



imagination at work

## GE China Technology Center 通用电气中国研发中心

**通用电气公司(GE)**是一家集科技、传媒、金融服务于一身的多元化公司，致力于为客户解决世界上最棘手的问题。GE的产品和服务范围广泛，从飞机发动机、发电设备、水处理和安防技术，到医疗成像、商务和消费者金融、媒体，客户遍及全球 100 多个国家，拥有 30 多万员工。杰夫·伊梅尔特先生是现任董事长及首席执行官。

GE 是全球 500 强企业中始终保持领先的企业，GE 是道·琼斯工业指数 1896 年设立以来，唯一一家至今仍在指数榜上的公司。

**GE 中国研究开发中心 (CTC)** 是 GE 公司四个全球研发中心之一，是跨业务集团、跨研究领域的研发机构，为 GE 各业务集团提供基础科学研究、新产品开发、工程开发和采购服务。

中心坐落于上海张江高科技园区，占地面积 47,000 平方米，于 2003 年 5 月投入使用，是国内最大的独立外资研发机构之一，也是国内极少数具有基础科学研究能力的企业研发中心。

GE 中国研发中心现有研发人员 1200 多人，60 多个拥有世界一流设备的实验室，其研究力量主要集中在以下领域：

- 清洁能源，包括洁净煤、风电、太阳能发电等；
- 海水淡化与水处理；
- 材料科学，包括纳米材料、晶体、陶瓷，材料分析；
- 电力电子和实时控制；
- 安防技术；
- 先进制造技术；
- 影像技术；
- 化学技术，如导电高分子，电化学技术

GE 中国研发中心每年完成 100 多个研究项目，其中包括三分之一左右的基础科研项目。截至 2008 年底，GE 中国研发中心共申请了 320 多项专利。

### **The GE China Technology Center, driving GE's growth in China and globally**

One of four global research and development facilities at the hub of GE's worldwide technology development efforts, the GE China Technology Center (CTC) is a diversified, multi-disciplinary organization conducting fundamental research, new product development, engineering service and sourcing service.

Located at Zhangjiang High-Tech Park, the China Technology Center (CTC) has been operational since May 2003 with a total physical area of 47,000 square meters. CTC is one of the biggest foreign invested R&D centers and among the very few enterprise R&D centers which have fundamental research capabilities.

With more than 1,200 researchers and engineers and 60+ labs, CTC teams are driven to bring technology breakthroughs and product innovations to life in the following key areas:

- Energy, including Clean Coal, Wind Power, Solar Power, etc.
- Water, including Seawater desalination and water treatment
- Material, including nano-material, crystal, etc.
- Electronic and electric, real time control
- Security systems
- Advanced manufacture
- Imaging Technology
- Chemical

GE China Technology Center accomplished more than 100 R&D projects every year, one third of which are fundamental research projects. Till the end of 2008, CTC has filed more than 320 patent applications.

如何申请职位:

选择 1. 请访问<http://www.ge.com/careers/>

- 根据职位编号申请职位;
- 在线投递简历.

选择 2. 请将简历直接投递至 [yuxiao.tang@ge.com](mailto:yuxiao.tang@ge.com) (请在邮件中注明申请得职位编码)

更多信息请访问GE网站 : [www.ge.com](http://www.ge.com) or [www.ge.com.cn](http://www.ge.com.cn)

How to apply:

**Option 1: Please visit: <http://www.ge.com/careers/>  
Please search and apply the jobs by job code  
Please submit your CV on-line**

**Option 2: Please send your CV directly to [yuxiao.tang@ge.com](mailto:yuxiao.tang@ge.com) (Please remark the job code in your mail)**

**More information, please visit GE website: [www.ge.com](http://www.ge.com) or [www.ge.com.cn](http://www.ge.com.cn)**



**All the Positions below will be Located in Shanghai**

**POSITION TITLE: Lead Engineer-Signal Processing (Algorithm)**  
**(Job Code: 1008431)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	Master / PhD	<b>Working Experience:</b>	3-5 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

conceptual design and algorithm validation, contribute to intelligence-embedded electronic system for SDE future development.

