



Job Title: Lead Research Scientist (Sustainable Superabsorbent Polymers)

Location: Oxford, UK

Employment type: Full-time, Permanent

Company: A&B Smart Materials

About Us:

A&B Smart Materials is an Oxford University-based materials science venture founded by Oxbridge graduates. We are pioneering the next generation of bio-based, biodegradable superabsorbent polymers (SAPs) to replace synthetic SAPs.

SAPs are “magic-like” materials that absorb hundreds of times their weight in water. They are used primarily in hygiene (diapers, pads, cosmetics) and agriculture (soil enhancers), representing a \$17.6B global market. With new EU regulations banning non-biodegradable SAPs in soils from 2028, there is an urgent demand for sustainable alternatives.

We are backed by some of the most prestigious investors in the world, and are part of the Creative Destruction Lab — the leading accelerator for deep tech ventures. Our work has also been recognised globally, including being named a “DeepTech Pioneer” at Hello Tomorrow (2025) and Winner of the Cleantech StartUp Award (South East, 2024). Backed by world-class advisors and based at Oxford’s Begbroke Science Park with access to cutting-edge labs, our mission is to make sustainable SAPs the global standard.

The Position:

We are seeking an experienced Lead Research Scientist with a proven track record in sustainable superabsorbent polymer (SAP) development. This is not an entry-level research role — it is a chance to bring decades of expertise into a startup where your insights can directly shape the technology roadmap and help us accelerate progress while navigating the complexities of sustainable SAP development.

You will work in close collaboration with our CTO to help define the company’s technology direction, ensuring alignment between breakthrough science and commercial growth. You will also play a pivotal role in mentoring our research team, developing IP, and translating scientific progress into scalable solutions.

Key Responsibilities:

- Lead SAP innovation: design and oversee R&D pathways for sustainable superabsorbent polymers.
- Bring deep scientific and practical insights into SAP design, performance, and scalability.
- Work closely with the CTO to shape technology direction and research strategy.
- Plan, execute, and interpret lab experiments with scientific and commercial impact in mind.
- Partner with the founding team to develop IP, refine technology pathways, and align R&D with commercial goals.

- Mentor junior scientists and instil best practices in experimental design and polymer chemistry.
- Represent A&B Smart Materials in publications, patents, and conferences.

Qualifications:

- PhD in Polymers, Biopolymers, or a closely related field.
- 10+ years' experience in polymers/biopolymers, with a strong preference for hands-on work in sustainable SAP development.
- Industrial or postdoctoral track record in bringing polymer innovations from lab to scale.
- Strong wet lab expertise, with ability to design and interpret complex experiments.
- Proven leadership experience, ideally managing R&D teams or cross-functional research programmes.
- A history of innovation — patents, publications, or commercialised technologies in SAPs.

Desired Experience (Nice to Have):

- Previous experience working at company/startup developing sustainable Super Absorbent Polymers.
- Previous experience working at a major chemical manufacturer.
- Background at a large hygiene company with exposure to SAP applications.
- Experience bridging between corporate R&D and fast-moving startups, bringing structure, rigour, and adaptability.
- Strong network within the SAP, polymer chemistry, or hygiene/agriculture communities.

Benefits & Perks:

- Competitive compensation package of up to £100,000 with generous equity package, so you share directly in the company's success.
- Significant long-term upside as the company scales in a rapidly growing global market.
- Comprehensive health insurance and wellbeing package.
- Over 28 days paid holiday annually.
- Flexible working hours with hybrid (on-site + remote) options.
- The chance to shape the global future of sustainable SAPs in a company building momentum with leading investors, accelerators, and awards.
- A creative, fast-moving environment where your experience will have a direct impact on products, IP, and company growth.

At A&B Smart Materials, we are looking for more than talent — we are looking for deep expertise. If you have spent years pushing the boundaries of sustainable SAPs and want your knowledge to directly influence a breakthrough technology, we want to hear from you.

Application Form: <https://forms.gle/wubPmfUnYP9u2SQa9>

Recruitment email: recruitment@absmartmaterials.com