



**Training Proposal for:**

**JSR Micro, Inc.**

**Agreement Number: ET16-0364**

**Panel Meeting of:** February 26, 2016

**ETP Regional Office:** San Francisco Bay Area

**Analyst:** R. Jackson

**PROJECT PROFILE**

Contract Attributes:	Priority Rate Retrainee	Industry Sector(s):	Nanotechnology Manufacturing  Priority Industry: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Counties Served:	Santa Clara	Repeat Contractor:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Union(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Number of Employees in:	CA: 151	U.S.:171	Worldwide: 171
<u>Turnover Rate:</u>	4%		
<u>Managers/Supervisors:</u> (% of total trainees)	16%		

**FUNDING DETAIL**

Program Costs	-	(Substantial Contribution)	(High Earner Reduction)	=	<b>Total ETP Funding</b>
\$118,404		\$0	\$0		\$118,404

In-Kind Contribution:	100% of Total ETP Funding Required	\$150,000
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**TRAINING PLAN TABLE**

Job No.	Job Description	Type of Training	Estimated No. of Trainees	Range of Hours		Average Cost per Trainee	Post-Retention Wage
				Class / Lab	CBT		
1	Retrainee Priority Rate	Business Skills, Computer Skills, Continuous Impr, OSHA 10/30, HAZWOPER, HazMat, Mfg Skills	143	8-200	0	\$828	\$17.02
				Weighted Avg: 46			

**Minimum Wage by County:** \$17.02 for Santa Clara County.

**Health Benefits:**  Yes  No This is employer share of cost for healthcare premiums – medical, dental, vision.

**Used to meet the Post-Retention Wage?:**  Yes  No  Maybe

Up to \$0.52 per hour may be used to meet the Post-Retention Wage.

**Wage Range by Occupation**

Occupation Titles	Wage Range	Estimated # of Trainees
Administrative Staff		45
Technical Staff		50
Supervisor		13
Manager		10
Production Staff		25

**INTRODUCTION**

Established in 1990, JSR Micro, Inc. (JSR) ([www.jsrmicro.com](http://www.jsrmicro.com)), a US-based subsidiary of JSR Corporation, is a manufacturer of materials sold to large Original Equipment Manufacturers (OEM). The customer base includes companies in the semiconductor and electronic-related industries; and energy and life sciences laboratories and research facilities. Products include advanced photo resists, Chemical Mechanical Polishing and stored-energy components, bio-process components, research and diagnostic re-agents, and polymers prepared for customers across multiple industries.

JSR's high-performance materials and components are used in OEM for advanced materials, specialty chemicals, and packaging materials. In addition, the Company provides research and development, custom design, and engineering to its customers which include domestic and international companies such as Samsung, IBM, Micron, and Intel.

**PROJECT DETAILS**

This will be JSR's second agreement in the last five years with total earnings under \$250,000. Therefore, no substantial contribution is applied.

This training plan is different from the previous Agreement (ET14-0256) due to new work-related equipment and technology-based skills upgrades (software, manufacturing processes, and ISO requirements). New products such as EUV Lithography, Novel Multilayer Material, Micron CMS-AC01 & Intel JIN-032C Cleaners and Exocap Serum & Plasma Testing Kits are presenting customer requirements. Also, new products require new equipment. The Company has spent over \$1 Million on manufacturing tools and software, which prompts the need for further training.

The proposed training will develop employee skills and cross-train on different processes to improve efficiency, increase production, and boost sales. Some courses were delivered in earlier agreements; however, the contents have been refreshed. Trainees will not repeat the same subject matter. All training will occur at JSR's sole location in Sunnyvale.

## Training Plan

JSR is delivering Class/Lab and E-learning training. Of the 143 employees participating, 41 have not trained in previous Agreements.

**Business Skills (20%)** – Training will be offered to Administrative Staff, Supervisors, Managers, and Technical Staff. Training in Performance Management and Strategic Growth Development will allow the Company to plan and manage growth. Additionally, training will expand overall sales and increase productivity.

**Computer Skills (30%)** – Training will be delivered company-wide. Trainees will be able to create databases, spreadsheets, reports, charts, graphs and professional presentation materials for clients. The training will also provide an understanding of Cloud Computing, project management tools, online meeting tools, customer management software, several database tools, and analysis tools. Topics include Bizagi (Business Process Modeling), Expensify (Accounting Software), FAS (Factory Automation System), Hyperion 2 (Cost Analysis Software), LIMS (Lab Information Management Software) and Sharepoint (Cloud-Based Document Sharing Platform).

