

National Chemical Technician Award Candidate Form

**Candidate information**

**Name:** Jay L Schneider **Title:** Chemical Technician III  
**Company name:** Xerox Corporation  
**Complete work address:** 800 Phillips Road, Building 143  
Webster NY 14580  
**Work phone:** 585-422-3166 **Email:** jay.schneider@xerox.com

**Candidate's immediate supervisor's information**

**Supervisor's name:** Zhen (Jerry) Lai **Supervisor's title:** Technical Manager  
**Work Phone:** 585-643-5354 **Email:** Zhen.Lai@xerox.com

**Nominator's information**

**Nominator's name:** Chieh-Min Cheng **Nominator's title:** Principal Engineer  
Area Manager  
**Work Phone:** 585-422-6094 **Email:** Chieh-Min.Cheng@xerox.com

**Candidate Eligibility**

All three boxes in the Eligible column must be checked for candidate to be eligible.

- |  | <b>Eligible</b>                         | <b>Ineligible</b>            |
|--|---|------------------------------|
| 1. Is the candidate a chemistry-based laboratory technician, process technician, operator, analyst, or other applied chemical technology professional? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No  |
| 2. Has the candidate been employed for at least five years as an applied chemical technology professional?   | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No  |
| 3. Is the candidate currently a member of the Committee on Technician Affairs Executive Board and/or Advocacy & Public Relations Subcommittee?         | <input checked="" type="checkbox"/> No  | <input type="checkbox"/> Yes |

**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%)**

Over the 20 years at Xerox, Mr. Jay Schneider is broadly recognized as a tremendous contributor with great technical expertise, work ethic, and working relationships, coupled with a strong willingness and ability to focus and deliver on critical process development and product delivery challenges. Mr. Schneider has been an extremely valuable member of Xerox Chemical Toner Technology team. His timely completion of experiments, careful observations of the process and effective knowledge sharing during production trials have enabled to many new toner product successful development and smoothly process scale up. With a Green Belt Certification for Design for Lean Six Sigma (DfLSS), Jay has demonstrated his capability to performance at very high technical level with pilot plant trial plan documentation, database developing and maintenance, statistical data analysis and reporting, design of experiments. Jay's strong interpersonal and communication skills and credibility he built with cross organization have enabled him as effective interface between the product development team and the pilot plant operational team.

Jay's main achievements include:

1. As core team member, leading robust latex process implementation, resulted over \$4 million saving for Xerox over 5 years;
2. As the leading technician, completed more than 300 trials in pilot plant for new product process scale up. Successfully enabled the new products launch to market on time.
3. As core member to the polyester latex toll project team, Jay led the new latex qualification through pilot and production trials. Significant reduction in energy consumption and land-fill waste

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was achieved by improving solvent-distillation efficiency by >50% and generating 40% less of distillation waste. The projected cost-saving was over \$1 million in 2 years and more beyond, plus \$5-10 millions of capital investment saving. He won the Xerox Earth Award.

4. Jay demonstrated a remarkable level of technical creativity and innovation. He consistently offered valuable insights into practical issues and problems. He has been productive in developing and protecting Xerox's intellectual capital, with 20 invention disclosures, 4 issued patents, 3 trade secrets, and 2 patent publications.

**Other (Considered together to make up the remaining 40%)**

**Leadership/Mentoring (1-15%)**

1. Mentor for young technicians. 2. Provides annual technical, equipment operational training to pilot plant technicians, young process engineers. 3. Offers process training for new products for the operational team members both in pilot plant and manufacture plant

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

1 Journal article, co-author

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

20 Invention Disclosure (13 first author)

4 issued patents (1 first inventor)

2 patents pending

3 Trade Secret (2 first inventor)

**Internal presentations, publications (1-5%) Include SOPs, presentation to teams, etc.**

29 internal reports. 300 SOP and Production Operation Procedures, Lockout Tagout, preventative maintenance plans

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

1. Committee Member of Quality Improvement Team at Xerox Toner Delivery and Development Group (TDDG). Responsible for initiating and organizing Kaizens Events, Identifying and implementing daily best practice at chemical toner pilot plant.

2. Security Champion for whole TDDG

3. Xerox Move SMART champion

4. Xerox Medical Emergency response team member

**Awards (1-5%)**

1: Xerox Earth Award (2009) (An internationally prestigious award issued by Xerox environment, health and safety). He received the award in front of hundreds of scientist, engineers and technician from around the world during the opening ceremony at Xerox annual international Earth Week event.

2: Xerox Supply Strategy Group Performance Excellence Award in 2009 (An award of international significance, because Mr. Schneider's selection was from amongst an international pool of Xerox scientists, engineer and technician around the world). He received the Award trophy in front of hundreds of scientist, engineers and technicians from around the world.

3: Green Belt Certification for Design for Lean Six Sigma (DfLSS), 2010. (Only the very top of research scientist, engineer and technician can be nominated from amongst an international pool of Xerox scientists around the world for Green Belt training).

4: Excellent Work Recognition, Xerox 2006, 2007, 2008, 2010

5: Outstanding Work Recognition, Xerox 2000, 2002

6: Xerox Admiral Award (2010) (An prestigious award issued to the individuals who made significant contribution in increasing safety, environment awareness by Xerox environment, health and safety

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



Chieh-Min Cheng, Ph.D  
*Principal Engineer, Area Manager*  
TDDG

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September 29, 2011

Ref: Recommendation Letter for Jay Schneider for National Chemical Technician Award

Dear Sir or Madam:

I am pleased to provide a professional evaluation of Mr. Jay Schneider to fully support his nomination for National Chemical Technician Award. I have the distinct pleasure to have Mr. Schneider as a leading chemical technician and role model at Xerox Corporation for more than 20 years. Mr. Schneider's professional career has been devoted to the chemical industry — from polymer colloidal science, to chemical engineering, to mechanic engineering and digital printing, with tremendous lab, pilot-plant activities in fundamentals in emulsion polymers applications, chemical toner research and development, and final product delivery to manufacturing. As set forth in detail below, Mr. Schneider's outstanding achievements in chemical toner industry, distinguished leadership in development of new product/process, as well as his continued efforts in improving the safety, efficiency and security in the daily chemical process practice show the dramatic benefits to Xerox Corporation, the society, the industry, and the U.S. on a national basis. This proves his outstanding qualifications that meet the criteria for the National Chemical Technician Award.