**QUALIFICATIONS / REQUIREMENTS:**

PhD degree with major in Signal Processing, Automation Control or related areas;

- 5 years above signal processing experience in medical/military/industry applications;
- Strong analytical capability in system modeling and verification through simulation;
- Strong experience in algorithm implement and optimization for embedded systems based on micro-processors/MCU/DSP;
- In-depth knowledge in advanced signal processing techniques, e.g. adaptive/statistical/array/image signal processing;
- Excellent programming skills: Matlab, C/C++ and assembly languages;
- Knowledge in embedded OS, signal processing system will add advantages;
- Demonstrated leadership and problem solving skills; Excellent language skill on English reading, speaking and writing.

**POSITION TITLE: Lead Engineer-Embedded System (Hardware)**  
**(Job Code: 1008436)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	Master / PhD	<b>Working Experience:</b>	3-5 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

conceptual design, implement and validation of embedded systems based on micro-processors/ /MCU/DSP/FPGA.

**QUALIFICATIONS / REQUIREMENTS:**

- . PhD degree with major in Embedded Systems, Automation Control, Signal Processing or related areas;
- . Must have 3 years above working experience in hardware design, at least 2 year hand-on experience in FPGA;
- . Solid knowledge in digital/analog electronics;
- . Strong experience in plan, design, implement, debug and optimizing embedded system based on micro-processors/MCU/DSP/FPGA;
- . Proficiency in FPGA development tool-chain and design flow;
- . Excellent programming skills: VHDL/Verilog, C/C++ and assembly languages;
- . Knowledge in embedded OS, signal processing system will add advantages;
- . Demonstrated leadership and problem solving skills; Excellent language skill on English reading, speaking and writing.

**POSITION TITLE: Lead Engineer**  
**(Job Code: 1104592)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	Master / PhD	<b>Working Experience:</b>	3-5 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

- " Formulates, implements and executes on new programs or integrates major programs to meet key technical objectives. Champion new ideas.
- Interfaces with related technology areas/labs.
- Be responsible for project execution and technical deliverables. Leverages broad technical experience to ensure success of projects.
- Has an expanded network through participation in development activities.
- Builds customer relationships and communicates with the customer on technology development activities. Influences customer technical direction.

**QUALIFICATIONS / REQUIREMENTS:**

- " PhD in chemical engineering/thermal engineering
- Industrial R&D experience in Coal Conversion/IGCC/Polygeneration
- Proven record of technical accomplishments in the related field.
- Strong leadership traits; experience in leading technology team.
- Strong interpersonal skills and excellent communication skills.
- Ability to build and maintain strong customer relationships.
- Excellent problem solving skills - ability to consider overall problem, identify opportunities and implement major changes.
- Self-starter & self-motivator, independent thinker, proactive problem solver.
- Motivated by quality, cost and speed.
- High energy with passion for excellence (Demonstrated ability to set and achieve aggressive goals and targets; Embrace change and technology evolution as an opportunity).
- Strong environmental, health and safety ethics.
- Fluent oral and written communication in English

**Desired Characteristics:**

- " > 6 years industrial R&D experiences in Coal Conversion/IGCC/Polygeneration.
- Good technical reputation in the area of expertise.
- Technology vision and big picture in the understanding of the industrial trends.

**POSITION TITLE: Principal Engineer– Organic Materials & Surface Chemistry  
(Job Code: 1061942)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	PhD	<b>Working Experience:</b>	10 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

- Strong strategic focus & influence to drive organization technologies
- Formulates, implements and executes on new programs or integrates major programs to meet key technical objectives. Champion new ideas
- Responsible for technical growth of the organization. Recognized for technical expertise and breath
- Considered a technical resource for complex, multi-disciplinary issues, works across discipline boundaries to integrate experience to ensure success of projects
- Ability to lead projects and initiatives with broad scope and high impact to the business
- Be responsible for program execution and technical deliverables
- Leverages broad technical experience to ensure success of projects. Leverage technical expertise and experience to provide direction to the team in technology development and transfer of technology
- External presence, recognized technical expert in industry, strong connection to the businesses. Has an expanded network through participation in development activities
- Viewed as a technical guide. Provide technical consultant and mentoring for junior scientists & engineers. Coaches and mentors others in technical reviews
- Builds customer relationships and communicates with the customer on technology development activities. Influences customer technical direction
- Applies the GE values and GE Growth Traits to personal leadership style, behavior and team activities
- Embraces EHS & plays an active role in creating culture of safety.

