

José-Manuel Martins

Ph.D. in Physics and Chemistry of Polymers



Profile

60 years old
Seniority : 12 years,
associate
English
Portuguese

**Chemistry, Petrochemistry,
physics and formulation of
Polymers**

Plastics and rubbers

**Resins, sealants, paints and
coatings**

Glues and adhesives

**Materials for electrical
insulation, dielectrics**

**Industrial processes and
products**

Project management

**Health, Safety and
Environment**

Corrosion

REACH

**Certified CRAC Expert
Approval N°14
(Physico-chemistry of
materials/corrosion)**

Education

Ph.D. in Physics and Chemistry of Polymers

University of Le Mans

Master Degree in Physics and Chemistry of Polymers

University of Paris VI

Professional background

SEG Diélectriques

Technical and Industrial Manager
R&D Manager – Materials for electrical insulation – Electrical Engineering
HSE Manager

Rhodia Silicones

R&D Engineer
Laboratory Manager – Industrial assistance, pilot, products, processes and industrialization
Project Leader

University of Bayreuth (Germany) – Henkel

R&D Engineer – Materials for paint & varnish coatings
Head of Analytical Laboratory

University of Le Mans

Institute for Polymers Applied Research

R&D Engineer – Materials for paint & varnish coatings, elastomers and rubbers, etc.
Head of Analytical Laboratory

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Key areas of expertise

Chemistry – Petrochemistry – Physics – Materials – Plastics

- Polymers, plastics, rubbers
- Formulations (inks, varnishes, resins, adhesives, paints, coatings, etc.)
- Structural properties and performance of materials
- Materials processing and applications
- Material design, manufacturing, formulation, or processing failings, ageing (coating resins, seals, bonding, concrete, composites, etc.)
- Accidental contaminations of products
- Adhesion failures
- Breakdown of electrical insulation products
- Material processing defects (coating resins, etc.)
- Waterproofness damages: infiltration, SEL
- Automotive: technical failures, suppliers, recalls, etc.

Corrosion

- Corrosion of storage tanks for varnishes, solvents, gases, etc.
- Corrosion of lagging and piping
- Corrosion of reinforcing bars and metal parts (concrete, gates, etc.)
- Surface treatment
- Standard tests (salt spray, etc.)
- Ovens/refractory materials and ceramics: heat treatments, construction
- Packaging: plastic, glass, complex films, packaging items, caps

Industrial processes

- Chemicals and derivatives manufacturing plants
- Impacts of manufacturing processes (reactors, mixers, coating ovens, ...) on product quality (polymerisation failures, cracking, folds, tears, blistering, delamination, etc.)
- Process malfunctions resulting in fires (static electricity, etc.)
- Treatment plants (physicochemical separations, biological treatment, water treatment)
- Traceability - conformities - analytical methods - non-destructive testing

Engineering – Miscellaneous

- Project management, site monitoring
- Methodologies for analysis/diagnosis/audits/troubleshootings
- Financial claims, studies of material and consequential losses, operating losses, withdrawal operations (injunction, prevention, safety, consumer warning, etc.)
- Health, Safety and Environment (HSE), management & prevention of industrial risks, health risk, toxicity for environment
- Operational training and support advice related to the areas of expertise and risk management