



United States

Office of Personnel Management

Washington, DC 20415

Classification Appeal Decision Under section 5112 of title 5, United States Code

Appellant: [appellant]

Agency classification: Research Chemist
GS-1320-14

Organization: [location] Area Food and Industrial
Oil Research Unit
National Center for Agriculture
Utilization Research
Agriculture Research Service
U.S. Department of Agriculture
[city and state]

OPM decision: Research Chemist
GS-1320-15

OPM decision number: C-1320-15-01

/s/ Kevin E. Mahoney

Kevin E. Mahoney
Deputy Associate Director
Center for Merit System Accountability
Human Capital Leadership
and Merit System Accountability

May 9, 2006
Date

As provided in section 511.612 of title 5, Code of Federal Regulations, this decision constitutes a certificate that is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government. The agency is responsible for reviewing its classification decisions for identical, similar, or related positions to ensure consistency with this decision. There is no right of further appeal. This decision is subject to discretionary review only under conditions and time limits specified in the *Introduction to the Position Classification Standards*, appendix 4, section G (address provided in appendix 4, section H).

Since this decision changes the classification of the appealed position, it is to be effective no later than the beginning of the fourth pay period after the date of this decision (5 CFR 511.702). The servicing human resources (HR) office must submit a compliance report containing the corrected position description and a Standard Form 50 showing the personnel action taken. The report must be submitted within 30 days from the effective date of the personnel action.

Decision sent to:

[appellant]
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NCAUR, ARS
U.S. Department of Agriculture
[address]
[city and state]

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Introduction

The Chicago Field Services Group of the U.S. Office of Personnel Management (OPM) accepted a classification appeal from [appellant] on September 30, 2005. His position is currently classified as Research Chemist, GS-1320-14, and is assigned to [location] Area Food and Industrial Oil Research Unit (FIO), National Center for Agriculture Utilization Research (NCAUR), Agriculture Research Service (ARS), U.S. Department of Agriculture (USDA), in [city and state]. The appellant believes his position should be reclassified as Research Chemist, GS-1320-15. We have accepted and decided this appeal under section 5112 of title 5, United States Code (U.S.C.).

To help decide the appeal, we conducted a telephone audit with the appellant and an interview with his immediate supervisor, and talked by phone to the ARS HR staff member who is the manager of the Research Panel Evaluation Program on March 2, 2006, and followed up with a call on April 12, 2006. We spoke to the NCAUR Director on March 9, 2006, and April 20, 2006. The agency HQ did not provide any other information. We conducted phone or e-mail conversations with 16 scientists, about half recommended by the appellant who are familiar with his work and others recommended by other scientists familiar with the appellant's work, nine letters submitted at the appellant's request by other scientists in the industry that utilize the appellant's research, and 16 letters from his previous RGE panel that were used exclusively to explain previous research, but not as additional testimonials. The interview subjects were additional scientists and experts from ARS HQ, interest groups and research universities directly in his field and in complementary research to ascertain the difficulty, complexity, and significance of his work.

Background

It is ARS policy that all GS-14 and GS-15 agency scientists, whose work is properly evaluated by the Research Grade Evaluation Guide (RGE), be reviewed every five years to determine what change, if any, is warranted in the grade level worth of their work. The appellant's position description (PD) and research position evaluation case write-up, dated October, 27, 2003, were submitted as part of the appellant's research evaluation case write-up prepared for the ARS panel review. The panel conducted the reviewed in early 2004, and issued a decision not to upgrade the position to the GS-15 grade level on March 5, 2004. A panel must come to a consensus for the degree awarded each factor, discussing the case until they can agree. Once the final decision is made, all individual notes and summaries are destroyed. The only remaining documentation is the evaluation report provided to the scientist explaining the decision. Conversations with two of the original panelists confirmed they destroyed their notes on site and they based their comments on their memory of the case. A summary of the panel decision was submitted with the appellant's appeal.

General issues

The appellant appealed the panel decision to USDA in April 2004. On June 23, 2005, the appellant voluntarily withdrew his appeal from USDA and requested it be forwarded to OPM for adjudication. The official PD number [#####] was certified as accurate by the appellant, his

supervisor, and the Area Director. While accepting the accuracy of the PD and the ratings of Factors I, II and III, the appellant does not agree with the level credited for Factor IV, Qualifications and scientific contributions. He believes he should have been credited with Factor Level E and requested his appeal be based on the totality of his accomplishments as opposed to a recent development that would now qualify him that was not present originally.

