



NAMI

納米及先進材料研發院有限公司
Nano and Advanced Materials Institute Limited

Nano and Advanced Materials Institute Limited (NAMI) was established in 2006 and designated by the Innovation and Technology Commission of the Hong Kong SAR Government as an R&D Centre for Nanotechnology and Advanced Materials. NAMI has a very strong team of over 170 professional researchers and 30,000 sq ft. laboratory with state-of-the-art equipment and facilities in the Hong Kong Science Park. NAMI conducts market-driven research on nanotechnology and advanced materials, supporting the local industries in developing and commercializing new technologies.

Senior Engineer / Engineer – Energy (Ref. 17036)

Duties The appointee will work on the development of polymer/composite with applications in energy absorption and impact damping materials, and fire resistant /retardant materials. He/she will work in a dynamic and efficient team which is responsible for:

- Designing composite formulation and developing process to form composites;
- Applying the composite to form prototype to achieve desired functions;
- Characterizations and testing at different process stages and evaluating the material performance;
- Scaling up process for trial production;
- Performing other duties assigned by supervisor.

Requirements

- A PhD/Mphil degree in Chemistry, Polymer Science/Engineering, Material Science/Engineering, Physics or related disciplines fulfilling at least one of the following technical requirements:
 - Experience in design, fabrication and characterization of polymer/composite;
 - Experience in chemical and mechanical characterization of composite materials;
 - Good knowledge of polymer and polymer composite;
- Hard-working and have a strong sense of ownership for his/her work is a must;
- With good analytical and troubleshooting skills. Creative and passionate for innovation;
- Team work with good communication skills.

Senior Engineer / Engineer – Environmental (Material Technology) (Ref. 18025)

Duties The appointee will work on the development of polymer or hybrid materials based nanomaterials or coatings. S/he will be responsible for developing formulations for forming polymer based nanomaterials or coatings, designing and optimization on the formulation of the polymer material, characterization on the properties of polymer materials, prepare project progress reports, meeting slides, SOPs, and related documents, and incubating idea to explore the opportunity of cooperation with industry partners.

Requirements The appointee will be responsible for R&D work, including experimental design, laboratory equipment operation, sample preparation, properties characterization, data analysis, performance testing, drafting proposals, reports, SOP and IP documents, in the following areas:

- MPhil degree or above in Chemistry, Material Science/Engineering or related disciplines;
- Solid knowledge in developing polymer or hybrid materials based nanomaterials;
- Extensive hands-on experience on characterization of nanomaterials;
- Solid experience in organic/inorganic material characterizations are necessary;
- Experiences on surface treatment and coating technologies will be an advantage;
- Hands-on experiences in various types of R&D work;
- Good command of spoken and written English and Chinese; Good communication, presentation and interpersonal skills, ability of literature and patent review are needed;
- Good team player with experience in people management and ability to work independently.

Senior Engineer / Engineer – Flexible Concrete / Mortar Formulation (Ref. 18041)

Duties The appointee will be responsible for project implementation, including experimental design, laboratory equipment operation, sample preparation, properties characterization, performance testing, data analysis, and reporting. He/she will be responsible for:

- Characterization and testing of rheological and mechanical properties of the materials with fibers;
- Develop formulations for concrete and mortar materials and conduct daily lab tests;
- Testing of the tensile performance and self-repair characteristics of the material that is tailored-made to the requirements of industrial partners;
- Prepare project progress reports, meeting slides, and related documents;
- Planning out field trials, developing scaling up and relevant mixing procedures of concrete with fibers;
- Support scale up and commercialization of all R&D results for industrial partners;
- Drive innovation projects of new products or new applications according to customer and project requirement;
- Support the incubation of ideas to explore new cooperation opportunities with industrial partners; and
- Perform other duties assigned by supervisor.

Requirements

- Master (MPhil/MSc) or Ph.D. degree in Material Science, Civil Engineering, Chemistry or Chemical Engineering or related disciplines;
- 2 years of experience in concrete formulation development is preferable while fresh graduates will also be considered;
- Prior experience in advanced chemical analysis such as SEM, IR, XRD, etc. would be a plus;
- Work independently and able to communicate in teamwork;
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search;
- Curious to research and innovation, positive, analytical, critical thinking, good troubleshooting skill;
- Have a sense of ownership for his/her work; and
- Willing to work under pressure.

Senior Engineer / Engineer – Advanced Battery Materials (Ref. 18052)

- Duties
- Hands-on synthesis and characterization of battery materials for high performance all solid state lithium batteries for consumer electronics;
 - Development of scalable process with good repeatability and reproducibility for the advanced battery materials;
 - Responsible for preparation of external technical reports for meeting with sponsors;
 - Responsible for ad hoc tasks assigned by supervisors; and
 - Any other duties as required.
- Requirements
- PhD in Material Science, Chemical Engineering, Chemistry, or related areas is required. Fresh graduate will also be considered;
 - Solid hands-on research experience on synthesis of battery materials for solid state battery with proven record. Experience on formulation or simulation of solid state electrolyte is a plus;
 - Strong analytical skills and deep understanding in electrical characteristics of lithium batteries. Knowledge on DoE is a plus;
 - Good troubleshooting skills with Can-Do attitude;
 - Strong accountability and responsibility for his/her work;
 - Must be able to work independently, yet able to be a good team player; and
 - Good command of spoken and written English and Chinese.

