I. Purpose and Objectives

A. Name: The name of the committee is P-123 K.K. Barnes Undergraduate Paper Competition Committee.

B. Purpose: The K.K. Barnes Undergraduate Paper Competition was endowed by family and friends of ASABE President-elect (1977) Barnes to provide a lasting memorial to this dedication to students and his profession. It is to encourage undergraduate students in the preparation of better technical papers on subjects in the agricultural, food, or biological engineering field. This competition consists of both written and oral presentations. It is the purpose of this activity to give students the experience of professional competition and to build skills in technical writing and public speaking. The cash awards and accompanying recognition are added incentives to foster this competition.

C. Objectives: It shall be the function of this committee to:
   1. Establish rules and administer the competition
   2. Coordinate with other competitions through P-120 Student Organizations Committee

II. Organization

A. The committee shall operate within the jurisdiction of the American Society of Agricultural and Biological Engineers Membership Development Council. The committee will report to the P-120 Student Organizations Committee, ASABE Membership Development Council and Board of Trustees.

III. Membership

A. Number of Members and Qualifications: The committee shall be composed of at least eight non-student ASABE members in good standing. An equal distribution of members between industry and academia is encouraged. Members who are employed by the government agencies may be considered either industry or academia. Geographic diversity is also encouraged.

B. Term of Service: The term of service shall be three years. Terms are staggered such that approximately one-third of the committee is replaced every year. A member may be re-appointed or replaced at the conclusion of a term. If a member cannot fulfill their three-year term, the chair may appoint a member to complete an unfilled term.

C. Nomination of Members: Prior to the Annual Meeting, the past / vice-chair shall solicit nominations for new members and confirm their acceptance of the nomination. Election of new members will occur as a part of the regular meeting at the Annual Meeting. New members will begin their term of service at the end of the Annual Meeting.

IV. Officers and Their Duties

A. Officers: The officers of the committee shall include a Chair, and either a Vice-Chair or Past-Chair.
   1. The Chair will serve for two years. The Vice-Chair will serve for one year then take over the role of Chair. The Past-Chair will serve for one year following their term as Chair. In any given year, the officers will consist of either a Chair (in 2nd year of their term) and Vice-Chair, or a Chair (in 1st year of their term) and a Past-Chair.
2. The officers will begin their terms of service at the end of the Annual Meeting.
3. The Past-Chair shall solicit nominations for Vice-Chair and confirm their acceptance of the nomination. Election of Vice-Chair will occur as a part of the regular meeting at the Annual Meeting.
4. In the event an elected officer cannot fill their term of office, the remaining officer shall select a replacement by means of an election by members of the committee as soon as possible.

B. The Chair shall be responsible for:
1. Keeping the work directed toward the objectives of the committee as set forth in Article I of the Bylaws.
2. Delegating to members such responsibilities and authority as deemed necessary.
3. Carrying out activities voted by the committee.
4. Presiding at all meetings of the committee.
5. Serving as representative to P-120 Student Organizations Committee.

Before Annual Meeting
6. Request committee meeting time and room with ASABE Meetings Department.
7. Confirm competition time, location, and facilities with ASABE Meetings Department.
8. Identify judges for all portions of competition and notify ASABE Awards Administrator.
9. Verify scoring for pre-meeting portion of competition and confirm with ASABE Awards Administrator.
10. Send meeting agenda to committee members.

During Annual Meeting
11. Facilitate portion of competition held during AIM (Remind finalists to attend Student Awards Banquet).
12. Gather judges scoresheets and compile/normalize scores for portion of competition held during AIM.
13. Send final results and judges’ comments to ASABE Awards Administrator for Student Awards Ceremony.
14. Recognize winners on stage at Student Awards Ceremony.
15. Facilitate committee meeting.
16. Provide report to P-120 Student Organizations Committee (attend if possible).

C. The Vice-Chair/Past-Chair shall be responsible for:
1. Assisting the Chair in carrying out duties of the office.
2. Presiding at meetings, in the absence of the Chair.
3. Recording minutes of all committee meetings and distribute them to committee members and ASABE Awards Administrator.
4. Providing an accurate roster of committee members to the ASABE Awards Administrator after the Annual Meeting.
5. Maintaining correspondence relative to the committee activities.
6. Gathering nominations for new members and Vice-Chair as outlined in Membership Section.

