|  |  |
| --- | --- |
| **Job Description**The Job Description Form should be used for all roles within The Manufacturing Technology Centre (MTC). This form should be completed by Head of the Department or Human Resources. A Recruitment Authorisation Form must also be attached.  |    |
|  |
| **Job Title:** | Senior Research Engineer / Materials Technology |
| **Grade:** | Senior Research Engineer |
| **Duration of Contract:** | Permanent |
| **Department/Theme:** | CMT Group – Materials Technology |
| **Location:** | The Manufacturing Technology Centre Ltd., Ansty Park, Coventry, CV7 9JU. |
| **Reporting To:** | Ben Tomita |
|  |
| **Job Purpose:** | This Senior Research Engineer role is based within the Materials Technology department of Component Manufacturing Technology.The purpose of this role is to provide technical leadership and technical governance in materials processing and net shape technologies, specifically for the ADS portfolio |

|  |  |
| --- | --- |
| **Duties & Responsibilities:** | Duties and responsibilities include but are not limited to the following:* Technical leadership of project and/or work package portfolio up to ~£1m, and of strategic initiatives
* To generate new project ideas in alignment with the theme’s strategy.
* To lead the development of proposals and the engagement with existing customers to win repeat business.
* Liaise with AMP Product Development Manager and Technology Manager to keep them up to date with capability offerings and to identify business development opportunities
* To provide technical leadership, mentoring and coaching to other staff while undertaking training to progress your own career development.
* To work in accordance with MTC procedures as set out in the company’s Business Management System, compliant with ISO9001:2008.
* Provide technical support to all REs, AREs and SREs
* Adhere to MTC’s Health and Safety policies in full;
* Adopt the MTC’s RIGHT practices in the work place.
 |
| **Candidate Specification:** | The candidate must have a high technical grasp of materials processing in order to technically lead and deliver R&D work.The candidate must have a keen interest in leading highly innovate work, which at times requires thinking outside of the box, and collaboration across other groups within the MTC. The candidate will have a proven track record of winning project work from both new and repeat customers.The candidate will enjoy working in a group, providing technical leadership to others, and working independently. The candidate will have a keen desire to develop new skills and be comfortable in working in a rapidly changing environment.  |

|  |  |
| --- | --- |
| **Key Deliverables:** | The post holder will be expected to:* Manage their time effectively to achieve on-time delivery.
* Manage project and task budgets.
* Liaise with customer and MTC’s workshop staff and manage the scope/budget of work.
* Deliver tasks to a quality in line with what the MTC and our customers’ demands and the budget allow.
* Work in a safe manner at all times.

Specific project objectives will be provided by the Line Manager once the candidate is in post. |

|  |  |
| --- | --- |
| **Person Specification** |   |
|  | **Essential** | **Desirable** |
| **Competencies / Behaviours** | **Team work:**Ability to interact with people effectively. Able and willing to share and receive information. Co-operates within the group and across groups. Consistently lead by example.Ability to sell the capabilities of the Advanced Materials Processing group to prospective customers, and or collaborative research groups, is essential. Guides the team towards consensus of opinion. Proactively identifies and facilitates conflict resolution, whenever possible, or identifies who to escalate to.**Decision making:**Able to work independently when required and considers all pertinent facts and alternatives before deciding on the most appropriate action.Self-management, pro-activeness towards de-risking decisions or facilitating decisions.**Work Standards:**Sets and maintains high performance standards. Pays close attention to detail, accuracy and completeness. Promotes a safe & clean environment.Pro-actively seeking for support and collaboration when required at the appropriate time.Pro-actively identifies issues or quality problems and gaps and leads people to increase their working standards**Integrity:**Maintain confidentiality at all times.Ability to negotiate to achieve a win-win situationMaintains MTC RIGHT way at all times**Motivation:**Maintains high level of productivity and self-direction, with ability to meet deadlines and work autonomously. Ability to motivate others.Proactively looks and owns his/her pipeline of work as well as others.Identifies and pursues opportunities for the department.Ability to influence positive actions on team members.Ability to coach others and provide day to day support to improve technical and soft capabilities.Clear interest in the development of people. **Communication**Able to communicate effectively (written & oral) with both technical and non-technical audiences.Coaches others to improve communication skills**Adaptability:**Adapts to changing work environments, work priorities and organizational needs.Support others adopting to new environments |  |
| **Technical Skills and Knowledge** | MSc or PhD/EngD in Mechanical engineering, design, or relevant Engineering degreeExcellent with CAD packages Practical knowledge of:* Bespoke design and machine integration knowledge

Theoretical knowledge of:* Casting processes, materials and applications.
* Powder-binder formulations for making slurries and feedstock materials for powder metallurgy processes and applications.
* Powder sintering processes and applications.
 | Programming skillsActively interested in growing links with academia and industry.Practical knowledge of * Design of safety systems
* Casting processes, materials and applications.
* Powder-binder formulations for making slurries and feedstock materials for powder metallurgy processes and applications.
* Powder sintering processes and applications.
* Joining and Coating Technologies
 |
| **General Skills / Attributes** | Excellent written and oral communication skills.Self-motivated with ability to meet deadlines.Effective delegation skills.Ability to work independently and as part of a team Ability to provide leadership in a team.Pragmatic hands on approach to problem solving Excellent interpersonal and organisational skills Excellent IT skills  | Project management skills. |
| **Experience** | A relevant degree in mechanical engineering or materials science.Knowledge in powder metallurgy and net shape technologiesExperience working in R&D or project-based environments;Experience of having produced and reviewed technical reports and / or guidance materials on engineering topics.Experience of working in a high quality academic research or industrial R&D environment. | Experience of managing Engineers/Scientists at equivalent levels in industry or supervising Undergraduate/MSc/PhD students.Demonstrable commercial skills and acumen including experience of proposing, costing, pricing and winning R+D project work from industrial organisations in a competitive environment. |
| **Other** | Commitment to observing the MTC’s Equality & Diversity policies at all times. Demonstrates an understanding of the MTC RIGHT way.Commitment to maintain confidentiality at all times.Commitment to work in a safe manner at all times. | Security clearance or the desire and ability to obtain clearance would be preferable. |