Senior Engineer / Engineer – Electrospinning and Nanofibers (Ref. 18050)

Duties The appointee will be responsible for R&D work, including experimental design, laboratory equipment operation, sample preparation, properties characterization, data analysis, performance testing, drafting proposals, reports, SOP and IP documents, in the following areas:

- Explore potential applications of electrospun nanofibers;
- Develop formulations for electrospinning nanofibers based materials;
- Characterize the performance of electrospun nanofibers;
- Execute sample testing with physicochemical property analysis, such as loading efficiency, encapsulation efficiency, release kinetics of target ingredient, morphology of nanofibers and stability study;
- Execute sample testing with thermal or structural analysis, such as TGA, DSC, XRD and FTIR;
- Incubate idea to explore the opportunity of cooperation with industry partners;
- Help with technology transfer to industry partners;
- Collaborate with other research staff on R&D work;
- Facilitate the daily operations of the laboratory; and
- Involve in marketing activities.

Requirements

- Bachelor (>6 years), Master (Mphil: >4 years) or Ph.D. degree (>1 year) in Process engineering, Automation engineering, Mechanical engineering, Medical engineering, Polymer Science, Polymer Physics and Chemistry, Material Science, Chemical Engineering, or related disciplines;
- Hands-on experiences in various types of R&D work, especially in material science or process engineering projects, including:
 - Physical and chemical characterization of advanced materials;
 - Experience in manufacturing industry is an advantage;
 - Solid knowledge and extensive experience in electrospinning and nanofibers is an advantage.
- Wholehearted application to work with high motivation;
- Work independently and able to communicate in teamwork;
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search;
- Positive, analytical, critical thinking and good troubleshooting skill;
- Have a sense of ownership for his/her work; and
- Willing to work under pressure.

Senior Engineer / Engineer – Functional Polymer Formulation and Processing (Ref. 18032)

Duties The appointee will work on the development of functional polymers for various healthcare applications. He/she will work in a dynamic and efficient team which is responsible for:

- Development of formulations for forming functional polymers via wet chemistry or extrusion/molding process;
- Characterization of the functional polymers using FTIR, TGA, DSC, etc.;
- Evaluation of the mechanical and biological performances of the formulations;
- Drafting proposals, project progress reports, meeting slides, SOPs, and IP documents;
- Incubating ideas to explore the opportunity of cooperation with industry partners;
- Collaborating with other research staff on R&D work;
- Facilitating the daily operations of the laboratory; and
- Performing other duties assigned by supervisor.

Requirements

- Master or Ph.D. degree in Polymer Science/Engineering, Material Science/Engineering, or related disciplines;
- Solid knowledge in polymer or material;
- Hands-on experiences in various types of R&D work, especially in polymer related projects;
- Knowledge and extensive experience in polymer processing and engineering (e.g. extrusion, injection molding) is an advantage;
- Knowledge in transparent plastics, such as Tritan, PET, PC and ABS, is an advantage;
- Wholehearted application to work with high motivation;
- Work independently and able to communicate in teamwork;
- Positive, analytical, critical thinking and good troubleshooting skill;
- Have a sense of ownership for his/her work;
- Willing to work under pressure;
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search; and
- Candidates with less working experiences will be considered as Engineers.

Senior Engineer / Engineer – Healthcare (Ref. 18046)

Duties The appointee will be responsible for R&D work, including experimental design, laboratory equipment operation, sample preparation, properties characterization, data analysis, performance testing, drafting proposals, reports, SOP and IP documents, in the following areas:

- Hands-on experience testing the identity of botanical ingredients using HPLC, GC/MS, LC-MS/MS;
- Demonstrate extensive problem-solving skills in the choice of active pharmaceutical ingredients, oral and/or topical formulation development;
- Incubate idea to explore the opportunity of cooperation with industry partners;
- Collaborate with other research staff on R&D work;
- Facilitate the daily operations of the laboratory;
- Involve in marketing activities.

Requirements

- Master or Ph.D. degree in Biology, Food Chemistry, Biomedical/Chemical Engineering, Chinese Medicine or related disciplines;
- Knowledge in Biomaterial design and nanomaterial fabrication is an advantage;
- Practical practice on TLC, HPLC, GC/MS, LC-MS/MS instruments are preferred;
- Experience in product development related to hair- or/and skin- care;
- Good command of English and Chinese, articulate report writing/presentation skills;
- Self-motivated, work independently and able to communicate in teamwork;
- Positive, analytical, critical thinking and good troubleshooting skill;
- Have a sense of ownership for his/her work;
- Willing to work under pressure;
- Candidates with less working experiences will be considered as Engineers.

Salary and Benefits

Salary will be commensurate with qualifications and experience. Medical and dental benefits as well as annual leave will be provided. Appointment will be offered on a contract basis, renewable subject to mutual agreement and performance.

Application Procedures

Please go to our Career Page and click the position you would like to apply for filling in the online application form: <http://www.nami.org.hk/en/nami/careers.html>

We thank applicants for their interests, but advise that only shortlisted candidates will be notified of the results of their applications.

(Applicants who do not hear from us within 8 weeks may consider their application unsuccessful and their data will be destroyed within 24 months of receipt.)