Senior Engineer / Engineer – Energy (Ref. 17027)

Duties

- The appointee will work on the development of battery materials, such as battery binder, cathode materials, anode materials, electrolyte formulations. S/he will work in a team which is responsible for:
- Developing high voltage cathode materials and high capacity anode materials;
- Developing new binders for the new cathode and anode materials to improve the battery performance;
- Formulating new electrolyte system for new anode and cathode materials to improve the cycle and high temperature performance;
- Characterizations and testing at different process stages and evaluating the material performance;
- Performing other duties assigned by supervisor.

Requirements

- A PhD degree in Chemistry, Material Science/Engineering, Physics or related disciplines fulfilling at least one of the following technical requirements:
    - Experience in anode development, such as graphite, hard carbon, silicon, SiOx, Sn, Si alloy etc.;
    - Experience in binder development, such water based binder for cathode and anode, for silicon anode;
    - Experience in electrolyte formulation, such as new electrolyte system for battery with voltage higher than 4.5V or electrolyte formulation for silicon anode etc.;
- Good knowledge of battery material system;
- 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; industrial battery materials and battery company working experience is a privilege.

Senior Engineer / Engineer - Construction (Ref. 17026)

Duties

- The appointee will be responsible for project implementation, including experimental design, laboratory equipment operation, sample preparation, properties characterization, data analysis, performance testing in the following areas:
- Develop formulations for functional cementitious materials;
- Responsible for achieving project milestones, writing up project proposals, reports and giving slide presentations from time to time;
- Work closely with project sponsors, suppliers, professors and other project related parties;

- Incubate idea to explore the opportunity of cooperation with industry partners.

Requirements

- MSc/MPhil or above degree in Materials Science, Civil Engineering, Mechanical Engineering or related, focusing on advanced engineering materials and composites materials related technologies;
- Prior experiences on advanced materials development/ deployment is an advantage, especially in polymer modified cementitious materials related projects;
- 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;
- Willing to work under pressure.

Senior Engineer / Engineer - Construction (Ref. 15127)

Duties

- The appointee will be responsible for project implementation, including experimental design, laboratory equipment operation, sample preparation, properties characterization, data analysis, performance testing in the following areas:
- Develop formulations for microencapsulated materials;
- Characterize the formulations by SEM, DLS, OM, HPLC and other relevant methods;
- Perform scaling up studies of formulations;
- Prepare project progress reports, meeting slides, SOPs, and related documents;
- Work closely with project sponsors, suppliers, professors and other project related parties;
- Incubate idea to explore the opportunity of cooperation with industry partners.

Requirements

- Master (MPhil: >4~5 year) or PhD degree (>1 year) in Chemistry, Material Science, Bioengineering, Chemical Engineering, or related disciplines;
- Hands-on experiences in various types of R&D work, especially in polymer synthesis and colloidal system related projects;
- Solid experiences in organic or inorganic encapsulation R&D area will be 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;
- Willing to work under pressure.

Senior Engineer / Engineer – Construction (Ref. 17018)

Duties

- The appointee will be responsible for project implementation, including experimental design, laboratory equipment operation, sample preparation, properties characterization, data analysis and performance testing;
- Develop formulations for fire resistant concrete materials;
- Prepare project progress reports, meeting slides, SOPs, and related documents;
- Work closely with project sponsors, suppliers, professors and other project related parties;
- Incubate idea to explore the opportunity of cooperation with industry partners.

Requirements

- Master (Mphil/MSc) or Ph.D. degree in Chemistry, Material Science, Chemical Engineering, or related disciplines;
- Hands-on experiences in various types of R&D work;
- Solid experiences in extrusion area will be 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;
- Willing to work under pressure.

Senior Engineer / Engineer – Construction and Building Materials (Ref. 15008)

Duties

- Initiate, implement and manage NAMI's projects on developing and customizing advanced engineering materials;
- Responsible for achieving project milestones, writing up project proposals, reports and giving slide presentations from time to time;
- Work closely with project sponsors, suppliers, professors and other project related parties;
- Supervise technical staffs;

- Maintain a good knowledge of the market trend and build network with local professionals for potential collaborations.

Requirements

- MSc/MPhil or above degree in materials science, civil engineering, mechanical engineering or related, focusing on advanced engineering materials and composites materials related technologies;
- R&D experiences on materials/ products characterization technique, applying/ developing composite materials, nano-modification, and numerical simulation;
- Prior experiences on advanced materials development/ deployment is an advantage;
- Positive, creative, analytical and good troubleshooting skills;
- Ability to initiate and work independently;
- Have a sense of ownership for his/her work, good interpersonal and communication skills;
- Good command of spoken and written English and Chinese, proficient in Putonghua is an advantage.