**Continuous Improvement (25%)** – Training will be delivered company-wide to advance quality management and assurance techniques. Additionally, new Lean processes and new equipment prompts training to fulfill recent changes related to new Electronic materials and IVD Life Science research. Training topics include Quality Management Skills for New Integrated Processes.

**Manufacturing Skills (20%)** – Training will be offered to Technical and Production Staff for the design and fabrication of new products. Training will focus on the development and launch of new products and ISO 9001:2015 certificates (upgrading from ISO:2008) to remain competitive. Trainees will also receive cross-training in equipment operation, assembly, testing, inspection technologies, and packaging advancements for new products. Topics include EUV Lithography Exocap Kit for Serum & Plasma, Semi-Conductor Cleaners & Novel Multi-Layered Nano Composites.

## Certified Safety Training

Training will be provided to Production Staff, Technical Staff, Managers, and Supervisors.

1. OSHA 10/30. This training is a series of courses “bundled” by industry sector and occupation. It usually consists of 10 hours of classroom or CBT training for journey-level workers and 30 hours for frontline supervisors. The coursework is geared to construction work, and also manufacturing. Completion of the training results in a certificate that

expands employment opportunities. The coursework must be approved by Cal-OSHA, and the instructors must be certified by Cal-OSHA.

2. Hazardous Waste Operations and Emergency Response Standard (HAZWOPER). This training is also a series of courses specifically designed for workers who handle hazardous substances as first-responders, or clean-up as needed at a hazard disposal or emergency site. It consists of 40 hours of classroom or CBT training, for workers stationed at the hazard site; and 24 hours for workers who visit the site (e.g., engineers). Field training is also required, although not funded by ETP. Completion of the training results in a certificate that expands employment opportunities. Each certification requires an 8-hour annual refresher course. This coursework must be approved by Cal-OSHA, and the instructors must be certified by Cal-OSHA. JSR represents that trainees will not receive 40 hours unless they work full time onsite at the clean-up location.
3. Hazardous Materials (HAZMAT). This training is also a series of courses, specific to industry sectors involved in the transport of hazardous materials. The coursework varies in length depending on the industry and the occupational title, as organized in five levels ranging from “first responder” to “incident commander.” It is generally a minimum of 24 hours with an 8-hour annual refresher, and may be delivered by classroom or CBT. In this proposal, Production Staff, Technical Staff, Managers, and Supervisors will receive up to 24 hours of training. Field training may be required, although not funded by ETP. Completion of the training results in a certificate that expands employment opportunities. This coursework is not under Cal-OSHA, but is administered under the Department of Transportation and CalTRANS. There are various certification entities for the coursework and instructors. In this proposal, the certification entity is CalTrans.

## **E-Learning**

While the majority of the training being delivered will be in-house instructor led classroom training, JSR does intend to deliver some training topics as E-learning. JSR understands original instructor signatures are required and trainer-to-trainee ratios must be within the ETP required 1:20 ratio. E-learning methods of training offer the Company additional ways to deliver training at the convenience of the training population.

## **Green/Clean Operations**

JSR employs “green technology” methods including environmental protection; energy generation and efficiency; distributed renewable energy; and other green business practices, processes, and products. JSR performs environmental and safety related evaluations during new product development, from research to end. Additionally the Company employs many strategies, including the use of nanotechnology, to make conservation and waste reduction measures routine.

## **Nanotechnology**

ETP funding will allow workers to improve skill sets and learn the newest technologies related to electronics and life sciences. JSR uses nanotechnology to develop solutions for various industries including mobile device and medical equipment. The training is related specifically to meeting the demand for new biotechnology research services and manufacturing of new electronics and/or medical products. Enhancements to more traditional semi-conductor or medical device manufacturing are being driven by consumer demands, innovation, and a broad marketplace shift to reduce the costs, size, and weight of products, and to maximize the ability to offer new products or services in order to adapt to market pressures.

## **Commitment to Training**

JSR uses training to express their on-going commitment to employee advancement and recognition in an effort to retain employees and equip them with skills to optimize service delivery and product development and improve customer satisfaction.

JSR's past training efforts included new hire orientation, regulatory training, on-the-job training, seminars and conferences, and basic computer skills (budget permitting).