Let me begin by briefly delineating my own status, standing and expertise before I describe Mr. Schneider's unique background and achievements. I hold a Ph.D. degree from Lehigh University and have been working in the industry for 20 years. Currently, I am the area manager of the EA toner process technology group at Xerox Corporation. I'm leading and guiding the revolutionary toner technology at Xerox. During my long research experience, I have authored numerous research articles, edited several books and hold over 50 patents. I have received numerous awards, including 2011 ACS National Award for Team Innovation, 2006 industrial innovation awards by American Chemical Society (ACS), Xerox's Joseph C. Wilson, Xerox's first annual Anne Mulcahy Inventor Award. So, I write this recommendation on the basis of my 25+ years of research and development experiences.


I have known Mr. Schneider professionally and personally for more than 6 years. He is one of the most creative and versatile technician in the field. He has profound understanding of practical issues coupled with strong desire in applying research results to real world problems. I have been enormously impressed by his innate intelligence and multi-faceted talents which include, for example, a rare combination of strong understanding of polymeric materials, chemical and mechanic engineering process, and superb practical intuition. A unique combination of his broad experience in xerographic hardware and chemical toner research and process scale up enables Mr. Schneider to serve as a critical bridge between the chemists, chemical engineers, mechanical engineers, and materials processing specialists in our organization and our materials suppliers. Not only his rare combination of expertise and experience makes him a very critical and indispensable member of the Advance Development team at Xerox, his outstanding communication skill enables him successfully leading the execution of the complex experimentation work, and also enables him made significant contribution to the success of Xerox's EA (emulsion aggregation) digital printing technology.

Thus, the advanced development group of Xerox considers itself extremely fortunate to have Mr. Schneider as part of the team working towards advancing the unique chemical toner technology and keeping it competitive in the international marketplace. I would like to briefly review what Mr. Schneider has accomplished below:

1. Mr. Schneider heavily involved in conducting original research in developing processes aiming to increase the process efficiency, reduce the energy consumption and waste generation for xerographic application, which resulted in four issued patents (one as the first inventor). Mr. Schneider works closely with the research scientists and engineers, not only conducts all the experimental work, but also documents all the research findings. He had written and co-authored more than 20 invention disclosures, of which 13 as the first inventor. The fact that Mr. Schneider's work has been the subject of several U.S. patents or patent applications is an undeniable most tangible proof that his work is very valuable to the company and to the field. This fact clearly demonstrates Jay's most unique and unusual expertise with novel findings, which have been recognized by well-established organizations and experts in the field of polymer science and chemical engineering.
2. Mr. Schneider's contribution to field techniques of polymer colloidal is outstanding. After serving as leading technician for 12 years in Fuser Development group, Mr. Schneider joined chemical toner development group with his creative genius and novel integration of the polymer science, mechanic and chemical engineering knowledge. Within a very short period of time, Mr. Schneider impressed everybody with his exceptional ability and devotion to chemical toner research and development which put him as the leading technician executing the complex experiments for emulsion aggregation process and product development. Mr. Schneider extended his laboratory studies to the field-scale with the application of emulsion aggregation fundamentals and the design for Six Sigma. He not only creatively co-designed a process which was robust to meet the challenges of raw material quality variations, but he also successfully co-leads a team to scale-up the process for production. Implementation of robust latex process delivered based on the hard work by Mr. Schneider and the team has resulted in significant reduction of wastes generation by 40% through eliminating scrapped latex batches, minimizing solvent usage reactor change-over, energy reduction by 25%. The project has resulted more than \$4 million saving for Xerox over last 5 years. Because of his tremendous contributions in waste reduction on this project, Mr. Schneider was awarded the "Xerox Earth Awards" for 2010 as a core team member. The Xerox Earth Awards, a prestigious international award, was selected and judged by the special committee with technical and environmental experts, which recognizes winner selected from more than 57,000 people worldwide for outstanding achievements in resource conservation waste reduction and recycling, and community development. This selection process itself is extremely rigorous and difficult, but winning the award is simply phenomenal and speaks loudly about Mr. Schneider's outstanding talent and abilities.
3. Mr. Schneider is a true role model at Xerox to others in terms of maintaining a safe and clean work environment, and in his behaviors. He established an excellent rapport not only within his immediate work group but throughout the broader organization as well. Jay not only established the best practice in experimental execution, but also frequently goes extra mile to document the standard operation procedure, production operation instruction, preventative maintenance plans for the instruments. He also offers regular trainings to others.

In closing, it is with sincere conviction that I enthusiastically recommend that Mr. Schneider be selected as a recipient of National Chemical Technician Award. I will be happy to respond should there be a need to obtain some more information or explanation. Thank you for your time and consideration.

Sincerely,



Chieh-Min Cheng, Ph.D  
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Xerox Corporation  
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Webster, NY 14580

**Jay L Schneider**

**Xerox 2009 Earth Award Winner**

**Innovation**

**Robust Latex Production & Waste Reduction**



**Patricia A Calkins**  
**Vice President**  
**Environment, Health & Safety**