Senior Engineer / Engineer – Construction and Building Materials (Ref. 15114)

Duties

- Responsible for the R&D work on the development of functional materials in the field of building and construction materials;
- Responsible for achieving project milestones, writing up project proposals, reports and giving slide presentations from time to time;
- Work closely with project sponsors, suppliers, professors and other project related parties.

Requirements

- Master or Ph.D. degree in Chemistry, Chemical Engineer, Materials Science or related fields with experience as below: polymer synthesis and/or composites, coating materials, functional advanced materials;
- Hands-on experience in material preparation, chemical analysis and characterization;
- Strong capability to analysis, to solve problem independently with the sense of responsibility;
- Able to work independently, self-motivated, good presentation, communication and interpersonal skills and demonstrated team participation;
- Good command of English and Chinese, proficiency in Mandarin an advantage.

Senior Engineer / Engineer – Electronics (Ref. 17023)

Duties	Specifying, designing (schematic capture, PCB layout, and firmware), implementing and verifying of the electronic prototype components and devices integrated with NAMI's new electronic solutions; Collaborate with other team members, including mechanical engineering, industrial design, and outside partners; Provide characterization and test of designed electronic system; Participate in all aspects of the prototype device design process.
Requirements	A Bachelor/Master's degree in Electrical or Computer Engineering; 3+ years' experience in designing and testing modern consumer electronic hardware at component, device, and system levels with understanding of manufacturing; Fresh graduate with proven skills is also under consideration; Proficient in circuit design for PCM of lithium ion battery, wireless charging and wearable devices, testing and solving problems; Hands-on experience in test environments and tools such as ICE, oscilloscope, signal generator, network analyzer; Experience in hardware prototype bring-up, debug, fault detection and failure analysis; Proficient software competence with the ability to write scripts for test; Experience in APP development for wearable devices is a plus; Strong communication skills and able to clearly express technical concepts in verbal and written forms; Strong independent working ability; Fluent in both Chinese and English, Mandarin is a plus.

Senior Engineer / Engineer – Electronics (Ref. 17022)

Duties	• The appointee will work on the development of advanced lithium sulfur or lithium ion battery through optimization of the cathode, anode, separator as well as the electrolyte. He/she will be responsible for a project base research to achieve milestone targets and the following commercialization related work.

Requirements	• Postgraduate degree, preferably PhD, in Chemistry, Material Science/Engineering or related disciplines and fulfill at least one of the following technical requirements:
	  o Knowledge in electrochemistry;
	  o Knowledge in battery materials synthesis including cathodes, anodes composite;
	  o Experience in lithium cell design, especially in electrolyte and separator;
	  o Experience in lithium base battery process including coin cell

fabrication, cathode/anode coating, pouch cell fabrications;
    - Knowledge in lithium base battery testing and electrochemical property characterization;
    - Knowledge in some commonly used characterization methods, including SEM, EDX, XRD, IR, Raman, AFM, DSC and TGA;
- Positive, creative, analytical and good troubleshooting skills;
- Self-motivated, good interpersonal and communication skills;
- Good command of spoken and written English and Chinese, proficient in Putonghua is an advantage;
- Less experience will be considered as Engineer.

Senior Engineer / Engineer – Electronic Materials (Ref. 17017)

Duties

- Develop advanced polymeric battery materials and electrolytes for high safety requirement;
- Prepare samples for analysis, and develop appropriate sample preparation techniques for the preservation for the sensitive constituents to air, moisture etc.;
- Organize and carry out characterization tasks, analyze results, prepare reports for organic/polymeric battery materials ranging from determination of polymer properties (molecular weight, crosslinking degree etc) to thermo-mechanical behavior of polymers at interfaces, and from chemical and physical properties to electrochemical response;
- Determine best techniques to use to attain the desired information on battery electrolytes containing polymeric constituents, additives and ionic liquids;
- Interface with customers including production and R&D to collaborate on projects;
- Train, guide and define tasks for technicians to facilitate work at high-standards.

Requirements

- 3+ years of experience in industrial or academic settings related to characterization /development of advanced electrolytes or separators for batteries;
- PhD degree in Chemistry/Chemical Engineering, Polymer Engineering, Materials Science or related field;
- Expertise in synthesis of organic/polymeric battery materials and electrolytes including polymer processing vs. polymer properties, polymer derivatization, inorganic-polymer composite design and synthesis, solvent interaction on a variety of polymer classes, chemical reactivity towards reducing and oxidizing agents, acids and bases;
- Expertise in multiple characterization techniques; e.g. various chromatography (gel, size exclusion, liquid, gas etc), FTIR, DSC/TGA, TMA/DMA, porosity, pore size, surface area determination, NMR, XRD, MS, SEM/EDS, ICP etc.;

- Experience in determination of physical properties of electrolytes: conductivity, density, viscosity, diffusion coefficient;
- Familiar with mechanical testing for polymers such as stress-strain, adhesion, peeling, puncture, nano indentation etc.;
- Good foundation in electrochemistry and electrochemical measurements (CV, EIS etc);
- A record of successful innovation and commercialization of new electrolyte materials for fuel cell, capacitor, and lithium ion batteries is a plus;
- Attention to details, ability to work well individually and in team settings;
- Strong verbal and written communication and teamwork skills;
- Fluent in both Chinese and English, Mandarin is a plus;
- Candidates with less experience will be considered as Engineers.

