

identifying data deleted to  
prevent clearly unwarranted  
invasion of personal privacy

U.S. Department of Homeland Security  
U.S. Citizenship and Immigration Services  
Office of Administrative Appeals MS 2090  
Washington, DC 20529-2090



U.S. Citizenship  
and Immigration  
Services

**PUBLIC COPY**

B<sub>3</sub>



FILE: [Redacted] Office: NEBRASKA SERVICE CENTER

Date:

OCT 07 2010

IN RE: Petitioner: [Redacted]  
Beneficiary: [Redacted]

PETITION: Immigrant Petition for Alien Worker as Outstanding Professor or Researcher Pursuant to Section 203(b)(1)(B) of the Immigration and Nationality Act, 8 U.S.C. § 1153(b)(1)(B)

ON BEHALF OF PETITIONER:

SELF-REPRESENTED

INSTRUCTIONS:

Enclosed please find the decision of the Administrative Appeals Office in your case. All of the documents related to this matter have been returned to the office that originally decided your case. Please be advised that any further inquiry that you might have concerning your case must be made to that office.

If you believe the law was inappropriately applied by us in reaching our decision, or you have additional information that you wish to have considered, you may file a motion to reconsider or a motion to reopen. The specific requirements for filing such a request can be found at 8 C.F.R. § 103.5. All motions must be submitted to the office that originally decided your case by filing a Form I-290B, Notice of Appeal or Motion, with a fee of \$585. Please be aware that 8 C.F.R. § 103.5(a)(1)(i) requires that any motion must be filed within 30 days of the decision that the motion seeks to reconsider or reopen.

Thank you,

Perry Rhew  
Chief, Administrative Appeals Office

**DISCUSSION:** The Director, Nebraska Service Center, denied the employment-based immigrant visa petition, which is now before the Administrative Appeals Office (AAO) on appeal. The appeal will be dismissed.

The petitioner is an institution of higher education and research. It seeks to classify the beneficiary as an outstanding researcher pursuant to section 203(b)(1)(B) of the Immigration and Nationality Act (the Act), 8 U.S.C. § 1153(b)(1)(B). The petitioner seeks to employ the beneficiary permanently in the United States as a Research Scientist. The director determined that the petitioner had not established that the beneficiary had attained the outstanding level of achievement required for classification as an outstanding researcher.

On appeal, the petitioner submits additional evidence and a letter arguing that the beneficiary meets at least two of the regulatory criteria at 8 C.F.R. § 204.5(i)(3)(i). For the reasons discussed below, we uphold the director's ultimate conclusion that the petitioner has not established the beneficiary's eligibility for the classification sought.

## I. Law

Section 203(b) of the Act states, in pertinent part, that:

(1) Priority workers. -- Visas shall first be made available . . . to qualified immigrants who are aliens described in any of the following subparagraphs (A) through (C):

\* \* \*

(B) Outstanding professors and researchers. -- An alien is described in this subparagraph if --

(i) the alien is recognized internationally as outstanding in a specific academic area,

(ii) the alien has at least 3 years of experience in teaching or research in the academic area, and

(iii) the alien seeks to enter the United States --

(I) for a tenured position (or tenure-track position) within a university or institution of higher education to teach in the academic area,

(II) for a comparable position with a university or institution of higher education to conduct research in the area, or

(III) for a comparable position to conduct research in the area with a department, division, or institute of a private employer, if the department, division, or institute employs at least 3 persons full-time in research activities and has achieved documented accomplishments in an academic field.

The regulation at 8 C.F.R. § 204.5(i)(3) states that a petition for an outstanding professor or researcher must be accompanied by:

(ii) Evidence that the alien has at least three years of experience in teaching and/or research in the academic field. Experience in teaching or research while working on an advanced degree will only be acceptable if the alien has acquired the degree, and if the teaching duties were such that he or she had full responsibility for the class taught or if the research conducted toward the degree has been recognized within the academic field as outstanding. Evidence of teaching and/or research experience shall be in the form of letter(s) from current or former employer(s) and shall include the name, address, and title of the writer, and a specific description of the duties performed by the alien.

This petition was filed on December 19, 2008 to classify the beneficiary as an outstanding researcher in chemical and metallurgical engineering and materials science. Therefore, the petitioner must establish that the beneficiary had at least three years of research experience in the field as of that date, and that the beneficiary's work has been recognized internationally within the field as outstanding.

The regulation at 8 C.F.R. § 204.5(i)(3)(i) states that a petition for an outstanding professor or researcher must be accompanied by "[e]vidence that the professor or researcher is recognized internationally as outstanding in the academic field specified in the petition." The regulation lists the following six criteria, of which the beneficiary must submit evidence qualifying under at least two.

(A) Documentation of the alien's receipt of major prizes or awards for outstanding achievement in the academic field;

(B) Documentation of the alien's membership in associations in the academic field which require outstanding achievements of their members;

(C) Published material in professional publications written by others about the alien's work in the academic field. Such material shall include the title, date, and author of the material, and any necessary translation;

(D) Evidence of the alien's participation, either individually or on a panel, as the judge of the work of others in the same or an allied academic field;

(E) Evidence of the alien's original scientific or scholarly research contributions to the academic field; or

(F) Evidence of the alien's authorship of scholarly books or articles (in scholarly journals with international circulation) in the academic field.