JSR represents that ETP funds will not displace the existing financial commitment to training. The Company's training budget has increased from \$80,000 to \$95,000, an increase of almost 20% from prior years. The Company will continue to provide safety training in accordance with all pertinent requirements under state and federal law.

### ➤ Training Infrastructure

The ETP-funded program will be managed by a dedicated internal training staff and an internal administrator who managed JSR's recently completed ETP Agreement. They also have a subcontracted consultant to assist with program administration.

## **RECOMMENDATION**

Staff recommends approval of this proposal.

## **ACTIVE PROJECTS**

The following table summarizes performance by JSR under an active ETP Agreement:

Agreement No.	Approved Amount	Term	No. Trainees (Estimated)	No. Completed Training	No. Retained
ET14-0256	\$155,548	02/03/2014– 02/02/2016	136	102	TBD

Based on ETP Systems, 6,518 reimbursable hours have been entered into ETP Online Tracking, sufficient to support earnings of \$117,443 (75% of approved amount). The Contractor also projects final earnings of 75% based on training delivered through November 2, 2015.

## **PRIOR PROJECTS**

The following table summarizes performance by JSR under an ETP Agreement that was completed within the last five years:

Agreement No.	Location (City)	Term	Approved Amount	Payment Earned \$ %
ET12-0128	Sunnyvale	10/03/2011- 10/02/2013	\$145,800	\$124,600 (85%)

## **DEVELOPMENT SERVICES**

JSR retained Sallyanne Monti Consulting in San Francisco to assist with development of this proposal for a flat fee of \$5,200.

## **ADMINISTRATIVE SERVICES**

JSR also retained Sallyanne Monti Consulting in San Francisco to perform administrative services in connection with this proposal for a fee not to exceed 13% of payment earned.

## **TRAINING VENDORS**

Learn iT of San Francisco has been retained for \$25,000 to provide Computer Skills training. Other trainers will be identified for ETP record-keeping purposes, as they are retained by JSR.

## Exhibit B: Menu Curriculum

### Class/Lab Hours

8 – 200

Trainees may receive any of the following:

### BUSINESS SKILLS

- + Performance Management
- + Strategic Growth Development

### COMPUTER SKILLS

- + Bizagi (Business Process Modeling)
- + Esker/Readsoft (Sales Software)
- + Expensify (Accounting Software)
- + FAS (Factory Automation Software)
- + Hologen 2 – (HR & Performance Management Software)
- + Hyperion 2 (Cost Analysis Software)
- + Itatio BPMS (Business Process Mapping & Signoffs) & Create
- + LIMS (Lab Information Management Software)
- + Microsoft Office 365 (Intermediate & Advanced)
- + Production Maintenance 2 (Process Mapping Proprietary)
- + Production Operator 2 (Process Mapping Proprietary)
- + Porquis (Document Control Software)
- + SAP
  - o BI (Business Intelligence Reporting Module)
  - o GTS (Compliance Management Module)
  - o R/3 (Process Management Module)
- + Sharepoint (Document Sharing Platform)
- + Starlims (Quality Management Software)
- + Online Meeting Skills
  - o Facetime
  - o GoTo Meeting
  - o Skype

### CONTINUOUS IMPROVEMENT

- + Quality Management Skills for Newly Integrated Processes

### OSHA: Provided by Certified OSHA Instructor

- + OSHA 10 (must complete 10 hours)
- + OSHA 30 (must complete 30 hours)

### HAZWOPER

- + HAZWOPER Refresher (must complete 8 hours)
- + HAZWOPER (24-Hour Course)
  - o 24 & 40 Hour HAZWOPER Training Overview
  - o Chemical Protective Clothing
  - o Confined Space Overview
  - o Containment & Spill Management
  - o Decontamination
  - o Gas Detection Basics
  - o General Safety Hazards
  - o Hazardous Materials Recognition & Sources of Reference
  - o HAZWOPER Emergencies
  - o Introduction to HAZWOPER Overview

- Regulatory Overview
- Medical Considerations for Chemical Protective Clothing
- Medical Surveillance
- Personal Protective Equipment
- Physical & Chemical Properties
- Respiratory Protection Program
- Safety & Health Program
- Sampling Methods & Procedures
- Site Characterization & Analysis
- Site Control
- The Hazard Communication (HAZCOM) Standard
- Toxicology

✚ HAZWOPER (40 Hour Course)