Senior Engineer / Engineer – Electronic Materials (Ref. 17013)

Duties

- Take technology responsibility for repeatability of lithium ion battery products;
- Lead process team to optimize processes and solve process problems for different type of lithium ion batteries such as pouch cell, button cell etc. for better battery performance;
- New process development and manufacturability study for new electrodes, electrolyte, separator and packaging materials for performance improvement of lithium ion battery in team work with material team;
- Evaluate and implement possible process simplifications in order to lower manufacturing costs and tact time for products;
- Perform physical failure analysis;
- Transfer new technologies / process modules from process R&D into production at customer side when applicable.

Requirements

- University degree in Technical Science (Mechanical Engineering or Electrical Engineering), Master's degree is a plus;
- At least 5 years of solid experience in lithium ion battery industrial as equipment manager/senior equipment engineer;
- Team player, good communication skills, problem solving skills, flexible;
- Fluent in both Chinese and English, Mandarin is a plus;
- Candidates with less experience will be considered as Engineers.

Senior Engineer / Engineer – Electronic Materials (Ref. 17002)

Duties

- The appointee will work on developing wearable electronics with the integration of bio-sensors and physiological sensors. He/she will work in a team which is responsible for:
- Identify or synthesis suitable materials that response to biomarkers for health, such as glucose, ions, pH, lactate and etc.;
- Develop printing process with various printing and coating techniques, such as screen printing and inkjet printing, to fabricate sensors;
- Characterization and testing of material properties and device performance;
- Perform other duties assigned by supervisor.

Requirements

- A Master/PhD degree in Biochemistry, Biomaterials and related fields;
- Experience with bio-sensing material and sensor device fabrication is preferred;
- Knowledge on printing process is an advantage;
- Ability to work independently, strong problem-solving skills required;
- Good command of English and Chinese;
- Candidate with more experience will be considered as Senior Engineer.

Senior Engineer / Engineer – Electronic Materials (Ref. 17011)

Duties

- The appointee will work on the development of advanced lithium-ion batteries, focused on improving anode and cathode materials. Solid electrolyte or supercapacitor experience would be a plus. He/she will be responsible for a project base research to achieve milestone targets and the following commercialization related work.

Requirements

- Postgraduate degree, Ph.D. preferred in Chemistry, Material Science/Engineering or related disciplines and fulfill at least one of the following technical requirements:
    - Knowledge in electrochemistry;
    - Knowledge in battery materials synthesis including cathodes, anodes composite;
    - Experience in lithium cell design, especially in electrolyte and separator;
    - Experience in lithium base battery process including coin cell fabrication, cathode/anode coating, pouch cell fabrications;
    - Knowledge in lithium base battery testing and electrochemical property characterization;
    - Knowledge in some commonly used characterization methods,

including SEM, EDX, XRD, IR, Raman, AFM, DSC and TGA;
- Positive, creative, analytical and good troubleshooting skills;
- Self-motivated, good interpersonal and communication skills;
- Good command of spoken and written English and Chinese, proficient in Putonghua is an advantage;
- Less experience will be considered as Engineer.

Senior Engineer / Engineer – Bio and Healthcare (Ref. 15128)

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:
- Develop formulations for forming functional polymers via wet chemistry or extrusion/molding process;
- Characterize the performance of functionalized polymer using FTIR, TGA, DSC;
- Execute the testing on the mechanical and biological properties of the formulations;
- Prepare project progress reports, meeting slides, SOPs, and related documents;
- 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; and
- Involve in marketing activities.

Requirements

- Master (Mphil: >4~5 year) or Ph.D. degree (>1 year) in Polymer Science, Polymer Physics and Chemistry, Biomedical Engineering, Bioengineering, Chemical Engineering, or related disciplines;
- Solid knowledge in functional polymer design and polymer;
- Knowledge in physical and chemical characterization of polymers;
- Knowledge and extensive experience in polymer processing and engineering (e.g. extrusion, injection molding, etc.) an advantage;
- Hands-on experiences in various types of R&D work, especially in polymer related projects;
- 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; and
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search.

