National Chemical Technician Award Candidate Form

Candidate information Name: Michael D. Mitchell Title: Lab Technician Company name: ChevronPhillips Chemical Company Complete work Bartlesville Technology Center address: 92-F Bartlesville, OK 74004 Work phone: 918-661-7156 mitchmd@cpchem.com Email: Candidate's immediate supervisor's information Supervisor's title: Supervisor's name: Chad Brown Team Leader Work Phone: Email: 918-661-9904 browncw@cpchem.com Nominator's information Nominator's name: Nominator's title: Tom Upshaw Senior Research Chemist Work Phone: Email: 918-661-3316 upshata@cpchem.com Candidate Eligibility All three boxes in the Eligible column must be checked for candidate to be eligible. Ineligible Eligible Yes 1. Is the candidate a chemistry-based laboratory technician, □ No

Candidate's contribution in six areas of award criteria

applied chemical technology professional?

process technician, operator, analyst, or other applied chemical

2. Has the candidate been employed for at least five years as an

Technician Affairs Executive Board and/or Advocacy & Public

3. Is the candidate currently a member of the Committee on

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.

□ No

☐ Yes

X Yes

X No

Technical Achievements (worth 60%)

technology professional?

Relations Subcommittee?

Mike is the acknowledged expert in 92-F for the instrumental methods of analysis such as GC, IR, MS, Raman, UV-VIS. Mike is also highly experienced with and generally the lead person for many separations on the wiped film evaporator. Mike has 35 years of experience as a lab technologist. Mike was the lead technician providing analytical support for the Ryton® thiophenol issue (response to the incident investigation). He has recently also provided crucial support for David Soules' work with end-capping agents for Ryton® polymers. Mike was one of two technicians who worked 12-hour night shifts recently to keep the H2S removal process test system in continuous operation to meet a time-critical requirement for a highly important plant support project.

Mike has experience in running multiple types of experimental studies. He does distillations of many types of products. He was instrumental in setting up the lab 2" wiped film evaporators and in obtaining and setting up the 4" wiped film evaporator. He was the lead technician (including shift work) on the large scale purification of a specialty mercaptan for a Joint Development Project. He operates the UV-reactors and the flow reactors which primarily utilize hazardous hydrogen sulfide. He also can do autoclave reactions. The types of reactions he has done includes thiolations, mercaptan oxidations to disulfides and polysulfides and sulfones, hydrogenations, alkylations, metathesis, etherification reactions, esterifications. He has done all

of these safely and efficiently.

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

Mike is the go to person for the younger technicians and is very willing to help them in any way possible, assisting them in training on test equipment, reactors, and H2S handling. He is the go to person by a variety of groups at the center for help with analytical instrument problems (both analysis and equipment) for GC and GCMS. He always serves as a good role model for safety, quality and timeliness in his work. There have been a number of retirements in recent years and Mike stepped up and took on additional responsibilities with the UV reactor system. Mike is a role-model for time management as he does things efficiently and doesn't like to be idle and will seek out things to do if there are no items on his to-do list.

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

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

Internal presentations, publications (1-5%) Include SOPs, presentation to teams, etc. 2 formal reports – extensive email and written notes/memos of results

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

When Mike is asked to do something, there are no concerns regarding the timing of doing the requested item or the quality of the results or effort put forward in performing the task. He also does so safely. He is a member of the CPChem Audit team and is actively involved in the group safety by serving as an assistant building marshal for emergencies, he helps maintain our chemical inventory system (CisPro), the RID vessel inspection and flare line inspections. He also maintains the records for the group credit card and also is responsible for the purchasing card, purchase order requests and AFE's, and work order requests. Mike also maintains the current SOPs and white sheets for 92-F in SharePoint.

Awards (1-5%)

Northeast Oklahoma ACS Technician of Year

Professional and community activities (ACS, AIChE, outreach, etc.) (1-10%)
Mike has served on the Osage Hills School Board in past, active in church activities
Participates regularly in the National Chemistry Week demonstrations
Participates regularly as a judge for the local school Science Fairs

Dear Erin,

I am writing this letter to express my support for the nomination of Mike Mitchell for the NO ACS Technician of the Year Award. I have worked with Mike Mitchell for 13+ years in my roles as a bench chemist, team leader and group Manager. Through this time, I have interacted with Mike both on the job and through extracurricular activities such as science fair judging and National Chemistry week demos. It is always a real pleasure to spend time with Mike in these activities as his enthusiasm to demonstrate science to the next generation is contagious.

Mike is a quiet leader in our research group. Mike assumes responsibility for critical items within the research group (SOP files, RID and Relief Devices, Analytical Equipment), and manages these items safely and efficiently. Typically reviews and audits of these systems are completed before the Manager or Team Leader can think to request their completion. New equipment in our research group is typically assigned to Mike's care, and we can expect reliable operation of systems like our GC's, HPLC's, GPC's and spectrometers for many years under Mike's care. Mike is also frugal with Company resources in this area, preferring to maintain and repair equipment rather than requesting replacement.

The Specialty Chemicals research group in Bartlesville is known for handling toxic and odorous materials. Very rarely are there comments or complaints of odor releases from 92-F. This is due in large part to the diligence and creativity of technicians like Mike handling these types of materials. Over the past few years, the hydrogen sulfide delivery system and mercaptan reactor drain system have been totally revamped with safety and reduced fugitive odors as the key target. Mike has been a leader in these efforts.

