>Desirable</b>	KD1 KD2	<ul style="list-style-type: none"> <li>• Knowledge of Waste management sector in UK and internationally</li> </ul>	I

## Behaviours

			Evidence A = Application I = Interview
<b>Essential</b>	BE1 BE2	<ul style="list-style-type: none"> <li>• Good communication and interpersonal skills including excellent numerical and writing skills, including writing Plain English documents for non-technical users</li> <li>• Ability to work independently and as part of a team</li> <li>• Good negotiation / interpersonal skills</li> </ul>	
<b>Desirable</b>	BD1 BD2	<ul style="list-style-type: none"> <li>• Attention to detail, accurate and precise</li> <li>• Flexible and adaptable approach</li> <li>• Willing to work flexibly to support business and project needs</li> </ul>	

<b>Created/Updated (mm/yy):</b>	<b>March 2024</b>
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