In 2010, the U.S. Court of Appeals for the Ninth Circuit (Ninth Circuit) reviewed the denial of a petition filed under a similar classification set forth at section 203(b)(1)(A) of the Act. *Kazarian v. USCIS*, 596 F.3d 1115 (9th Cir. 2010). Although the court upheld the AAO's decision to deny the petition, the court took issue with the AAO's evaluation of evidence submitted to meet a given evidentiary criterion. With respect to the criteria at 8 C.F.R. § 204.5(h)(3)(iv) and (vi), the court concluded that while U.S. Citizenship and Immigration Services (USCIS) may have raised legitimate concerns about the significance of the evidence submitted to meet those two criteria, those concerns should have been raised in a subsequent "final merits determination." *Id.* at 1121-22.

The court stated that the AAO's evaluation rested on an improper understanding of the regulations.<sup>1</sup> Instead of parsing the significance of evidence as part of the initial inquiry, the court stated that "the proper procedure is to count the types of evidence provided (which the AAO did)," and if the petitioner failed to submit sufficient evidence, "the proper conclusion is that the applicant has failed to satisfy the regulatory requirement of three types of evidence (as the AAO concluded)." *Id.* at 1122 (citing to 8 C.F.R. § 204.5(h)(3)). The court also explained the "final merits determination" as the corollary to this procedure:

If a petitioner has submitted the requisite evidence, USCIS determines whether the evidence demonstrates both a "level of expertise indicating that the individual is one of that small percentage who have risen to the very top of the[ir] field of endeavor," 8 C.F.R. § 204.5(h)(2), and "that the alien has sustained national or international acclaim and that his or her achievements have been recognized in the field of expertise." 8 C.F.R. § 204.5(h)(3). Only aliens whose achievements have garnered "sustained national or international acclaim" are eligible for an "extraordinary ability" visa. 8 U.S.C. § 1153(b)(1)(A)(i).

*Id.* at 1119-20.

Thus, *Kazarian* sets forth a two-part approach where the evidence is first counted and then considered in the context of a final merits determination.<sup>2</sup> While involving a different classification than the one at issue in this matter, the similarity of the two classifications makes the court's reasoning persuasive to the classification sought in this matter. In reviewing Service Center decisions, the AAO will apply the test set forth in *Kazarian*. As the AAO maintains *de novo* review, the AAO will conduct a new analysis if the director reached his or her conclusion by using a one-step analysis rather than the two-step analysis

---

<sup>1</sup> Specifically, the court stated that the AAO had unilaterally imposed novel substantive or evidentiary requirements beyond those set forth in the regulations at 8 C.F.R. § 204.5(h)(3)(iv) (comparable to 8 C.F.R. § 204.5(i)(3)(i)(D)) and 8 C.F.R. § 204.5(h)(3)(vi) (comparable to 8 C.F.R. § 204.5(i)(3)(i)(F)).

<sup>2</sup> The classification at issue in *Kazarian*, section 203(b)(1)(A) of the Act, requires qualifying evidence under three criteria whereas the classification at issue in this matter, section 203(b)(1)(B) of the Act, requires qualifying evidence under only two criteria.

dictated by the *Kazarian* court. See 8 C.F.R. 103.3(a)(1)(iv); *Soltane v. DOJ*, 381 F.3d 143, 145 (3d Cir. 2004); *Spencer Enterprises, Inc. v. United States*, 229 F. Supp. 2d 1025, 1043 (E.D. Cal. 2001), *aff'd*, 345 F.3d 683 (9<sup>th</sup> Cir. 2003) (recognizing the AAO's *de novo* authority).

## II. Analysis

### A. Evidentiary Criteria<sup>3</sup>

#### *Documentation of the alien's receipt of major prizes or awards for outstanding achievement in the academic field*

The petitioner did not initially claim that the beneficiary meets this criterion. In response to the director's request for evidence, the petitioner submitted certificates stating that the beneficiary received [REDACTED] in 2001 and 2004. The director found that the record lacked "documentary evidence of the criteria for winning the awards, evidence specifying who is eligible to compete for the awards or evidence to establish the reputation of the organization granting the award[s]." On appeal, the petitioner provides general information about the Denver X-Ray Conference, but the record lacks evidence showing the level of prestige accorded to the beneficiary's poster awards by the academic field. The petitioner also submits an internet printout from the 2001 Denver X-Ray conference listing 32 papers (including the beneficiary's) and bearing a notation that "[s]ession chairs will select the two best papers for awards." The petitioner's appellate submission does not include documentary evidence specifying "the criteria for winning the awards" as noted by the director.

It is significant that the *proposed* regulation relating to this classification would have required evidence of a major *international* award. The final rule removed the requirement that the award be "international," but left the word "major." The commentary states: "The word "international" has been removed in order to accommodate the *possibility* that an alien might be recognized internationally as outstanding for having received a major award that is not international." (Emphasis added.) 56 Fed. Reg. 60897-01, 60899 (Nov. 29, 1991.)

Thus, the standard for this criterion is very high. The rule recognizes only the "possibility" that a *major* award that is not international would qualify. Significantly, even lesser international awards cannot serve to meet this criterion given the continued use of the word "major" in the final rule. Compare 8 C.F.R. § 204.5(h)(3)(i) (allowing for "lesser" nationally or internationally recognized awards for a separate classification than the one sought in this matter).