**QUALIFICATIONS / REQUIREMENTS:**

- PhD in polymer, material science, organic chemistry, biochemistry & processing
- Proven track record with demonstrating strategic technical leadership skills
- At least 10 years Industrial R&D experience in chemical and material systems development for applications in energy storage and conversion, renewable energies, environmental technologies, etc
- Proven record of technical accomplishments in the related field & recognized technical expert in the related area
- Ability to make effective resource decisions, identify and remove project obstacles or barriers on behalf of the team
- Strong interpersonal skills and excellent communication skills, ability to give clear, understandable instructions and coaching, explain complex problems in simple terms, foster cross-organizational communications

- Ability to build and maintain strong customer relationships, anticipate and address customer needs, accelerate the pace of change to meet business objectives; analyze competitors and share insights and information with the group or team
- Excellent problem solving skills - ability to consider overall problem, identify opportunities and implement major changes
- Self-starter & self-motivator, independent thinker, proactive problem solver
- Motivated by quality, cost and speed
- High energy with passion for excellence (Demonstrated ability to set and achieve aggressive goals and targets; Embrace change and technology evolution as an opportunity)
- Strong environmental, health and safety ethics & play an active role in creating culture of safety
- Fluent oral and written communication in English

**POSITION TITLE: Principal Engineer- Inorganic Materials**  
**(Job Code: 1061944)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	PhD	<b>Working Experience:</b>	10 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

- Strong strategic focus & influence to drive organization technologies
- Formulates, implements and executes on new programs or integrates major programs to meet key technical objectives. Champion new ideas
- Responsible for technical growth of the organization. Recognized for technical expertise and breath
- Considered a technical resource for complex, multi-disciplinary issues, works across discipline boundaries to integrate experience to ensure success of projects
- Ability to lead projects and initiatives with broad scope and high impact to the business
- Be responsible for program execution and technical deliverables
- Leverages broad technical experience to ensure success of projects. Leverage technical expertise and experience to provide direction to the team in technology development and transfer of technology
- External presence, recognized technical expert in industry, strong connection to the businesses. Has an expanded network through participation in development activities
- Viewed as a technical guide. Provide technical consultant and mentoring for junior scientists & engineers. Coaches and mentors others in technical reviews
- Builds customer relationships and communicates with the customer on technology development activities. Influences customer technical direction
- Applies the GE values and GE Growth Traits to personal leadership style, behavior and team activities
- Embraces EHS & plays an active role in creating culture of safety

**QUALIFICATIONS / REQUIREMENTS:**

- PhD in Physics, Chemical Engineering, Materials Science or related fields; strong academic credentials; a solid history of technical accomplishments including publications and patents
- Experience with Crystal growth or thin film technology
- Proven track record with demonstrating strategic technical leadership skills
- At least 10 years Industrial R&D experience in chemical and material systems development for applications in energy storage and conversion, renewable energies, environmental technologies, etc
- Proven record of technical accomplishments in the related field & recognized technical expert in the related area
- Ability to make effective resource decisions, identify and remove project obstacles or barriers on behalf of the team



- Strong interpersonal skills and excellent communication skills, ability to give clear, understandable instructions and coaching, explain complex problems in simple terms, foster cross-organizational communications
- Ability to build and maintain strong customer relationships, anticipate and address customer needs, accelerate the pace of change to meet business objectives; analyze competitors and share insights and information with the group or team
- Excellent problem solving skills - ability to consider overall problem, identify opportunities and implement major changes
- Self-starter & self-motivator, independent thinker, proactive problem solver
- Motivated by quality, cost and speed
- High energy with passion for excellence (Demonstrated ability to set and achieve aggressive goals and targets; Embrace change and technology evolution as an opportunity)
- Strong environmental, health and safety ethics & play an active role in creating culture of safety
- Fluent oral and written communication in English