- 40 Hour HAZWOPER Training Overview
- Chemical Protective Clothing
- Chemical Protective Clothing (CPC) Classifications
- Chemical Protective Clothing (CPC) Overview
- Chemical Protective Clothing (CPC) Program
- Chemical Protective Clothing (CPC) Selection
- Colorimetric Tubes & Diffusion Tubes
- Confined Space Overview
- Containment & Spill Management
- Decontaminating Chemical Protective Clothing
- Doffing Chemical Protective Clothing
- Decontamination
- Donning Chemical Protective Clothing
- Flammability & Combustible Gas Indicators
- Gas Detection Basics
- General Safety Hazards
- Hazardous Materials Recognition & Sources of Reference
- HAZWOPER Emergencies
- Introduction to HAZWOPER Overview
- Introduction to Respiratory Protection
- Inspection, Storage and Maintenance of CPC
- Other Detection Devices
- Personal Protective Equipment
- Medical Considerations for Chemical Protective Clothing
- Medical Surveillance
- Physical and Chemical Properties
- PIDs (Photo Ionization Detector) and FIDs (Flame Ionization Detector)
- Preventing Sparks
- Regulatory Overview
- Respirator Fit Testing
- Respirator Maintenance & Care
- Respirator Medical Evaluation
- Respiratory Protection Program
- Respirator Selection & Use
- Respirator Training & Program Guidelines
- Safety & Health Program
- Sampling Methods & Procedure
- Sensor Technology

- Site Characterization & Analysis
- Site Control
- The Hazard Communication (HAZCOM) Standard
- Toxicology
- Training & Monitoring CPC
- Types of Gas Detection Systems
- Types of Respiratory Protection

### **MANUFACTURING SKILLS**

- + Advanced Production Tools & Technology for Growth
  - Electronic Materials
  - Energy & Environment
  - Life Sciences
- + Advanced New Product Manufacturing Techniques
  - EUV Lithography
  - Exocap Kit for Serum & Plasma
  - Semi-Conductor Cleaners
    - Intel JIN-032
    - Micron CMS-AC010
  - Novel Multi Layered Nano Composites
- + Environmental Health & Safety
  - Controlled Material Purchasing, Recordkeeping, Inventory & Storage
  - Corporate Social Responsibility (CRM)
  - Dangerous Goods Training for Warehouse Employees (Certification)
  - Emergency Response Techniques
  - Environmental Health & Safety Change Forum
  - Environmental Protection Across All Services
  - Equipment Safety in a Production Environment
  - Job Safety Analysis
  - Risk Management
  - Safe Behavior Observation, Improvement & Recognition
- + ISO 9001:2015 Upgrade

### **HAZMAT (Certified by Cal Trans)**

- + Awareness Training (no min.)
- + Operation Training (Min. 8 hours)
- + Technician Training (Min. 24 hours)
- + Specialist Training (Min. 24 hours)
- + Incident Commander Training (Min. 24 hours)

### **E-Learning Hours**

8–200 Trainees may receive any of the following:

### **BUSINESS SKILLS**

- + Performance Management
- + Strategic Growth Development

### **COMPUTER SKILLS**

- + Bizagi (Business Process Modeling)
- + Esker/Readsoft (Sales Software)

- ✚ Expensify (Accounting Software)
- ✚ FAS (Factory Automation Software)
- ✚ Hologen 2 – (HR & Performance Management Software)
- ✚ Hyperion 2 (Cost Analysis Software)
- ✚ Italo BPMS (Business Process Mapping & Signoffs) & Create
- ✚ LIMS (Lab Information Management Software)
- ✚ Microsoft Office 365 (Intermediate & Advanced)
- ✚ Production Maintenance 2 (Process Mapping Proprietary)
- ✚ Production Operator 2 (Process Mapping Proprietary)
- ✚ Porquis (Document Control Software)
- ✚ SAP
  - BI (Business Intelligence Reporting Module)
  - GTS (Compliance Management Module)
  - R/3 (Process Management Module)
- ✚ Sharepoint (Document Sharing Platform)
- ✚ Starlims (Quality Management Software)
- ✚ Online Meeting Skills
  - Facetime
  - Go-To Meeting
  - Skype

### **CONTINUOUS IMPROVEMENT**

- ✚ Quality Management Skills for Newly Integrated Processes

Safety Training will be limited to 10% of total training hours per-trainee (This cap does not apply to Hazmat, OSHA 10/30 or HAZWOPER)

Note: Reimbursement for retraining is capped at 200 total training hours per trainee, regardless of the method of delivery.
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