Rather than submitting evidence demonstrating the significance of the beneficiary's XRD Poster Awards to the academic field, the submitted documentation focuses mainly on the Denver X-Ray Conference in general. There is no documentary evidence demonstrating that the XRD Poster Awards received by the beneficiary are recognized beyond the confines of this conference and

---

<sup>3</sup> The petitioner does not claim to meet or submit evidence relating to the regulatory categories of evidence not discussed in this decision.

therefore commensurate with "major" awards for outstanding achievement in the academic field. Accordingly, the petitioner has not established that the beneficiary meets this criterion.

*Published material in professional publications written by others about the alien's work in the academic field. Such material shall include the title, date, and author of the material, and any necessary translation*

The petitioner submitted citation evidence showing less than ten independent cites to his body of published work as of the petition's filing date.<sup>4</sup> Articles which cite the beneficiary's work are primarily about the author's own work, not the beneficiary's work. As such, they cannot be considered published material about the beneficiary's work. We note that the submitted articles citing to the beneficiary's work similarly referenced numerous other authors. With regard to this criterion, a footnoted reference to the alien's work without evaluation is of minimal probative value.

In light of the above, the petitioner has not established that the beneficiary meets this criterion.

*Evidence of the alien's participation, either individually or on a panel, as the judge of the work of others in the same or an allied academic field*

The petitioner did not initially claim this criterion. In his decision, the director noted that the beneficiary's curriculum vitae stated that he judged the

The director's decision indicated that despite the request for evidence, no evidence pertaining to the beneficiary's participation as a judge was submitted. The self-serving claims in the beneficiary's curriculum vitae are not sufficient to meet the burden of proof for this regulatory criterion. Going on record without supporting documentary evidence is not sufficient for purposes of meeting the burden of proof in these proceedings. *Matter of Soffici*, 22 I&N Dec. 158, 165 (Comm. 1998) (citing *Matter of Treasure Craft of California*, 14 I&N Dec. 190 (Reg. Comm. 1972)). A petition must be filed with any initial evidence required by the regulation. 8 C.F.R. § 103.2(b)(1). The nonexistence or other unavailability of primary evidence creates a presumption of ineligibility. 8 C.F.R. § 103.2(b)(2)(i). According to the same regulation, only where the petitioner demonstrates that primary evidence does not exist or cannot be obtained may the petitioner rely on secondary evidence and only where secondary evidence is demonstrated to be unavailable may the petitioner rely on affidavits. Where a record does not exist, the petitioner must submit an original written statement on letterhead from the relevant authority indicating the reason the record does not exist and whether similar records for the time and place are available. 8 C.F.R. § 103.2(b)(2)(ii). In this instance, the petitioner has not established that evidence of the beneficiary's participation does not exist or cannot be obtained. Further, the beneficiary's curriculum vitae do not equate to secondary evidence or affidavits.

The petitioner's response included a February 26, 2009 e-mail from the Special Issue Guest Editor of the *Journal of Alloys and Compounds* to the beneficiary requesting that he review a paper for the

---

<sup>4</sup> More than half of the submitted articles citing to the beneficiary's work were self-citations by his research supervisor and collaborator

journal. The petitioner also submitted a March 13, 2009 e-mail from the Special Issue Guest Editor thanking the beneficiary for completing the aforementioned review. The preceding request and the beneficiary's participation as a reviewer post-date the petition's December 19, 2008 filing date. A petitioner, however, must demonstrate the beneficiary's eligibility as of the filing date of the petition. See 8 C.F.R. §§ 103.2(b)(1), (12); *Matter of Katigbak*, 14 I&N Dec. 45, 49 (Reg'l. Comm'r. 1971). Accordingly, the AAO will not consider the beneficiary's participation as a reviewer for the *Journal of Alloys and Compounds* in this proceeding.

In light of the above, the petitioner has not established that the beneficiary meets this criterion.

*Evidence of the alien's original scientific or scholarly research contributions to the academic field.*

The plain language of the regulation at 8 C.F.R. § 204.5(i)(3)(i)(E) does not require that the beneficiary's contributions themselves be internationally recognized as outstanding. That said, the plain language of the regulation does not simply require original research, but original "research contributions." Had the regulation contemplated merely the submission of original research, it would have said so, and not have included the extra word "contributions." Moreover, the plain language of the regulation requires that the contributions be "to the academic field" rather than an individual laboratory or institution.

The petitioner submitted several reference letters supporting the petition.

states:

[The beneficiary] is a Research Scientist in our department at the University of Nevada, Reno. He currently works on a project to study complex metal hydrides . . . . The goal of the project in which [the beneficiary] plays a key role is to determine the structural behavior during pressure cycling of lithium-based complex hydride materials which can reversibly absorb and desorb hydrogen. These materials have important potential use in hydrogen storage for hydrogen powered cars. [The beneficiary] has developed a new Sievert's apparatus to measure the hydrogen absorption/desorption capacities in materials, an apparatus that can perform real time structural studies by connecting to either neutron or X-ray diffractometers.

does not provide specific examples of how the beneficiary's Sievert's apparatus is being applied by others in the field beyond the beneficiary's immediate projects at the University of Nevada, Reno and the Argonne National Laboratory.

further states:

Other important research achievements in which [the beneficiary] has been significantly involved include work on (1) explosive and gas generator materials, and (2) thermal energy

storage materials. His research on ammonium nitrate is important, as this substance can be used as the gas generator material for an automobile airbag. . . . [The beneficiary] found that ammonium nitrate can be stabilized between -100 °C to 120 °C by adding small amounts of potassium nitrate. This temperature range is important for use as airbag gas generator material stored in cars which will be driven at all different temperature ranges in varied climate conditions. In order to determine the thermal and structural properties of these materials, [the beneficiary] collaborated with researchers at the Oak Ridge National Laboratory (ORNL), where he developed

He published his findings on the latter work in the

There is no evidence showing that the beneficiary's work in has been frequently cited or otherwise equates to a research contribution to the academic field as a whole.

continues:

[The beneficiary] has also developed new solid-state thermal energy storage materials using special organic compounds to store thermal energy. One example of the application of these materials is in passive solar buildings that use them to store the heat of the sun and reuse the released heat. This research was sponsored by the National Renewable Energy Laboratory. Large amounts of energy are stored or released during solid-state phase transformation (without melting the materials) during temperature changes, and this energy can potentially be put to great use as heat to keep a house warm for extended periods of time before a heater needs to be turned on during winter time. [The beneficiary] conducted various studies to develop new binary systems of organic compounds, and optimized them to have a specific phase transformation temperature to be used in different places with special temperature conditions.

does not provide any specific examples of how the beneficiary's solid-state thermal energy storage materials have actually been utilized in the industry. Further, there is no evidence showing that the binary systems of organic compounds developed by the beneficiary are being applied by others in the field or otherwise constitute a research contribution to the academic field as a whole.

coauthored several publications with the beneficiary and served as his research supervisor. states:

[The beneficiary], along with others, developed a new Sievert's apparatus in order to measure the hydrogen storage capacities of target materials that can perform real time structural studies by connecting to either neutron or synchrotron x-ray diffractometers. This apparatus can measure the hydrogen storage capacities, as well as determine the crystal structural changes simultaneously during long-term hydrogen absorbing/desorbing pressure cycling. He

had brought this apparatus to the Argonne National Laboratory to perform this combined research on neutron diffraction structure and hydrogen storage capacity determination. This was a pioneering effort that has never before been (volumetrically) tried, to the best of my knowledge. Results from this work will be of far greater impact than those of almost any other laboratory in the world.

While [REDACTED] indicates that the beneficiary's Sievert's apparatus is a novel measurement tool, there is no evidence that the results from this apparatus have already significantly impacted the field as of the date of filing. A petitioner must establish the beneficiary's eligibility at the time of filing. 8 C.F.R. §§ 103.2(b)(1), (12); *Matter of Katigbak*, 14 I&N Dec. at 49. A petition cannot be approved at a future date after the beneficiary becomes eligible under a new set of facts. *Id.* at 49.

[REDACTED] further states:

Another important research achievement of [the beneficiary's] work involves his work on propellants/explosives and gas generator materials for applications in vehicular air bags. He studied practical new generation propellant oxidizers for explosive materials, such as ammonium nitrate ( $\text{NH}_4\text{NO}_3$ ), for use in a gas generator of an automobile airbag . . . . [The beneficiary] has shown that a small amount (~5 %) of potassium nitrates ( $\text{KNO}_3$ ) added to the ammonium nitrate is enough to solve this problem, and this new material revealed that there is no longer any phase transition between  $-100\text{ }^\circ\text{C}$  to  $+120\text{ }^\circ\text{C}$ . He performed a significant amount of structural characterization and thermal analysis work to prove this finding. [The beneficiary] collaborated with researchers at the High Temperature Materials Laboratory (HTML) of the Oak Ridge National Laboratory (ORNL) to perform detailed structural and phase transition analysis as the instrumentation was available there. By combining all results, [the beneficiary] built up the first complete ammonium nitrate-potassium nitrate binary phase diagram which included all structural and thermal properties at various temperatures and compositions. By use of this phase diagram, [the beneficiary's] work has provided a relatively easy means to determine the optimum composition to be used within various temperature excursions between summers and winters. The goal of this work is its eventual wide use as a gas generator of an automobile airbag, which will reduce industrial manufacturing processing costs.

There is no evidence showing that any automobile parts manufacturers have licensed or utilized the beneficiary's technology or that it otherwise equates to a research contribution to the academic field as a whole.

[REDACTED] continues:

[The beneficiary] has also performed research on *Solar Thermal Energy Storage Materials*. He developed new solid-state thermal energy storage materials using special organic compounds to store the heat from the sun during the day, and release the heat for passive Solar Building Applications, sponsored by the National Renewable Energy Laboratory (NREL). These storage materials, made from organic compounds, can store large amounts of

energy during their solid-state phase transformation over temperature changes. . . . One of the key issues in this research has been to determine the solid-state phase transformation temperature for the practical application of this technology. [The beneficiary] conducted various studies and developed new binary systems of these compounds. He optimized them to have a specific phase transformation temperature for wide variety of applications.

does not provide specific examples of how the beneficiary's storage materials have been applied in the field or have notably influenced the field beyond his laboratory and its immediate collaborators.

states:

I briefly met [the beneficiary] at where I was highly interested in and impressed with his poster presentation.

In this work, [the beneficiary] presented important new findings on gas generator materials by combining different amounts of ammonium nitrates ( $\text{NH}_4\text{NO}_3$ ) and potassium nitrates ( $\text{KNO}_3$ ) to form new solid-state solutions and determined the crystal structure of new solid-state solutions by using in-situ high temperature X-ray diffraction techniques. . . . This new finding helps to solve the temperature issue on the storage of airbag gas generator materials in automobiles when driven from low temperature snowy mountain conditions to hot sunny deserts.