Senior Engineer / Engineer – Bio and Healthcare (Ref. 15119)

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:
- Develop formulations using biopolymer;
- Characterize the performance of functionalized polymer;
- Execute sample testing with HPLC or LC/MS/MS;
- 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; and
- Involve in marketing activities.

Requirements

- Master (Mphil: >4~5 year) or Ph.D. degree (>1 year) in Polymer Science, Polymer Physics and Chemistry, Biomedical Engineering, Bioengineering, Chemical Engineering, or related disciplines.
    - Biopolymer material design and polymer synthesis as well as process engineering;
    - Physical and chemical characterization of polymers;
    - Solid knowledge and extensive experience in film fabrication is an advantage.
- Hands-on experiences in various types of R&D work, especially in biopolymer related projects;
- 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;
- Willing to work under pressure.

Senior Engineer / Engineer – Bio and Healthcare (Ref. 15113)

Duties

- The appointee will be responsible for R&D work, including experimental design, laboratory equipment operation, sample preparation and characterization, data analysis, performance testing, drafting proposals, reports, SOP and IP documents, in the following areas::
- Develop formulations for forming functional nanofibers via electrospinning;
- Assist in scaling up the electrospinning process;
- Characterize the electrospun nanofibers using SEM, EDX, FTIR and TGA;

- Execute sample testing with HPLC, ELISA and UV-vis;
- Incubate ideas to explore cooperation opportunities with industrial partners;
- Collaborate with other research staff on R&D work;
- Collaborate with NAMI's industrial partners on R&D work;
- Facilitate the daily operations of the laboratory;
- Participate in marketing activities.

Requirements

- A Bachelor/Master's degree or PhD degree in chemistry, chemical engineering, materials science, mechanical engineering, medical engineering, process engineering, or related disciplines, preferably with experience in any of the following research areas:
    - Analytical skills in HPLC, ELISA and UV-vis
    - Electrospinning
    - Controlled release
    - Characterization of nanomaterials
    - Design and optimization of various chemical and biological processes
    - Literature/patent search
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search;
- 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.

Engineer / Senior Engineer – Bio and Healthcare (Ref. 17016)

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 on IVD and development of POCT for various type of diseases detection using advance technology;
- Execute sample testing with PCR, qPCR, spectrofluorometer, electrophoresis, HPLC and NMR;
- 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 (Mphil: >4~5 years) or Ph.D. degree (>2 year) in Molecular

Biology, Biochemistry, Pharmaceutical Science, Biomolecular Engineering, Bioengineering, Chemical Engineering, or related disciplines.
    - Biomaterial design, nano materials fabrication and small molecule synthesis is an advantage;
    - Primer & enzyme design, conjugation of various biomolecules;
    - Bacteria culture, DNA/RNA modification and purification;
    - Physical and chemical characterization of biomolecules;
    - Solid knowledge and extensive experience in molecular biology, IVD and POCT techniques.
- Hand-on experiences in various types of R&D work;
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search;
- 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.

Senior Engineer / Engineer – Healthcare (Ref. 17019)

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, LC-MS/MS;
- Demonstrate extensive problem-solving skills in the choice of active pharmaceutical ingredients and topical or transdermal 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 (Mphil: >4~5 years) or Ph.D. degree (>2 year) in Molecular Biology, Biochemistry, Pharmaceutical Science, Biomolecular/Chemical Engineering, Chinese Medicine or related disciplines;
    - Biomaterial design, nano materials fabrication and small molecule synthesis is an advantage;
    - Practical practice on TLC, HPLC, GC, LC-MS/MS, ICP/MS instruments are preferred;
    - Experience in preclinical drug testing related to neurology and the skin;

- Hand-on experiences in various types of R&D work;
- Good command of English and Chinese, articulate report writing/presentation skills as well as abilities in literature/patent search;
- 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.

Senior Engineer / Engineer – Healthcare (Ref. 17025)

Duties

- The appointee will be contributing to our exemplary technical research and development (R&D) work, including experimental design, sample preparation, characterization, prototyping, data analysis, performance testing, drafting reports and proposals, standard operating procedures and patent filings in the following areas:
- Develop and prepare next generation polymer-based material for medical and consumer products;
- Characterize and analyze samples using thermal analysis, mechanical testing methods, IR, AFM, SEM, TEM, XPS, etc;

Requirements

- Bachelor, Master or Ph.D. degrees in Engineering, Polymer Science, Polymer Physics, Material Science, Organic Chemistry/Chemistry, Nanotechnology, Textiles, or related disciplines;
- A self-starter and comfortable with contributing independently as well as collaborating in a team environment;
- Candidates with plastic processing, plasma chemistry, composites and bacterial culture will have an advantage;
- Minimum of 1 year of working experience in commercial laboratories or 3 years of academic research laboratory experience for BS and MS; recent doctoral graduates/candidates are encouraged to apply.