By law, we must make that decision solely by comparing his current duties and responsibilities to OPM standards and guidelines (5 U.S.C. 5106, 5107, and 5112). Therefore, we must evaluate Factor IV based on the instructions on its application contained in the RGE.

Position information

The appellant reports administratively to the FIO Research Leader, a Supervisory Research Chemist, GS-1320-15. The appellant's supervisor only reviews manuscripts and broad changes in research direction. The appellant's position is organizationally designated as a Lead Scientist. He provides technical guidance to a GS-14 Research Chemist and is the administrative supervisor to three GS-9 technicians. The appellant is responsible for conceptualizing, planning, leading, evaluating, and reporting research results on utilizing genetically and structurally modified oils in food oil products. He is responsible for conducting research to develop new technologies to formulate safer, healthier, and more functional food oil products from commodity and niche market fats, oils, and oilseed crops. His specialty is in soybean oil, which is the world's most widely used edible oil. In the United States, soybean oil accounts for nearly 80 percent of edible oil consumption. He utilizes organic synthesis, sophisticated analytic techniques, and devises, modifies, and/or develops novel oil processing technologies to achieve agency objectives. The appellant designs sophisticated experimental approaches. He receives no technical supervision and has total responsibility for all technical aspects of research, including analyzing, interpreting, and reporting results in presentations, technical reports, and publications. A high degree of originality and ingenuity is required.

ARS is USDA's chief scientific research agency with a focus on solving key problems of national priority, which ARS defines as ensuring high-quality, safe food, and other agricultural products; assessing the nutritional needs of Americans; sustaining a competitive agricultural economy; enhancing the natural resource base and the environment; and, providing economic opportunities for rural citizens, communities, and society as a whole. The [location] Area FIO consists of 12 research offices, with NCAUR being the largest. FIO identifies and develops new concepts in utilizing vegetable oils as alternative value-added industrial products and develops innovative technologies to solve problems in the utilization of edible vegetable oils. The unit conducts fundamental and applied research with the goal of expanding domestic use and export markets for American agricultural materials. FIO scientists research applicable processes with the intention of sharing the results with the private sector.

As the designated lead technology transfer facility for USDA, NCAUR maintains a mixed portfolio of interdisciplinary science ranging from fundamental to applied research. Established by an act of Congress in 1938, NCAUR invents new industrial and food products from agricultural commodities, develops new technologies to improve environmental quality, and provides technical support to Federal regulatory and action agencies. However, the ARS RGE

Panel Director stressed his agency receives its Congressional appropriations based on producing applicable research technology. As a result of the Federal Technology Transfer Act (1986) and the Government Performance and Results Act (1993), he stated “very few Government scientists conduct ‘pure knowledge research’ because funding is seldom available for such work. Valued payoffs are products and solutions to problems which can be transferred to user groups, action agencies, industry, and other stakeholders.”

Series, title, and standard determination

The agency has placed the position in the Chemist Series, GS-1320, titled it Research Chemist, and evaluated the position using the RGEF. The appellant does not question the series or title of his position or use of the RGEF to evaluate his work. After a thorough review of the record, we agree with these determinations.

Grade determination

Part I of the RGEF is used to evaluate positions at GS-11 through GS-15 that are engaged in basic or applied research in the sciences when the functions involve the personal performance of professionally responsible research as the highest level function and for a substantial portion of the time. Part I includes four factors which are considered and rated separately, with the total point value then being converted to a grade level by use of the grade conversion chart provided in the RGEF. Each factor is evaluated at one of five degree levels. Three of these levels (A, C, and E) are defined in the RGEF. An intermediate level (B or D) may be assigned when a position is evaluated between levels A and C or levels C and E, respectively. Each factor also includes a description for an “In Excess of Degree E” level.

The Panel evaluated the position using the RGEF at Levels I-D, II-E, III-D, and IV-D. For Levels I and IV, the agency noted that the appellant’s ratings come near, but do not fully meet, Degree E. The appellant agrees with the evaluation of Factors I, II, and III, but disagrees with the agency’s evaluation of Factor IV. After our careful review of the record, we concur with the evaluation Factors I, II, and III. Therefore, we will focus our analysis as it relates to Factor IV.

Factor IV, Qualifications and scientific contributions

This factor measures the total qualifications, professional standing and recognition, and scientific contributions of the researcher insofar as these bear on the dimensions of the current research situation and work performance for which there is an almost complete absence of applicable guidelines, pertinent literature, and methodology. Factor IV is given twice the weight of the other factors. In addition, the RGEF instructs that although the total history of accomplishment is considered, recent research or similar activity which assures maintenance of research competence is essential to full credit for past accomplishments.