\* \* \*

In 2005, I met [the beneficiary] again at the TMS [Minerals, Metals & Materials Society] Annual Meeting in San Francisco, one of the most significant annual events in the field of materials science. I attended [the beneficiary's] presentation of his research on his development of the first binary phase diagram of ammonium nitrates ( $\text{NH}_4\text{NO}_3$ ) and potassium nitrates ( $\text{KNO}_3$ ) at different compositions and temperatures. To develop the  $\text{NH}_4\text{NO}_3$ - $\text{KNO}_3$  phase diagram, [the beneficiary] used X-ray diffraction techniques to determine the crystal structures and he also utilized the Differential Scanning Calorimetric (DSC) method to measure the thermodynamics properties of all new solid-state solutions. This phase diagram provides more detailed structural and thermal properties of  $\text{NH}_4\text{NO}_3$  and  $\text{KNO}_3$  to support [the beneficiary's] previous presentation on his new findings on airbag gas generators.

After attending his impressive presentation, I read two of [the beneficiary's] published papers: appearing in and appearing in

In this research, [the beneficiary] proposed a revolutionary new process to stabilize ammonium nitrate, a subject that has intrigued the materials science field a great deal because, to date, there have been no practical means developed to stabilize this

substance. Through his utilization of X-ray diffraction and thermodynamics methods, [the beneficiary] verified that ammonium nitrate can be stabilized by adding potassium nitrate. This new discovery by [the beneficiary] will be of great benefit to American industry. Stabilized ammonium nitrate can provide an excellent chemical compound as a gas generator within an automotive airbag.

The record, however, does not include evidence showing that any automobile parts manufacturers have already applied the beneficiary's discovery in their industry. With regard to the beneficiary's published and presented work, the regulations include a separate criterion for scholarly articles at 8 C.F.R. § 204.5(i)(3)(i)(F). If the regulations are to be interpreted with any logic, it must be presumed that the regulation views contributions as a separate evidentiary requirement from scholarly articles. To hold otherwise would render meaningless the regulatory requirement that a beneficiary meet at least two separate criteria.

[REDACTED] states:

I have read several of [the beneficiary's] papers, which let me to consider him as a leading researcher in Metallurgical and Materials Engineering. In particular, his papers published in the peer-reviewed journals, [REDACTED] are especially notable. There, [the beneficiary] reported on the use of neutron diffraction to characterize the phases during hydrogen cycling. All of [the beneficiary's] neutron diffraction experiments were performed at the Argonne National Laboratory, using a setup (Sievert's apparatus) developed by [the beneficiary] at the University of Nevada-Reno. In his works [the beneficiary] succeeded to determine hydrogen storage capacity and structural changes simultaneously, and this is a highly desired result. The studied hydrogen storage material, Li-based hydride, can store and release large amounts of hydrogen. In the future, it may be used in hydrogen fuel cells as a power source for automobiles.

Some of the [the beneficiary's] recent works were published in the conference proceedings, [REDACTED]

[REDACTED] He found that the presence of oxygen is most detrimental to hydrogen storage capacity and contributed to the largest loss in hydrogen capacity after ~500 pressure cycling compared to other impurity gases (such as CH<sub>4</sub>, NH<sub>3</sub> and H<sub>2</sub>O). [The beneficiary's] results are among the first to be reported in the scientific literature on this subject. These results provide extremely important information to avoid the effect of gases that constitute impurities when building a new system for powering automobiles using hydrogen, including issues that must be dealt with at hydrogen fuelling stations.

Initially and in response to the director's request for evidence, the petitioner submitted evidence of only minimal citation, with no article or presentation of the beneficiary having been cited by more than three independent researchers beyond those at the University of Nevada, Reno. The petitioner's citation

evidence included 17 articles citing to the beneficiary's body of work.<sup>5</sup> More than half of the submitted citations were self-citations by [REDACTED]. On appeal, the petitioner submits a November 19, 2009 letter from [REDACTED] asserting that the beneficiary works in a "very specialized field of study" and that it is reasonable to expect that researchers in his field would cite to their own work. Self-citation is a normal, expected practice. Self-citation cannot, however, demonstrate the response of independent researchers. The seven independent cites to the beneficiary's body of work as of December 2008 is not indicative of a demonstrable influence in the academic field as of the petition's filing date. As previously discussed, a petitioner must establish the beneficiary's eligibility at the time of filing the petition. 8 C.F.R. §§ 103.2(b)(1), (12); *Matter of Katigbak*, 14 I&N Dec. at 49. A petition cannot be approved at a future date after the beneficiary becomes eligible under a new set of facts. *Id.* at 49.

[REDACTED] states:

I became acquainted with [the beneficiary's] research while serving [REDACTED] held in Charlotte, North Carolina. . . . One of his invited presentations was entitled [REDACTED]

[REDACTED] are two important organic compounds for thermal energy storage applications. These organic compounds can absorb large amounts of heat during their solid-state phase transitions. In [the beneficiary's] presentation, he illustrated the important thermal properties of the PE-AMPL binary system.

In his work, he determined specific phase transition temperatures and measured the enthalpy/heat capacities of different compositions of a PE-AMPL binary system. He also determined the crystal structures of these compounds in order to construct a PE-AMPL binary phase diagram, which included all thermal property and crystal structure information. His studies of the binary system offered the capability of determining the best composition of these compounds with special transition temperatures for use in various locations.