The real true measure of Mike's skills and value as a laboratory technician are demonstrated by the requests for his time from other research groups. Mike has worked closely with the K-Resin[®] group, the Ryton[®] group, and most recently his support has been requested for the new NAO pilot plant start up this summer. Mike is a true collaborator and satisfies the requests of these "outside" customers as well as the requirements of the business that he supports.

Finally, I would like to comment on Mike's can do spirit. Mike is willing to go the extra mile to see projects succeed. He is flexible in scheduling and has accepted temporary night shift assignments for critical projects. When these special situations arise, it is gratifying to know that we have in Mike someone that will handle the special situation safely and effectively.

Thank you for considering Mike for this award. I believe that he is a very strong candidate.

Sincerely,

Mitchell D. Refvik

Specialty Chemistry and Product Development Manager

Chevron Phillips Chemical Company, LP

92-F Bartlesville Technical Center

Mitchell D. Refink

Highways 60&123

Bartlesville, OK 74004



David Soules

Ryton Lab Team Leader

BRTC Highway 60 & 123 Bartlesville, OK 74004

105 CPL Bartlesville. OK 74004

Telephone: 918 661-6335 Fax: 918 662-2870 mailto:souleda@cpchem.com

www.cpchem.com

July 7, 2011

Northern Oklahoma ACS

Re: Technician of the year

To whom it may concern:

I understand that Mike Mitchell is being nominated for Technician of the Year. I wish to support that nomination. Mike works in the Specialty Chemicals group and I am in Ryton. Even though we are not in the same group, Mike always helps me with analysis using equipment that I do not have access to and I never feel like I am waiting in line while he does work for the people in his group. He even surprised me by doing a distillation for me when all I had asked for was help in setting up the apparatus so I could run while he did his normal work for Specialty Chemicals. I should not have been surprised since Mike will always help if he can multitask safely.

Mike is also my gas chromatography expert. He maintains instruments for Specialty Chemicals and therefore has expertise. When I have problems with my GC equipment, Mike is very willing to come to our building to assist and teach me on issues that I have not seen. This idea of sharing experience and spending the extra effort to teach rather than just doing the task himself is another example of Mike being a leader in the group.

Perhaps the best thing I can say is that I would like Mike to be in my group. I have tried but Specialty Chemicals does not seem to want to give him up.

These are just a few of the many reasons that Mike is a very deserving candidate for Technician of the Year.

Sincerely,

David Soules

July 7, 2011

To: Northern Oklahoma Section of the American Chemical Society Awards Committee

Re: Technician of the Year Award

It is my understanding that Michael D. Mitchell has been nominated for this outstanding award. Mike is very deserving of this award. He has worked for Phillips Petroleum Co. and Chevron Phillips Chemical Company for over 35 years combined service. I have know him for at least 25 years of that time.

Mike is a very motivated and independent worker. He has great safety awareness and very excellent laboratory skills. He has numerous skills related to analytical techniques as he operates and maintains the following analytical equipment: GC, GCMS, FTIR, UV-Vis. He is frequently asked to do both analysis involving these techniques and to also help other groups with their GC equipment.

Mike also has numerous skills at conducting a variety of laboratory procedures. He can do distillations, operate the wiped film evaporators, and operate the UV-Reactor systems which utilize the very hazardous chemical hydrogen sulfide. He also can operate autoclave and flow reactors. Some of the types of reactions he has performed include thiolation of olefins using hydrogen sulfide, production of disulfides and polysulfides, oxidation of sulfides to sulfones, alkylation of aromatics, hydrogenation of a variety of substrates including reductive aminations. In general, Mike has a broad range of expertise.

As hinted at, Mike primarily works in the Specialty Chemicals group but is frequently helping those in other groups. He is very easy to work with and is very efficient in his work and timely in his delivery of results.

Since I have known Mike he has been involved as a volunteer for National Chemistry Week and also serves as a Science Fair Judge at a number of the local schools.

I have had the privilege of serving as a judge in the past for the Technician of the Year Award and, in my opinion, Mike is very deserving of this award.

Regards,

Michael S. Matson Research Fellow

Chevron Phillips Chemical Company

matsoms@cpchem.com

661-9901

Bill Fisher
Research Engineer
Chevron Phillips Chemical Company
Highways 60 & 123
Building 92-F
Bartlesville, OK 74006
July 8, 2011

To whom it may concern:

I am writing to support the nomination of Michael Mitchell for technician of the year. I am relatively new to the specialty chemicals group here at Chevron Phillips and I work as the research engineer for the group's pilot plant facility. I have worked with Mike for a little under two years at this point in my career. Even in that short time, it is obvious to me that Mike takes a lot of pride in his work.

Mike is an expert on many analytical techniques. In my time working with him he has helped me by performing analysis using gel permeation chromatography (GPC), gas chromatography (GC), and gas chromatography-mass spectrometry (GC-MS) among others. He is always good to talk to when I am unsure what techniques are appropriate for a given situation, and I have benefitted greatly from our conversations. Mike frequently processes crude material the pilot plant produces via wiped-film evaporator (WiFE), in relatively large volumes for a lab operation, safely and efficiently.

Mike is also extremely timely and focused in his execution. I will deliver samples to him that I don't need tested for a week, and he will have the results to me the next day. He approaches his work like a craftsman, with a determination to provide consistently high quality results. As a result, he is trusted and respected by both his peers and superiors. It is my honor to recommend him for technician of the year.

Sincerely,

Bill Fisher

Research Engineer

Chevron Phillips Chemical Company