**POSITION TITLE: [Principal Engineer-Coal Conversion/IGCC/Polygeneration](#)  
(Job Code: 1061947)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	PhD	<b>Working Experience:</b>	10 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

- Strong strategic focus & influence to drive organization technologies
- Formulates, implements and executes on new programs or integrates major programs to meet key technical objectives. Champion new ideas
- Responsible for technical growth of the organization. Recognized for technical expertise and breath. Make high impact to the business or is a recognized expert in Coal Conversion/IGCC/Polygeneration field
- Considered a technical resource for complex, multi-disciplinary issues, works across discipline boundaries to integrate experience to ensure success of projects
- Ability to lead projects and initiatives with broad scope and high impact to the business
- Be responsible for program execution and technical deliverables
- Leverages broad technical experience to ensure success of projects. Leverage technical expertise and experience to provide direction to the team in technology development and transfer of technology
- External presence, recognized technical expert in industry, strong connection to the businesses. Has an expanded network through participation in development activities
- Viewed as a technical guide. Provide technical consultant and mentoring for junior scientists & engineers. Coaches and mentors others in technical reviews
- Builds customer relationships and communicates with the customer on technology development activities. Influences customer technical direction
- Applies the GE values and GE Growth Traits to personal leadership style, behavior and team activities
- Embraces EHS & plays an active role in creating culture of safety

**QUALIFICATIONS / REQUIREMENTS:**

- PhD in Chemical Engineering/Thermal Engineering
- Proven track record with demonstrating strategic technical leadership skills
- At least 10 years Industrial R&D experience in systems development for applications in energy storage and conversion, renewable energies, environmental technologies, etc
- Proven record of technical accomplishments in the related field & recognized technical expert in the related area
- Ability to make effective resource decisions, identify and remove project obstacles or barriers on behalf of the team
- Strong interpersonal skills and excellent communication skills, ability to give clear, understandable instructions

and coaching, explain complex problems in simple terms, foster cross-organizational communications

- Ability to build and maintain strong customer relationships, anticipate and address customer needs, accelerate the pace of change to meet business objectives; analyze competitors and share insights and information with the group or team

- Excellent problem solving skills - ability to consider overall problem, identify opportunities and implement major changes

- Self-starter & self-motivator, independent thinker, proactive problem solver

- Motivated by quality, cost and speed

- High energy with passion for excellence (Demonstrated ability to set and achieve aggressive goals and targets;

Embrace change and technology evolution as an opportunity)

- Strong environmental, health and safety ethics & play an active role in creating culture of safety

- Fluent oral and written communication in English

**POSITION TITLE: Principle Mechanical Engineer**  
**(Job Code: 1061954)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	PhD	<b>Working Experience:</b>	10 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

"Provide leadership for a cross-functional team to design and develop digital manufacturing technologies.

- Formulates, implements and executes on new programs or integrates major programs to meet key technical objectives. Champion new ideas
- Responsible for technical growth of the organization. Recognized for technical expertise and breath
- Considered a technical resource for complex, multi-disciplinary issues, works across discipline boundaries to integrate experience to ensure success of projects
- Ability to lead projects and initiatives with broad scope and high impact to the business
- Be responsible for program execution and technical deliverables
- Leverages broad technical experience to ensure success of projects. Leverage technical expertise and experience to provide direction to the team in technology development and transfer of technology
- External presence, recognized technical expert in industry, strong connection to the businesses. Has an expanded network through participation in development activities
- Viewed as a technical guide. Provide technical consultant and mentoring for junior scientists & engineers. Coaches and mentors others in technical reviews
- Applies the GE values to personal leadership style, behavior and team activities
- Embraces EHS & plays an active role in creating culture of safety

**QUALIFICATIONS / REQUIREMENTS:**

- "1. Deeply understand the manufacturing processes and procedure, and have solid shop floor working experience.
2. Deeply understand and use the philosophy and tools of total quality, lean manufacturing, design for manufacturability and assembly, and serve as an engineering resource to others within the research center and also the customer site.
3. Focus on optimizing CAD definition with NC Programming techniques, machine/fixture design, and machine dynamics.
4. Specialize in system level manufacturing process including inspection, geometry analysis, process variable analysis, connectivity between digital definition/controls and the feedback loops, manufacturing IT systems connectivity to shop floor process.
5. Strong capability of Modeling & simulation - analyze shop floor data; develop optimization algorithms, present

decision assistance to shop floor management.