In [the beneficiary's] second presentation at the session I chaired, he presented the important thermal properties and the effect of thermal cycling on other important organic compounds, such as pentaglycerine (PG) and neopentylglycol (NPG), with special phase transition temperatures at room temperature. According to his findings, the ideal combination of PG-NPG for a room temperature phase transition temperature was determined to be 40%PG-60%NPG, which can be used for solar building applications in most areas. [The beneficiary's] work has shown that these compounds hold great promise for use in solid-state phase transition, even after many cycles. [The beneficiary] published his findings on these thermal property results in the journal [REDACTED] . . . and in the [REDACTED]

Apparently, he also presented these important results at other conferences, including . . . The

<sup>5</sup> The article entitled "[REDACTED]" was claimed twice.



nitrate showed there was no phase transition when the temperature changed from -100 °C to 120 °C. This important finding made by [the beneficiary] is that this material can be used as a gas generator for an automobile airbag and that it can be safely stored inside a car without worrying about environmental temperature changes. [The beneficiary] also extended his studies to perform high temperature X-ray diffraction experiments at ORNL for various compositions of  $\text{NH}_4\text{NO}_3$  and  $\text{KNO}_3$ , and he found that there are two new undetermined phases in the mid-range of compositions for mixing these two materials. By combining all his studies, [the beneficiary] made the first  $\text{NH}_4\text{NO}_3$ -  $\text{KNO}_3$  binary phase diagram which included all structural and thermal properties at various temperatures and compositions.

As previously discussed, there is no evidence showing that the beneficiary's specific innovation has already been implemented in the industry as a gas generator for an automobile airbag or as a prototype under consideration for widespread manufacture.

states:

I have come to know of [the beneficiary's] research primarily through the reading of his publications in the field of materials science, appearing in such *journals as* . . . This is fascinating and important research that involves the study of potential hydrogen storage materials which can reversibly absorb and desorb hydrogen. . . . [The beneficiary] has developed an improved method for determining hydrogen storage capacity as well as crystal structure for Li-based hydrides utilizing a Sieverts apparatus combined with Neutron and X-ray diffraction techniques.

\* \* \*

I have also read [the beneficiary's] paper appearing in the regarding his work on the development of new gas generator materials by combining ammonium nitrates (AN) and potassium nitrates (KN) to form a solid-state solution. . . . In this research, [the beneficiary] developed a new binary AN-KN phase diagram utilizing the techniques of high-temperature X-ray diffraction, thermal phase transition properties by differential scanning calorimetry (DSC), vapor pressures measurement by a torsion effusion vapor pressure apparatus, and computer modeling. . . . From [the beneficiary's] AN-KN phase diagram research work, it can be easily found that ammonium nitrates can be stabilized by adding small amounts of potassium nitrates. This new finding makes it possible that the stabilized ammonium nitrate can be used as a gas generator in a car airbag.

does not specify the automobile parts manufacturers that have utilized the beneficiary's technology in their airbags or how the beneficiary's work has already been applied in the field. As previously discussed, a petitioner must establish the beneficiary's eligibility at the time of filing. 8 C.F.R. §§ 103.2(b)(1), (12); *Matter of Katigbak*, 14 I&N Dec. at 49. A petition cannot be approved at a future date after the beneficiary becomes eligible under a new set of facts. *Id.* at 49.

states:

I first became exposed to [the beneficiary]'s research from January to December 2001 when I visited the [redacted] where he was working.

Regarding [the beneficiary's] research on explosive and gas generator materials, he addressed important issues dealing with ammonium nitrate ( $\text{NH}_4\text{NO}_3$ ). [The beneficiary] . . . discovered that by adding a small amount of potassium nitrate ( $\text{KNO}_3$ ) to the ammonium nitrate, the resultant new material would then display no phase transition between -100 degrees C to 120 degrees C. . . . He developed the first experimental ammonium nitrate-potassium nitrate binary phase diagram which included all structural and thermal properties at various temperatures and compositions. I read [the beneficiary]'s findings on this breakthrough, which he published in the journals [redacted] . . . [The beneficiary] demonstrated that ammonium nitrate could be practically used in industry after improving the stabilization property by adding potassium nitrate. This research will provide an important breakthrough for the American automotive industry and improve motoring safety.

Regarding [the beneficiary's] research on new solid-state thermal energy storage materials, he tackled this exciting area because these materials, like organic compounds (also called "plastic crystal") can be used in passive solar building applications. . . . One of his research goals was to determine the accurate solid-state phase transformation temperature for the practical application of these materials. He conducted different kinds of studies on the structural determination of these materials through use of X-ray technology, bulk thermal cycling, phase transition study, and enthalpy/heat capacity measurements. He also developed new binary systems of these compounds and optimized them to derive specific phase transformation temperatures to eventually bring about their practical application for everyday use. . . . It was a pleasure to interact with [the beneficiary] in this important and revolutionary work and offer my own suggestions and analyses.

There is no evidence showing that the beneficiary's work in [redacted] have been frequently cited or otherwise equate to research contributions to the academic field as a whole. Further, there is no evidence showing that the beneficiary's structural determinations and binary systems have been utilized by manufacturers or applied by others in the academic field.

states:

I have acquired knowledge of [the beneficiary's] research as a result of his publications in [REDACTED] and other conference proceedings.

