**REC GROUP**

**Job Description – Employee Positions**

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| **Principal / Senior Engineer – Coolant Management** |
| **1. ORGANIZATION:** |
| BU, Company, Dep.: | REC Solar Pte Ltd |
| Location: | Singapore |
| Superior Manager: | Director, Wafer Technology |
| Immediate Manager: | Project Manager, Wafer Saw Technology |
| **2. ROLE/JOB SUMMARY:**  |
| We are now looking for a person which can join the Wafer Technology Team in Singapore, and continue to develop our fundamental understanding of the wafer sawing process. The candidate will get the responsibility for developing the saw coolant and improve sawing process quality. In addition to working in projects, the candidate will work with increasing our fundamental understanding of how the saw is interacting with the process and document this know-how.  |
| **3. ESSENTIAL DUTIES AND RESPONSIBILITIES:** |
| * Study the essential properties of coolant in diamond wire sawing and establishing the characterization methods
* Plan, coordinate and execute improvement activities with customer and external collaborators
* Conduct essential technical research on surface chemistry / colloidal chemistry / suspension handling / fluid mechanics
* Develop optimum material conduct together with supplier, especially in the area of coolant adhesion to diamond saw wire, wire wetting, and coolant usage in the wafer sawing process
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| **4. ADDITIONAL RESPONSIBILITIES:**  |
| * Develop waste coolant filtration process with external vendor to meet discharge or recycling requirements
* Assist R&D Project Team with technical analyses, trouble shooting and improvement projects
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| **5. AUTHORITIES:**  |
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| **6. REQUIRED QUALIFICATIONS AND SKILLS:** |
| Technical/ Professional: | * MSc / PhD in Chemistry / Chemical Engineering / Material Science
* Min. 3-5 years relevant experience from Research / Manufacturing Background
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| Technological: | * Expertise in surface chemistry / colloidal chemistry / suspension handling / fluid mechanics
* Experience in working with suspensions / powders / fluid dynamics / ceramic processing / abrasives
* Knowledge of statistical data analysis methods and DOE
* Understanding of high temperature processing equipment technology
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| General: | * Self-driven
* Proactive
* Structured
* Analytical
 |
| People/Relations: | * Excellent team worker
* Ability to co-operate with different professionals (operations, equipment suppliers, technology institutes, supply chain, operation)
* Good communication skills in English, both orally and in writing
* Enjoy working in an international team
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| REC knowledge: | * Not Required
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| **7. ADDITIONAL, ADVANTAGEOUS SKILLS:**  |
| * Experience in documentation of experimental observations & data in publications / literature.
* Experience in washing chemistry (especially in silicon wafer washing).
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| **8. OTHER REQUIREMENTS** (Physical, Certificates, Etc)**:**  |
| Some travelling to conferences, seminars, and research institutes is to be expected. |

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