#### National Chemical Technician Award Candidate Form

Candidate information Name: Company name: Complete work	Mi Sun Um Brooks Rand Labs 3958 6 <sup>th</sup> Ave NW	Title: Mercury Group Lead		
address: Work phone:	Seattle, WA 98107 206-753-6112	Email:	misun@brooksr	and.com
Candidate's immediate	supervisor's information	pπ		
Supervisor's name:	Annie Carter	Supervisor's title:	Lab Manager	
Work Phone:	206-753-6115	Email:	annie@brooksra	and.com
Nominator's information	าก			
Nominator's name:	Joel Creswell	Nominator's title:	Research Scien	tist
Work Phone:	206-753-6192	Email:	joel@brooksran	d.com
Candidate Eligibility				
All three boxes in the E	ligible column must be	checked for candidate		
				<i>Ineligible</i> ☐ No
<ol><li>Has the candid</li></ol>	Has the candidate been employed for at least five years as an Yes applied chemical technology professional?			
<ol><li>Is the candidate</li></ol>	Is the candidate currently a member of the Committee on  No  Yes Technician Affairs Executive Board and/or Advocacy & Public			

# Candidate's contribution in six areas of award criteria

Make space as necessary under each category. Total packet, including letter(s) of recommendation. must not exceed 6 pages, minimum 10-point font. Do not include proprietary, confidential, or private information.

# Technical Achievements (worth 60%)

Relations Subcommittee?

Mi Sun is an exceptionally skilled analyst. She conducts or oversees analysis of inorganic, organic, and total mercury in a wide variety of matrices ranging from human hair, blood, and breastmilk, to natural waters, sediments, and plant material. She is known for her careful attention to data quality, routinely catching single problem results out of large datasets and modifying the analytical or sample preparation parameters to achieve quality control objectives. She has been instrumental in the development of internal methods and standard operating procedures, some of which are currently being evaluated by EPA for incorporation into promulgated methods. She has a reputation for finding and addressing analytical issues before they become problems that affect data quality. In a laboratory environment, a co-worker with that great attention to detail is a real bonus.

# Other (Considered together to make up the remaining 40%) Leadership/Mentoring (1-15%)

Mi Sun leads more by the example she sets than the requests she makes. She works extremely hard and is always willing to help others when they have questions or get overwhelmed. Her attitude is always upbeat and positive, making her a pleasure to work with. She takes great pride and care in her training of others, and has a strong focus on an analyst's understanding of the methods, rather that just the ability to carry out analysis. During busy weeks and long days, Mi Sun both motivates her co-workers and helps keep the quality of their work high, spotting and preventing mistakes before they cause problems.

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# Number of communications/publications (1-5%) Please do not include titles.

Mi Sun has designed and conducted method development research projects that have resulted in at least five conference presentations.

# External publications, presentations, patents (1-5%)

Mi Sun presented a poster titled "A Comparison of Preconcentration Trap Materials for Use in Determination of Monomethyl Mercury by Cold Vapor Atomic Fluorescence Spectroscopy" at the North American Society of Environmental Toxicology and Chemistry (SETAC) conference in Milwaukee, WI, in 2006. She has been listed as a co-author on four other conference posters.

Internal presentations, publications (1-5%) Include SOPs, presentation to teams, etc. Mi Sun has reviewed, revised, and updated seven Brooks Rand SOPs. As the leader of the Mercury Group, she presents to her team on a regular basis.

# Contribution to quality, safety, and other initiatives (1-5%)

Mi Sun has been proactive in presenting her ideas for improving lab safety to the Brooks Rand Safety Committee, in order to minimize accidents and promote a healthy working environment.

Awards (1-5%)

### Professional and community activities (ACS, AIChE, outreach, etc.) (1-10%)

Mi Sun is active in the company book club, which often reads and discusses books relevant to the study of environmental trace metals. As a fluent speaker of Korean, she has been instrumental in forging and developing relationships with company distributors in Korea, and has devoted considerable time to teaching Korean technicians at these companies about mercury analysis.



September 27, 2011

To Whom it May Concern,

Thank you for taking the time to consider Mi Sun Um for the National Chemical Technician Award. I was previously the Mercury Group Lead and am currently the Lab Manager. I have been Mi Sun's direct supervisor for the last 5 years. Mi Sun was a Mercury Group Technician for four years and for the last year has been the Mercury Group Lead. She has a bit of a unique story to her beginning at Brooks Rand Labs. When we hired her, we were hiring for two positions. One candidate we interviewed recommended Mi Sun, her friend and co-worker, for the job. It is not every day that someone feels so strongly about another's work that they give a recommendation at their own interview! We contacted her for an interview and have been supremely impressed ever since. Every day Mi Sun has exceeded all of my expectations and raised the bar for everyone that works with her. For the last four years, Mi Sun has been my second in command and is the person to whom I direct all business if I am out of the office. She managed things so well whenever I was on the road that when I became Lab Manager, she was the standout choice for the Mercury Group Lead. Mi Sun is responsible for knowing all of the sample preparations and analyses that are done by the Mercury Group, as well as for maintaining and troubleshooting the analytical instrumentation. She is also responsible for coordinating with the other lab groups and has proven to be an effective communicator.

Whether Mi Sun is performing a task for the first or the hundredth time, she always produces top quality data and has unparalleled attention to detail. More than that, she exudes a positive attitude toward the work she does and it is contagious to those around her. She finds satisfaction in completing even the most menial task to perfection. At the other end of the spectrum, if odd projects come in, she is always willing to accept the challenge of figuring out how best to carry them out, and then follows through to finish them up in a timely manner. She has often worked long hours and weekends to ensure tasks are completed on time.

Mi Sun is highly regarded by everyone here at Brooks Rand Labs and I cannot think of someone more deserving of this award. Thank you for your consideration.

Sincerely,

Annie Carter Lab Manager Brooks Rand Labs



September 29, 2011

Re: Letter of Recommendation for Mi Sun Um

To Whom it May Concern:

It is my honor to recommend Ms. Mi Sun Um for the ACS National Chemical Technician Award. I have had the pleasure to know and work with Mi Sun for nearly five years at Brooks Rand Labs (BRL) in Seattle.

Mi Sun was first hired as a chemical analyst in BRL's Mercury Laboratory in October 2006. Mi Sun was an experienced analyst who had previously worked at a full-service environmental testing laboratory in the Seattle area, but the methods that we performed at BRL were new to her. Mi Sun immediately showed great technical ability, and her performance was reward with a cumulative raise in pay of over 21% during just her first 12 months of employment.

Mi Sun was promoted to the position of Mercury Lab Group Leader in 2010, and in that role she does an exceptional job of training new analysts on the high technical details of successful laboratory analysis.

Mi Sun brings to all of her activities energy, enthusiasm, and commitment. This is to be expected in any successful member of an entrepreneurial organization, and in this regard Mi Sun fits in well. Be it in the method develop of new analytical methods for the speciation of different mercury forms, or the improvement of existing methods for the analysis of complex samples, Mi Sun consistently delivers high-quality data supported by excellent quality assurance/quality control data.

Most Sincerely,

Michelle L. Briscoe

VP of Analytical Services Brooks Rand Labs, LLC

3958 6<sup>th</sup> Avenue NW

Seattle, WA 98107

206-632-6206, ext. 117

michelle@brooksrand.com