At Degree C, researchers have demonstrated their ability as mature, competent, and productive workers and will typically have authored one or more publications of considerable interest and value to the field. This is typically evidenced by favorable reviews, by citation in the work of others, by presentations of papers to professional societies, and/or will have contributed inventions, new designs, or techniques that are of material significance in the solution of

important applied problems. Contributions at this level involve leadership of a productive research team or derive from highly productive personal performance of research, in terms of both quantity and quality. Researchers at this level are considered significant contributors to the field and are beginning to be sought out for consultation by colleagues who are professionally mature researchers. Further evidence of emerging recognition may be selection to serve in important committee assignments in professional groups.

At Degree E, the researcher has demonstrated outstanding attainment in a broad, or in a narrow but intensely specialized, field of research. The researcher will typically have authored a number of important publications, of which at least some have had a major impact on advancing the field, or are accepted as definitive of important areas of the field. The researcher may have contributed inventions, new designs, or techniques that are regarded as major advances in basic or applied research and have opened the way for extensive further developments, or have solved problems of great importance to the scientific field, the agency, or the public. Contributions are of such importance and magnitude that they move the art forward. The researcher is consulted by colleagues who are themselves specialists, invited to address national professional organizations, and receives recognition in the literature through favorable reviews and citations as further evidence of attainment of this level.

The appellant believes it is appropriate to credit Degree E because of his contributions to the field of food oil products and for the recognition he receives from his peers on regional, national, and international levels. The appellant is a member of the inaugural 2002 class inducted into the Institute of Food Technologists (IFT) Hall of Fame. He was appointed a Fellow by the American Oil Chemists Society (AOCS). He has been awarded the IFT Stephen S. Chang Award, which recognizes a scientist or technologist who has made decisive accomplishments in research for the improvement or development of products related to lipids and must have made significant and distinguished accomplishments in basic research that have been utilized by industries for the development or improvement of products related to lipids. He is the only ARS scientist to ever receive it. Five times he has been given the Outstanding Paper Award from the AOCS. On the regional level, he received the Alton E. Bailey Medal, which was established by the North Central Section AOCS in 1959 and has usually gone to academic professors. Both AOCS and IFT are international organizations with large percentages of foreign members who are eligible to receive the above awards. According to the interviewed scientists, the Chang, Bailey, and AOCS Fellow awards are among the most prestigious in the field and the appellant is one of one of only two scientists to receive all three. He continues to be recognized within the industry as evidenced by his receipt in February 2006 of the Harold Macy Award from the Minnesota IFT for contributions to food science and technology. No other ARS scientist lower graded than a GS-15 ever received any of these awards. He is also the only AOCS Fellow who is not a GS-15; this fellowship is considered extremely prestigious in the field and stood out to the interviewed scientists, including the ARS national program leaders. He is also received the most major industry awards amongst ARS scientists without a PhD.

The appellant is the author of more than 170 publications, 80 of which he is the major author. More than 100 of the publications were peer reviewed. His research has been cited more than a thousand times in other published scientific articles. He has contributed 22 chapters to books on fats, oils and lipids, including the standard reference book *Baily's Industrial Oils and Fats*, of

which he is now serving on the advisory board for the 6th edition. He has edited three books: *Lecithins*, *Supercritical Fluids in Lipid Technology*, and *Trans Fat Alternatives*. The chief for Kraft Food's Policy and Development, said 150 copies of *Trans Fat Alternatives* was bought for the staff as they deem it the best book in the industry. He has served on the editorial boards of the *Journal of Food Science and Agriculture* and *Inform: Journal of the American Oil Chemists Society*. He also was recently recognized in a cover story, with his picture as the sole graphic, in *Food Technology*, a major trade publication. The NCAUR Director said his scientists do not author review or literature synthesis articles just to increase their total number of publications because the time spent on those is taking away from the practical research.

The publications in which he regularly publishes his work, such as the *Journal of Agriculture Food Chemistry*, *Journal of the American Oil Chemical Society*, *Journal of Food Science*, etc., were consistently referred to as "highly regarded peer-reviewed journals" by the professors and ARS scientists whom we interviewed. These journals are the same ones that the professors also regularly publish their research. In our review, we looked at the publication lists for several professors who research in the same field and found the appellant's list to closely mirror them in terms of journal titles, with the appellant publishing more than many of them. Several ARS managers who themselves are scientists stated that ARS is selective in where they want their scientists to publish, preferring articles be placed in technical journals that industry professionals would read exclusively as opposed to mass market or broad circulation science magazines that are not as certain to reach the target audience.