\* \* \*

[The beneficiary] has developed a new Sievert's apparatus that measures hydrogen storage capacity and can perform real time structural studies by connecting to either neutron or X-ray diffractometers. No other laboratories in the world have performed real time structural studies of hydrogen storage materials during the loading/unloading of hydrogen and this research represents an important step forward in its innovative approach that will have significant impact on the state of research in hydrogen fuel technology. [The beneficiary] derived his structural data by his innovative use of a new Sievert's apparatus of his own design, as mentioned above, requiring advanced crystallographic knowledge and analysis methods.

There is no evidence showing that the beneficiary's work in [REDACTED] [REDACTED] has been frequently cited or that his development of a new Sievert's apparatus has notably influenced the academic field beyond his circle of collaborators.

[REDACTED] states:

When I worked at TRW as Senior Staff engineer, one of our company's objectives was to use green and safe ingredients and to reduce the processing costs of the airbag gas generators. . . . [The beneficiary's] team at University of Nevada, Reno proposed to use the inexpensive ammonium nitrate as an airbag gas generator component and provided a novel method to stabilize it. Their proposal was sound and technically competent. We, at TRW, were pleased to grant [the beneficiary's] team at University of Nevada Reno this research project.

The problem for using ammonium nitrate as a gas generator of airbag is that pure ammonium nitrate is very sensitive to temperature changes. . . . To solve this phase transition problem of ammonium nitrate, [the beneficiary] developed a new method to stabilize it by adding small amounts of potassium nitrate to ammonium nitrate which made this new material insensitive to temperature cycling. The new material has no phase transition from  $-100^{\circ}$  to  $120^{\circ}$ C. [The beneficiary] used X-ray diffraction and differential scanning calorimetry technique to prove that this material is a new and valuable gas generator component for the airbag safety systems. The finding of [the beneficiary's] is a very valuable and important breakthrough for the automobile safety industry.

[REDACTED] asserts that the beneficiary's University of Nevada, Reno research team's proposal to use ammonium nitrate as an airbag gas generator component "was sound and technically competent," but there is no evidence demonstrating that the automotive industry has successfully applied the beneficiary's innovation.

states:

I became acquainted with [the beneficiary's] research when we met each other at the 2004 TMS Annual Meeting held in Charlotte, North Carolina. [The beneficiary] was invited to present his research findings on solar thermal energy storage materials. His research studied on one kind of these materials, organic compounds, which can absorb large amounts of heat at their solid-state phase transition temperature when heated.

\* \* \*

However, these materials have not been used practically due to their extremely high phase transition temperatures, and the sunlight does not provide sufficient heat. In his presentation, a solution, developed by [the beneficiary], resolves this issue by combining two kinds of organic compounds, resulting in a new material, to reduce the phase transition temperature.... Each of these new materials, developed by [the beneficiary], has its own special phase transition temperature and it can be used in the designated place. Especially, he made one of the materials with the phase transition at room temperature, thus, it can be used in most areas. [The beneficiary's] research mentioned above has been published in the Journal of [redacted] as well as in conference proceedings.

I met [the beneficiary] again at the 2006 TMS Annual Meeting held in San Antonio, Texas.... In his presentation, [the beneficiary] stated that these materials can reversibly store (absorb and desorb) large amounts of hydrogen so that they can be used to supply hydrogen to hydrogen fuel cells which are used to power automobiles as part of the U.S. hydrogen energy initiative. However, the condition that Li-based hydrogen storage materials absorb large amounts of hydrogen only occurs at their first reversible absorbing/desorbing cycle. After second cycle, there is a loss of hydrogen storage capacity compared to the first cycle.... In order to solve this problem, [the beneficiary] designed a new Sievert's apparatus which can measure the hydrogen storage capacities and simultaneously determine structural changes of the newly formed materials. This new Sievert's apparatus can perform the real time structural studies by connecting to either neutron or X-ray diffractometers, also can perform multiple hydrogen absorbing/desorbing cycles (not only a single cycle). . . . His original results have been published in the [redacted] and the [redacted], and have been used by others in different research areas.

There is no evidence demonstrating that the beneficiary's findings in [redacted] have been frequently cited by independent researchers. Further, while [redacted] comments that the beneficiary's results have been "used by others in different research areas," he does not provide specific examples of their utilization. Moreover, there is no evidence that the beneficiary's new Sievert's apparatus design has been recognized in the academic field at a level consistent with a contribution to the field as a whole.

The opinions of experts in the field are not without weight and have been considered above. USCIS may, in its discretion, use as advisory opinions statements submitted as expert testimony. *See Matter of Caron International*, 19 I&N Dec. 791, 795 (Comm'r. 1988). However, USCIS is ultimately responsible for making the final determination regarding an alien's eligibility for the benefit sought. *Id.* The submission of letters from experts supporting the petition is not presumptive evidence of eligibility; USCIS may, as we have done above, evaluate the content of those letters as to whether they support the alien's eligibility. *See id.* at 795; *see also Matter of V-K-*, 24 I&N Dec. 500, n.2 (BIA 2008) (noting that expert opinion testimony does not purport to be evidence as to "fact"). USCIS may even give less weight to an opinion that is not corroborated, in accord with other information or is in any way questionable. *Id.* at 795; *see also Matter of Soffici*, 22 I&N Dec. at 165. In this case, the submitted evidence does not establish that the beneficiary's work equates to original scientific contributions to the academic field at large.

