



Chemical Scientist / Engineer

Additive manufacturing or 3D printing technologies represent a promising market in the materials sector to realize adapted and functional parts. One of the most widely used technologies is DLP (Digital Light Processing) or VAT polymerization. Admatec Europe develops and produces 3D printers based on this technology.

Admatec Europe www.admateceurope.com is specialized in additive manufacturing of ceramics and metals. Admatec designs and manufactures printers and develops various ceramic and metallic feedstocks for printing. The current Admaflex 3D printing technology in the market is based on layer-by-layer curing of photosensitive polymers containing metal or ceramic powders. During the printing process, the layers are added and cured with help of UV-photo curing. After the printing, the parts are cleaned and then thermal de-binded and sintered to a dense material. Our sister company Formatec Technical Ceramics B.V. produces ceramic and metal parts by injection molding and printing. Both companies are part of Formatec Holding owned by Nano Dimension www.nano-di.com and are therewith a division of an international world player on Additive Manufacturing.

Additive manufacturing of powder metallurgical materials is a combination of three consecutive and connected factors, first the preparation of polymers-based slurries or feedstocks, then the 3D shaping process and finally the de-binding and sintering. To complete our current team, we are looking for a **Chemistry Scientist / Engineer**, for developing high filled polymer systems.

Work description

You will be part of the Admatec / Formatec materials development team optimizing and developing materials and processes for current and future printing and production techniques. Your initial tasks will be on further understanding and exploring polymer systems and developing new resin mixtures suitable for the type of material defined. Your work will be a support for the materials team, so you will be part of a multidisciplinary team including engineering, powder metallurgy, software & production. Your main tasks will be:

- Development of new polymeric compositions required and adapted to powder metallurgical processing technology.
- Performing experimental tests and analyses related to the behavior of polymers chemically and physically.
- Support Materials Colleagues by providing key expertise on photopolymerization reactions under the Admaflex system.
- Become familiar with the general printing and forming processes by performing technical support in tests for R&D or for customers, preparing feedstock & slurries, tests on post processing steps.
- Record the experimental tests in a laboratory notebook, synthesize the results and write reports for each case study.
- Validate and instruct on new working procedures.

Qualifications/ Skills

- A PhD or master's degree in Polymer science, organic chemistry, or equivalent.
- Skills in characterization approaches of polymers (TGA, FTIR, SEM, AFM, tensile tests, curing-Kinetics, plasticity, rheology tests...).

- A strong knowledge in organic chemistry, polymer rheology, surface chemistry, mechanical and chemical behavior.
- Knowledge on materials and additive manufacturing techniques will be a plus but not mandatory.
- Be proactive and have a practical and integrated approach to laboratory work for experimental tests.
- Curious, autonomous, self-motivated with a rigorous scientific approach.
- Excellent teamwork skills and flexibility focused on results and customer requirements.
- A very good synthesis and report writing skills.
- Fluent English, reading and writing skills.

What do we offer

At Admatec Europe, we offer you the opportunity to join international company to work in dynamic, innovative, motivated, and multi-disciplinary team with interesting challenges for a broad spectrum of applications.

- A dynamic, innovative, cooperative working environment.
- Competitive salary, bonus and RSU options.
- A nice and motivated team
- 30 days annual leave on a full-time basis.
- Travel allowance.
- Flexible working hours.
- A good pension scheme by PME.

If you are interested and meet the above requirements, please apply by sending your Resume (CV) via the following email addresses:

- Jaco Saurwalt j.saurwalt@admateceurope.com
- Nadia El Felss NadiaE@admateceurope.com