

DHANASEKAR M

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OBJECTIVE

Seeking to work with a goal oriented organization which is looking for the career conscious and ambitious employee, where my knowledge, skills and experience will be used for the full advancement and growth of the organization.

TOTAL EXPERIENCE

Accomplished **12 years and 8 months** of experience in **Research & Development, Quality Assurance, Quality Controller, Raw Material Incharge** in Chemical, Abrasive, Composite & Alloy Industries

PROFESSIONAL PROFILE

RANE BRAKE LINING LIMITED, CHENNAI

Currently Working as **R&D - Assistant Manager (Dec 2021 to Present)**

1. Roles & Responsibilities:

- ❖ Developing and executing new product development, and works with the commercialization team to bring these composite friction product to market and achieve business goal of organization
- ❖ Responsible for Localization of Raw Materials against Imported RM with cross-functional team.
- ❖ Find alternate Raw material for performance improvement as well as cost savings.
- ❖ Understand need of new customers, checking for feasibility trial, and making pilot sample.
- ❖ Minimizing customer complaints by using quality tools and provide solution.
- ❖ New supplier development, process audit, process improvements at supplier end.
- ❖ Do the pilot trial for new source development, coordinating the plant trials, optimizing the process condition at plant scale with finalized processes and issue specifications to respective departments.
- ❖ Follow up of safe laboratory working practices, documentation of project works, ISO quality standards and assisting for internal & external lab documentation work
- ❖ Knowledge in APQP, PPAP, FMEA, MSA, SPC (IATF 16949).

CARBORUNDUM UNIVERSAL LIMITED, MURUGAPPA GROUP

Worked as **R&D - Executive, (Aug 2015 to Nov 2021)**

1. Roles & Responsibilities:

- ❖ Responsible for New product development as per markets needs and as part of R&D initiatives.
- ❖ Expertise in Epoxy, Phenolic, Alkyd, Polyurethane, Polyester resin based product
- ❖ Visit customer site and provide the technical solutions on time to improve product performance.
- ❖ Identifying of new Raw materials for cost reduction, process improvements, new technologies and to make Green products.
- ❖ Responsible for establishment of F Type epoxy bonded grinding wheel by casting process technology for Bearing, ID and OD racer, Cutlery & Connecting rod application
- ❖ New development of Rubber bonded grinding wheel by closely monitoring mixing, moulding and curing
- ❖ Modify manufacturing processes for safety improvement, quality improvement, design change cost reduction.
- ❖ Analyzing organic & inorganic compounds to determine chemical & physical properties, composition, structure by sophisticated instruments.
- ❖ Develop the testing facilities for adjacency products, evaluate product and analysis of new products
- ❖ Coordination of new product development activities with cross-functional team like Application team, production and marketing.
- ❖ Transfer of technology by analyzing the pilot data, coordinating the plant trials, optimizing the process condition at plant scale with finalized processes and specifications.
- ❖ Technical Support for Marketing team: Support for field trials, field support queries and bench marking report for competition products. Trial and establishing products.
- ❖ Provide assistance to manufacturing in order to improve the quality and efficiency of the manufacturing process and the quality assurance lab in solving quality and production problems
- ❖ Working with the design team (drawing office) to produce required technical drawings for both production and customer requirements.
- ❖ Analyze the competitor sample and complaint sample by FTIR, TGDTA, DSC, GC-MS, ICP-OES, SEM- EDS.
- ❖ Generate ideas for new concepts and convert them into products to match performance as per customer requirement.
- ❖ Knowledge and Experience in PPAP, FMEA, APQP, CAPA, Poka Yoke, 5S, TPM, Control plan, 8D, 7 QC Tools,
- ❖ Experience in SAP, ERP, Lean Six Sigma Green belt,

R&D - Sr. CHEMIST (Mar 2012 to July 2015)

1a. Roles & Responsibilities:

- ❖ To supervise timely sampling, and inspection of raw material samples as per SOP.
- ❖ Conducted prototype product formulation batching and maintained appropriate documentation.
- ❖ Responsible for vendor development & vendor audit with procurement team and making pilot trial .