6. Expertise in the use of modern design tools including 3D CAD, Pro-Engineer or SolidWorks, Factory flow simulation.

7. Coating and welding process level knowledge is a plus.

**Desired Characteristics:**

Successful candidate will champion collaboration with industrial design, engineering and manufacturing to lead the manufacturing development process. Strong strategic focus & influence to drive organization technologies

**POSITION TITLE: Principal Engineer - Electrochemistry & Chemical Engineering**  
**(Job Code: 1061958)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	PhD	<b>Working Experience:</b>	10 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

- Strong strategic focus & influence to drive organization technologies
- Formulates, implements and executes on new programs or integrates major programs to meet key technical objectives. Champion new ideas
- Responsible for technical growth of the organization. Recognized for technical expertise and breadth
- Considered a technical resource for complex, multi-disciplinary issues, works across discipline boundaries to integrate experience to ensure success of projects
- Ability to lead projects and initiatives with broad scope and high impact to the business
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- Embraces EHS & plays an active role in creating culture of safety

**QUALIFICATIONS / REQUIREMENTS:**

- PhD in Chemical Engineering (process development, system design & integration), Electrochemistry, Materials science (composites, materials structure property relationship, etc.)
- Proven track record with demonstrating strategic technical leadership skills
- At least 10 years Industrial R&D experience in chemical and material systems development for applications in energy storage and conversion, renewable energies, environmental technologies, etc
- Proven record of technical accomplishments in the related field & recognized technical expert in the related area
- Ability to make effective resource decisions, identify and remove project obstacles or barriers on behalf of the team

- Strong interpersonal skills and excellent communication skills, ability to give clear, understandable instructions and coaching, explain complex problems in simple terms, foster cross-organizational communications
- Ability to build and maintain strong customer relationships, anticipate and address customer needs, accelerate the pace of change to meet business objectives; analyze competitors and share insights and information with the group or team
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- Self-starter & self-motivator, independent thinker, proactive problem solver
- Motivated by quality, cost and speed
- High energy with passion for excellence (Demonstrated ability to set and achieve aggressive goals and targets; Embrace change and technology evolution as an opportunity)
- Strong environmental, health and safety ethics & play an active role in creating culture of safety
- Fluent oral and written communication in English

**POSITION TITLE: Principal Engineer - Optical Instrumentation**  
**(Job Code: 1061961)**

<b>Work Location:</b>	Shanghai	<b>Reqs:</b>	1	<b>Language:</b>	Fluent English
<b>Degree:</b>	PhD	<b>Working Experience:</b>	10 years		

**JOB DESCRIPTION:**

**ESSENTIAL FUNCTION / RESPONSIBILITIES:**

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- Embraces EHS & plays an active role in creating culture of safety.

**QUALIFICATIONS / REQUIREMENTS:**

- PhD in Electrical/Mechanical/Optical Engineering or related fields
- Proven track record with demonstrating strategic technical leadership skills
- At least 10 years Industrial R&D experience in optical systems development for applications in industrial inspection, biomedical engineering - Proven record of technical accomplishments in the related field & recognized technical expert in the related area
- Ability to make effective resource decisions, identify and remove project obstacles or barriers on behalf of the team



- Strong interpersonal skills and excellent communication skills, ability to give clear, understandable instructions and coaching, explain complex problems in simple terms, foster cross-organizational communications
- Ability to build and maintain strong customer relationships, anticipate and address customer needs, accelerate the pace of change to meet business objectives; analyze competitors and share insights and information with the group or team
- Excellent problem solving skills - ability to consider overall problem, identify opportunities and implement major changes
- Self-starter & self-motivator, independent thinker, proactive problem solver
- Motivated by quality, cost and speed
- High energy with passion for excellence (Demonstrated ability to set and achieve aggressive goals and targets; Embrace change and technology evolution as an opportunity)
- Strong environmental, health and safety ethics & play an active role in creating culture of safety
- Fluent oral and written communication in English