In light of the above, the petitioner has not submitted qualifying evidence that meets the plain language requirements of the regulation at 8 C.F.R. § 204.5(i)(3)(i)(E).

*Evidence of the alien's authorship of scholarly books or articles (in scholarly journals with international circulation) in the academic field.*

As stated above, the petitioner submitted several articles authored by the beneficiary. Thus, the beneficiary has submitted evidence that qualifies under 8 C.F.R. § 204.5(i)(3)(i)(F).

In light of the above, the petitioner has submitted evidence that meets only one of the criteria that must be satisfied to establish the minimum eligibility requirements for this classification. Specifically the petitioner submitted evidence that the beneficiary meets the criterion set forth at 8 C.F.R. § 204.5(i)(3)(i)(F). Nevertheless, the next step is a final merits determination that considers whether the evidence is consistent with the statutory standard in this matter, international recognition as outstanding. Section 203(b)(1)(B)(i) of the Act.

#### *B. Final Merits Determination*

It is important to note at the outset that the controlling purpose of the regulation at 8 C.F.R. § 204.5(i)(3)(i) is to establish international recognition, and any evidence submitted to meet these criteria must therefore be to some extent indicative of international recognition. More specifically, outstanding professors and researchers should stand apart in the academic community through eminence and distinction based on international recognition. The regulation at issue provides criteria to be used in evaluating whether a professor or researcher is deemed outstanding. *Employment-Based Immigrants*, 56 Fed. Reg. 30703, 30705 (proposed July 5, 1991) (enacted 56 Fed. Reg. 60897 (Nov. 29, 1991)).

The nature of the beneficiary's judging experience is a relevant consideration as to whether the evidence is indicative of his recognition beyond his own circle of collaborators. *See Kazarian*, 596 F. 3d at 1122. The petitioner has not established that the beneficiary's judging of his university's

Graduate Student Association's Presentation Paper/Poster competition is commensurate with international recognition. Rather, it is more consistent with local or institutional recognition. Further, regarding the beneficiary's review of a single article for [REDACTED] subsequent to the petition's filing date, we cannot ignore that scientific journals are peer reviewed and rely on many scientists to review submitted articles. Normally a journal's editorial staff will enlist the assistance of numerous professionals in the field who agree to review submitted papers. It is common for a publication to ask multiple reviewers to review a manuscript and to offer comments. The publication's editorial staff may accept or reject any reviewer's comments in determining whether to publish or reject submitted papers. Thus, peer review is routine in the field and not every peer reviewer enjoys international recognition. Without evidence that sets the beneficiary apart from others in his field as of the petition's filing date, such as evidence that he has reviewed manuscripts for a journal that credits a small, elite group of referees, received independent requests from a substantial number of journals, or served in an editorial position for a distinguished journal, we cannot conclude that the beneficiary's judging experience is indicative of or consistent with international recognition.

Regarding the beneficiary's original research, as stated above, it does not appear to rise to the level of contributions to the academic field as a whole. Demonstrating that the beneficiary's work was "original" in that it did not merely duplicate prior research is not useful in setting the beneficiary apart in the academic community through eminence and distinction based on international recognition. 56 Fed. Reg. at 30705. Research work that is unoriginal would be unlikely to secure the beneficiary a master's degree, let alone classification as an outstanding researcher. To argue that all original research is, by definition, "outstanding" is to weaken that adjective beyond any useful meaning, and to presume that most research is "unoriginal."

While the beneficiary has published articles, the Department of Labor's Occupational Outlook Handbook, (accessed at [www.bls.gov/oco](http://www.bls.gov/oco) on September 28, 2010 and incorporated into the record of proceedings), provides information about the nature of employment as a postsecondary teacher (professor) and the requirements for such a position. See [www.bls.gov/oco/ocos066.htm](http://www.bls.gov/oco/ocos066.htm). The handbook expressly states that faculty members are pressured to perform research and publish their work and that the professor's research record is a consideration for tenure. Moreover, the doctoral programs training students for faculty positions require a dissertation, or written report on original research. *Id.* This information reveals that original published research, whether arising from research at a university or private employer, does not set the researcher apart from faculty in that researcher's field.

Moreover, the beneficiary's citation history is a relevant consideration as to whether the evidence is indicative of the beneficiary's recognition beyond his own circle of collaborators. See *Kazarian*, 596 F. 3d at 1122. As the beneficiary has been, at best, minimally cited and the record contains no other comparable evidence demonstrating the impact of the beneficiary's articles, we cannot conclude that the beneficiary's publication record is consistent with international recognition.

In light of the above, our final merits determination reveals that the beneficiary's single form of qualifying evidence, publishing articles that have been only minimally cited, does not set the

beneficiary apart in the academic community through eminence and distinction based on international recognition, the purpose of the regulatory criteria. 56 Fed. Reg. at 30705.

### **III. Conclusion**

The petitioner has shown that the beneficiary is a talented researcher, who has won the respect of his collaborators, employers, and mentors, while securing some degree of international exposure for his work. The record, however, stops short of elevating the beneficiary to the level of an alien who is internationally recognized as an outstanding researcher or professor. Therefore, the petitioner has not established that the beneficiary is qualified for the benefit sought.

The burden of proof in these proceedings rests solely with the petitioner. Section 291 of the Act, 8 U.S.C. § 1361. The petitioner has not sustained that burden. Accordingly, the appeal will be dismissed.