The appellant is widely recognized as a subject matter expert in the field of edible vegetable oils. His research is widely recognized for its results in utilizing genetically and structurally modified oils in food oil products. He has been invited to present or contribute papers on related topics at more than 50 international or national conferences. One scientist we interviewed stated the appellant's speeches are usually standing room only. The NCAUR Director stressed that ARS scientists do not regularly make presentations unless it is for their own work, adding that professors are more likely to be asked to provide overview speeches. Recently, the now-former Under-Secretary for USDA's Research, Education, and Economics (REE) mission area, requested the appellant address the Chinese Ministry of Science and Technology as part of a hand-picked ARS team visit to China that was designed to showcase the agency's best scientists. The appellant has consulted with more than a dozen of the industry's major companies, including Archer Daniels Midland, Nabisco/Beatrice Foods, Conagra, Cargill, General Mills, DuPont and Monsanto. He has also mentored scientists from around the world who have traveled to Peoria to work in his lab.

The former ARS Lead Scientist for Food Quality and Safety Research previously wrote of the appellant's research that his "early contributions in this field concentrated on providing evaluation of supercritical fluid processed oils, and he took the key initiative in writing these early research publications . . . among (his) seminal contributions were the evaluation of residual protein meals for potential use in animal/human diet use."

As the lead researcher, he developed methods that fixed many of the underlying processes that previously plagued the edible oil industry which had been characterized over the years as one of the most energy wasteful and environmentally unfriendly of industries. His research has

consistently led to new discoveries involving soybeans. For example, he solved a 50-year old problem by discovering what damaged soybeans during international shipping. Moreover, he found a way to prevent hogs from being poisoned by certain soybean meals. The appellant also developed and wrote the seminal method on degumming soybeans to recover lecithin, a phospholipid used as an emulsifier in a wide range of commercial food products. In doing so, he says he disproved the conventional production wisdom of the time and led to its greatly expanded production in the private sector with one company building 25 plants around the world to use his method to produce lecithin.

He also demonstrated that extraction of edible oils with new carbon dioxide processes provides a number of significant advantages over traditional methods. He has been recognized as the first scientist to demonstrate that oil processing methods can effectively remove catalyst residues, which has allowed for the commercial acceptance of copper containing catalysts for the hydrogenation of soybeans. The industries had been reluctant to use this method previously, but after his findings, three processing plants were constructed to use the method. The research also led to a process to recycle copper for use in the products. In addition, his research on supercritical fluid extraction has led to his being interviewed by more than 300 individuals from 75 companies hoping to use his findings for new oilseed extraction and processing production. The appellant has been recognized by the IFT as being a pioneer in promoting the use of steam or physical refining for soybean and other edible oils. The record shows his research has significantly furthered the industry's forward movement.

A scientist from a major food company wrote that appellant's research allowed his former company to lower the linolenic acid content of soybean oil from 7-8 percent to below 3 percent, which prevents the "fishy or objectionable flavors when used as frying oils. Additionally, the appellant's research with copper catalysts drastically changed their standard operating procedures, eliminating the need for linolenic acid to be winterized and eliminated a costly analyzation process. The company constructed a new facility to better utilize the appellant's research processes.

The appellant is recognized as a top expert in the field of edible oils and regularly consults with the world's leading food companies on a variety of topics, e.g., contacted for his opinion as part of an investigation of an explosion at a Costa Rican lecithin plant in which, from a description of the accident over the telephone, he was able to determine what chemicals reacted together to cause the explosion. His studies have also helped these companies introduce new, healthier products that have earned tens of millions of dollars in profits, according to letters submitted by the companies on his behalf, while lessening the companies research and development budgets. The appellant continues to produce new research. The IFT in a recent press release stated the appellant "was instrumental in commercialization of a number of oilseeds, including low linolenic soybean oil valued at over \$500,000,000 per year." His research has developed new methods to produce soybean oils that directly increase demand, improving the economic market of the American farmers who grow the crops. He also discovered that dark-colored gossypol pigments are less prone to color fixations than light-colored ones, which historically was a serious problem in the conventional process because the presence of gossypol and its derivatives above certain levels in cotton seed oil and meal limits its usage as food and feed. The healthier products have pointed to lower health-care costs. The scientists we interviewed commented that

his contributions to oil research have been directly and indirectly responsible for what an ARS scientist called an “incalculable” amount of economic benefit to the country because much of his research is now being used to help food companies comply with new FDA laws and his techniques improved crops and expanded markets for American farmers.