D. The ASABE Awards Administrator (ASABE Staff) shall be responsible for:
1. Maintain ASABE Student Competition Website with accurate rules.
2. Solicit entries from students.
3. Gather submissions from participants.
4. Forward scoring instructions and submissions to judges for pre-AIM portion of competition.
5. Gather judges scores and compile scores for pre-AIM portion of competition.
6. Send compiled scores to chair for normalization and approval for pre-AIM portion of competition.
7. Respond to participants with results and judges’ comments from pre-AIM portion of competition.
8. Invite finalists and coordinate the waiver of ASABE Annual Meeting registration and Student Award Ceremony ticket.
9. Provide judges scoring instructions and copy of finalists initial submissions for AIM portion of competition.
10. Confirm moderator (from IPC Officer Team) for AIM portion of competition.
11. Develop script and provide to moderator for AIM portion of competition.
12. Acquire awards material for Student Awards Ceremony.
13. Respond to finalists with results and judges’ comments from AIM portion of competition.

V. Conduct of Business
   A. Quorum: Three members or their proxies shall constitute a quorum.
   B. Proxies: Any member may appoint a non-student ASABE member as their proxy.
   C. Voting: All matters shall be decided by majority vote except for amendment of these bylaws. Two-thirds of the membership must approve a change in the bylaws.
   D. Meetings: Regular meetings of the committee will be held at the annual meeting of the Society. Other meetings held by conference call or electronic means at the discretion of the Chair.

VI. Amendments
   A. Changes in the Bylaws may be proposed at any meeting of the committee. Following approval at a committee meeting, final action will be by letter ballot or at the next succeeding regular meeting of the committee at which a quorum is present. A 2/3 majority of those voting is required for passage.
   B. Changes in the Appendix related to the competition details may be proposed at any meeting of the committee and approved by 2/3 majority vote.
   C. All approved Bylaws changes shall be shared with committee members, P-120 Student Organizations Committee, and ASABE Awards Administrator.
   D. The ASABE Awards Administrator shall retain a master copy of the latest Bylaws.

VII. Competition Funding and Budget
   A. The K.K. Barnes endowed foundation fund supports the competition. Per foundation guidelines, 4% of the total fund is available annually to cover expenses associated with competition.
   B. Competition Budget (annual)
      1. Cash Awards = $1,000
      2. AIM Entry Fees = $750 (3x $250)
      3. ASABE Awards Administration = $900

VIII. Selection of Judges
   A. A minimum of three committee members judge the written portion of the competition. Typically, all committee members serve as judges.
   B. The committee chair shall select three individuals to judge the oral portion of the competition. Judges may be selected from the group of current and past Presidents, Fellows, or current and past ASABE Society or Foundation Trustees in attendance at the annual meeting. In unusual circumstances, at the discretion of the chair, other ASABE officers may be selected as judges.
C. Judges must notify the chair and disqualify themselves from the evaluation of any entry submitted were they believe there is a potential conflict of interest (such as by a student from the university where they are faculty members, or any student they have supervised in employment or previous graduate work). In the case of a disqualification, the normalization of the scores by the remaining judges shall be the score assigned.

IX. Scoring Procedure

A. Judges will score the written portion of the competition in accordance with the scoresheet in Appendix 1 and return scores to ASABE Awards Administrator. Comments and feedback for contestants is allowed and encouraged. All judges’ feedback will be merged for each entry and shared as a composite.

B. The ASABE Awards Administrator will compile the scores from the judges and forward to the chair.

C. The chair will then apply a standard normalization procedure to determine the final results ensuring no one judge will have an undue and unfair influence on the results.
   1. The Committee Chair calculates normalized results by calculating mean and standard deviation and then subtracting the mean from each raw score and dividing the result by the standard deviation. Finally add the normalized value from each judge for each participant and rank order the participants.

D. The committee reserves the right to not invite low quality entries to participate.

E. The chair will forward the final placing including normalized scores to the ASABE Awards Administrator.

F. The ASABE Awards Administrator is responsible for inviting the top three entries to the ASABE Annual International Meeting for phase two judging. In the event one or more of the authors of the top three student papers selected cannot accept the invitation to attend the international annual meeting, the invitation will be extended to other contestants in the order in which they placed in the competition.