- ❖ Check the chemistry of minerals like feldspar, TiO₂, Gypsum, CaCO₃, PAF, Kaolin clay, Cryolite, Quartz, China clay, MnO₂, Iron Oxide, Lithophone, Barytes, ZnO, Wollastonite, Lime, etc...
- ❖ Preparing and maintaining necessary documents to comply with ISO 9001, ISO 14001 and OHSAS 18001 other statutory quality standards.
- ❖ Works with Quality Assurance personnel to investigate any product quality issues and provide solution .
- ❖ Check the chemical properties of incoming raw material, finished and customer complaint sample by Volumetric and Gravimetric analysis, Instrumental analysis, etc.
- ❖ Check chemical properties of all types of abrasive grains (Alumina), ceramic bond, Frit etc.
- ❖ Responsible for the proper use, calibration of analytical equipment and good laboratory practice.
- ❖ Testing of pH, Epoxy Value, Amine Value, Tg Value, UTM Tensile Strength, Rockwell Hardness
- ❖ Conducted laboratory audits of raw materials and finished goods, and developed processes to help minimize waste.
- ❖ Rejection Analysis and Corrective and Preventive Actions towards rejections reduction

IMAC ALLOY CASTING, CHENNAI

Worked as **QUALITY ASSURANCE** from **September 2009 to Feb 2012.**

Roles & Responsibilities:

- ❖ Monitor process to ensure that they meet as per customer specification
- ❖ Verify and issue Certificate of Acceptance products that meet customer specification.
- ❖ Frequent plant visit and working with production team for process improvement.
- ❖ Devise and establish a company's quality procedures, standards, and specifications.
- ❖ Knowledge about the different system of QMS, CAPA, Non Conformance, cp-cpk, etc
- ❖ Check the composition of Aluminium, Silicon, Manganese, Magnesium, Vanadium, Zinc, Iron, Calcium, Sodium, Copper, Nickel, Molybdenum, Zirconium of incoming alloy metal by OES method
- ❖ Should work on target based system of minimizing customer complaint through putting new systems and procedure in place
- ❖ Test the alloy composition by **Baird Vacuum Emission Spectrometer (Optical Emission Spectrometer)**
- ❖ Corrective and preventive action done for non-conformance finished ingots
- ❖ Understand customer needs and requirements to develop effective quality control processes
- ❖ Experience in PPAP, FMEA, SPC, Process capability, Control plan, 8D, 7 QC Tools

ACADEMIC ACCOMPLISHMENTS

- ★ M.Sc (Chemistry) from Madurai Kamaraj University, Madurai in 2019, Secured **65 %**
- ★ B.Sc (Chemistry) from RKM Vivekananda College, Chennai in 2009, Secured **68%**
- ★ HSC from P.A.K.Palanisamy Higher Secondary School, Chennai in 2006, Secured **79%**
- ★ SSLC from P.A.K.Palanisamy Higher Secondary School, Chennai in 2008, Secured **88%**

ANALYSIS / INSTRUMENTATION SKILLS

- Expertise in **WDXRF (Rigasu ZSX)** for Raw material & Complaint sample analysis
- Expertise in **Particle size Distribution analyzer (Mastasizer - Malvern hydro 2000 MO)**
- Expertise in **TGDTA (Thermo plus EV02 - TGMA 8122)**
- Expertise in **Hesse Heating microscope** for ceramic bond analysis
- Expertise in **Metallurgical & Stereo Microscope** with **Pixel fox** Software
- **Carbon & Sulphur analyser**, Contour & Surface roughness measuring (CMM)
- **UV DOUBLE BEAM – Spectrophotometer (Shimadzu-1700)** analysis with **Spectra Treats**
- **BET** surface area analysis with **Smart sorb 92/93** software
- Wet chemical analysis as per standard analysis procedure.
- Micro hardness testing by **Vicker's Hardness** Tester.
- Check **Rockwell Hardness Tester** for Composite materials.
- Check Polymer Tensile & Flexural strength, Shear strength by **UTM Machine**
- Expertise in **HPLC, GC - MS, ICP - OES, DSC, SEM – EDS, FTIR**, Analytical equipment.
- **Viscometer, pH Meter, Gel time, Carbon & Sulphur** apparatus
- **Baird Vacuum Emission Spectrometer - OES** Testing Machine (**Spark tester**)
- Check the uncured resin percent by **Soxhlet apparatus (Acetone Extraction Method)**
- Lean Six Sigma Green Belt Training.

PERSONAL DETAILS

Date of Birth : 18th July 1989.
Father's Name : A.M. MANOHARAN
Mother's Name : M. SIVAKAMI
Marital Status : Married
Blood Group : A^{+ve}
Hobbies : Reading newspaper , Playing Cricket
Language Known : English, Tamil

DECLARATION

I hereby declare that the above mentioned information is correct up to my knowledge and I bear the responsibility for the correctness of the above mentioned particulars.

Place: Chennai

Date:

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