The appellant is highly respected within ARS. One Center director asserted the appellant ranks with the best ARS scientists in the agency covering all science fields. As a panel chair for more than twenty years, it is his firm opinion that only accomplishments matter in the review process because stature and recognition flow from that. He further stated that the types of awards the appellant received rarely go to Government scientists as opposed to full professors at major academic institutions. While the Director works in a different specialty, he said the appellant’s work is so well known that its importance is widely recognized in the entire food industry. Another Center Director agreed, and stated the appellant is “a leading light” in today’s *trans* fatty acid research that has been a major part of the ARS research. An ARS supervisor agreed his research work meets the Degree E level, citing the example that it was the appellant who wrote the recent FIO five-year plan for research direction, which was accepted in its entirety by the agency. One ARS national project leader stated the appellant’s recent work, especially its impact on the industry, “would absolutely” merit receiving Factor E.

The appellant’s contributions continue to move the state of the research forward. In 2005, he was the Lead Scientist on a project entitled, “Improved Functional Foods via Novel Processing Technologies.” This project was submitted to the Office of Scientific Quality Review, whose mission is to plan and facilitate high quality scientific and technical peer reviews of all Agency prospective research project plans, and received a score of 7.0 (8 point scale) and required no revision. As such, it was considered by the review panel to be among the best projects submitted in National Program (NP) 306, Quality and Utilization of Agricultural Products, ARS, USDA. The plan was reviewed by a “world class expert in expert in oils and fats research” and five additional scientists. The case write up called the project “excellent and one that will lead to valuable information related to the objectives of the NP Action Plan. This research team is to be congratulated on the composite action class assignment of No Revision Required.” This work was then published in a peer-reviewed industry-specific journal.

As team lead, the appellant was instrumental in discovering a sophisticated method to determine the structures and composition of hydrogenated oils used in margarine and shortening formulations, thus fulfilling a need for improved *trans* fatty acid analysis for the edible oil industry. He received considerable recognition for his work on developing the new method for producing margarine oils which redirected the entire research in this field. His work on high-pressure processing for fatty acid reduction was featured in *Science News*, volume 168 21, dated July 9, 2005. He was also the author of a paper entitled, “Low *trans* shortening and spread oils via electrochemical hydrogenation,” which was approved to be published in an ARS publication. The electrochemical method had been used by professors working in the field, but this was a new and novel approach to fat and oil modification. The appellant’s research provided the technology to formulate low-fat spreads free of *trans*-fatty acids, resulting in healthier foods and larger soybean markets. Other work in this area has led to co-sponsorships between NCAUR and private companies. Several of the scientists interviewed said the appellant’s research is all

the more impressive because he predicted the *trans* fatty acid health issues and then proceeded to help solve them.

The appellant's vision concerning the application of his work to new and improved food products is well known in the industry. His research on "interesterification," a process in which acids or enzymes modify liquid fats to make them solid, was a key discovery as an alternative method to hydrogenation that opened the way for the development of healthier foods. Additionally, he developed new processes to modify vegetable oils into food products and discovered that natural fats and oils can be made more functional using the interesterification method. This discovery advanced the field and is now the commonly used method. According to the Project Leader for New Technology and Discovery at a major food company, this innovation was used by the company to develop low/no *trans* fatty acid products for the market ahead of an FDA ruling that required listing the amount of *trans* fatty acids on nutritional labels by January 1, 2006. Several scientists added that had he not been working on the alternative before the FDA mandated it, the industry might not have been able to meet the deadline, resulting in marketing problems for products containing conventional fats. He continues to receive recognition of his contribution to research and development from industry businesses. Several of the scientists we spoke with who work in the private sector stated they were grateful that he was working to push the industry forward because many of them work for companies that have cut their research and development budgets.

One of the benchmarks in determining whether to award Factor E is if the scientist would be the equivalent of a full professor at a recognized academic institution. Ascertaining this is subjective as each university has its own criteria and goals, as well as individual professors having their own opinions as to what is relevant to be a full professor. We interviewed via phone or e-mail a representative number of professors, mostly at universities with well-known agriculture and food science programs, as well as some affiliated with stand-alone research or non-agriculture based chemistry programs. Several of the professors were already familiar with the appellant's research, but previously had not been requested for an opinion. Each requested to either review his curriculum vitae or conducted an independent review by researching his publications (i.e. using Chemical Abstracts or Pub Med).

One emeritus university professor from a major university, an often-cited expert in fats and oils, stated the appellant has "an impressive record" and "He has been involved with much cutting edge research, especially in supercritical extraction, control of *trans* fatty acid content, and nonhydratable phospholipids." He summarized that in "my opinion of his overall record is that he would have achieved the rank of full professor had he spent his career in academia instead of governmental laboratories."

Another major university expert stated he held the appellant "in very high regard. His scientific work has been outstanding . . . His work generally provides an excellent basis for industrial application." Of his work on *trans* fatty acids, the professor said "in my mind, he is at the forefront of that development," and the appellant's work on supercritical extraction of fats was "pioneering." He then agreed that the appellant's research merits recognition with, "I would say that his work would qualify him for Full Professor at the university level."

Another professor with the Food Science and Human Nutrition Department at a major university stated she compared the appellant's record to "the dossiers that I review for the promotion of an associate to full professor" and his "type of publication history is what we expect full professors in our college to have." Further, "I believe that given this publication history and the awards recognition that [the appellant] has received, he would rank at the full professor level in the research category...." One professor from a major university who had briefly worked at NCAUR did not feel he could make a determination about whether he would be a full professor, but that the appellant "has an outstanding reputation as a researcher" and he "is an outstanding communicator, including as a technical writer." A professor who is recognized by the other interviewed scientists as being among the most eminent in the appellant's field, even went so far as to say of the appellant: "one may find it difficult, if not impossible, to find a parallel to him."

One major food company development chief wrote the appellant's work has influenced him personally as a lipid scientist and his company is currently applying the appellant's research in the chemistry and functionality of low *trans* lipids, as well as applying it to help answer several ongoing questions surrounding *trans* fats. In a follow-up call, he said from a public policy standpoint, the appellant's research is of critical importance today because of the intense focus on producing healthier food oil products. He also stated that during the past two to three years, the appellant has become one of the pre-eminent researchers on this subject matter in the world and that he "is an industry-wide resource for us all to tap."

The director of business development for another company, referred by other scientists as being one of the industry's top researchers, wrote that the appellant's "work provides the foundation and standard for lecithin production procedures used throughout the industry today." He further stated that he believed the appellant "is truly an asset to the agency and more importantly, to American agriculture and industry." The Director of Grain Processing Research and Development at a very large agribusiness wrote the appellant "is a leader in oil processing research" and his efforts "are recognized worldwide."

According to a letter from a top official at Archer Daniels Midland Company (ADM), in 2003, ADM helped Frito Lay change the frying oil they used on food production based on tests and methods the appellant created. Additionally ADM recently launched an entire line of products that were inspired by the appellant's research in low/zero *trans* fatty acids. The CEO of an engineering company said that what he found most important about the appellant's research was that it helped solve real world problems in the soybean industry. He stated the entire industry uses the appellant's methods and techniques, and added that further than just "ranking with the best in the field," when the appellant "speaks, people listen."

In conclusion, the record shows the appellant is considered one of the foremost research chemists and subject matter experts in the field of edible food oils based on the breadth of publication of his research in scientific journals, significant and continuing peer recognition, and his extensive mentoring and consulting activities. His recent innovative research is directly responsible for new concepts that continue to solve problems concerning the utilization of edible food oils in the production of alternative value-added industrial food products. His qualifications and scientific contributions in conducting research to develop new technologies to formulate safer, healthier, and more functional food oil products from commodity and niche market fats, oils, and oilseed

crops meets all of the requirements for Degree E. Therefore, this factor meets Degree E and is assigned 20 points.

Summary

Factor evaluations and points are assigned as follows:

I.	Research situation or assignment:	Degree D	8 points
II.	Supervision received:	Degree E	10 points
III.	Guidelines and originality:	Degree D	8 points
IV.	Qualifications and scientific contributions:	Degree E	20 points
		Total	46 points

According to the conversion scale shown in the grade-determination chart in the RGEG, a total of 46 factor points falls within a range (46-52) which converts to a classification grade of GS-15. Therefore, GS-15 is the appropriate grade for the appealed position.

Decision

The appellant's position is properly classified as Research Chemist, GS-1320-15.