G. The ASABE Awards Administrator is responsible for sharing the results and comments after the Annual Meeting per these guidelines:
   1. Contestant’s overall ranking (first, second, third or 1/5, 2/5) can be shared.
   2. Contestant’s composite score combining all judges can be shared; however, the individual judge’s scores should not be shared.
   3. Comments from judges can shared; however, the individual judge’s names should not be shared.

H. Judges will score the oral portion of the completion in accordance with the scoresheet in Appendix 1 and return scores to chair. Comments and feedback for contestants is allowed and encouraged. All judges’ feedback will be merged for each entry and shared as a composite.

I. The chair will compile the scores from the judges and apply a standard normalization procedure per the guidelines in section C above.

J. The chair will forward the final placings including normalized scores and judges’ comments to the ASABE Awards Administrator.

K. The ASABE Awards Administrator is responsible for sharing the results and comments with the finalists per the guidelines in section G above.
Appendix 1: P-123 K.K. Barnes Student Paper Awards Competition Rules

I. Competition Rules

A. The purpose of the K. K. Barnes Student Paper Awards Competition is to encourage undergraduate students in the preparation of better technical papers on subjects in the agricultural, food or biological engineering field. It is intended as a special inducement to supplement the training provided in the undergraduate curriculum by providing early practice in a type of performance required of professionals in the work in which they will later engage.

B. The competition consists of two parts: a Written Competition, and an Oral Competition. Authors of the top three written papers are invited to attend the ASABE Annual Meeting to participate in the oral competition.

C. The P-123 Committee has full responsibility for this competition and scoring of entries. Decisions made by the committee shall be final.

D. Content Requirements
   1. Paper content includes any technical subject applicable to the solution of a problem or problems in mechanization or engineering for agricultural, food, or biological systems will be acceptable. The paper may be an assignment in a course in the student’s major field or one presented especially for this competition or for publication elsewhere. Papers can result from library research problems as well as experimental research work performed by the student.

   2. The presentation shall be an oral SUMMARY of the written paper entered. The degree of emphasis given segments of the general subject, however, need not be the same in the oral presentation as in the written paper. The time for the presentation shall not exceed fifteen (15) minutes and the question period following each presentation will be restricted to not more than five (5) minutes. The use of slides, charts, graphs and similar illustrative materials is encouraged.

E. Entry Format Requirements
   1. PDF file format with file naming convention of LastName_Subject. It is the entrant’s responsibility to verify that the converted file appears as intended.

   2. Organization and formatting of paper should follow a logical pattern and conform to good professional paper or technical writing standards as stated in the “Submission of Manuscript to ASABE Technical Journals” published by ASABE. Specific requirements include:

      a) Must be an original, unpublished work (entries will be checked for plagiarism).

      b) Must not exceed 7,000 words (each table and figure count as 300 words; references do not count toward 7,000 word limit).

      c) Must be double-spaced, using Times or Times New Roman, regular 11-point font, with pages numbered.
d) On the cover page only, include: Title of the paper, contestant name, ASABE membership number, email address & telephone number, name/location of the institution in which you are enrolled, date or anticipated date of first professional degree, and name of the advisor for the paper. Also, at the bottom a signature block containing the signature of the contestant, student-branch faculty advisor or department head and the date of signing. In the case of multi-authored papers, the first listed author will be treated as the only author of the paper and will be the only one recognized in competitive judging.

e) The second page shall be a statement of how the subject of the paper was chosen and whether the paper is a library research paper or a report of experimental work in which the author contributed to the work. Since the rules contemplate only individual entries, acknowledgment of any co-authors or co-workers should be made on this page.

II. Contestant Eligibility

A. Contestants shall be student members of the ASABE (membership in a local student branch will not substitute for student membership in ASABE) and undergraduates at the time of the studies that resulted in the preparation of the paper.

B. Entries shall be received at ASABE headquarters no later than six months after the students’ receipt of the first professional degree.

C. Contestants can make only one entry per year.

D. Contestants must have paid their dues to ASABE by the submission date or the entry will be disqualified.

E. Papers submitted to other ASABE Student Design Competitions are not eligible for the K.K. Barnes Student Paper Award Competition.

III. Entry Deadlines

A. Entries must be submitted electronically to the attention of the ASABE Awards Administrator, awards@asabe.org, no later than May 15 midnight ET. An e-mail documenting receipt of the entry will be returned within a week of submission. If you do not receive a receipt, contact the ASABE Awards Administrator.

IV. Awards

A. The top three submissions are invited to the ASABE Annual International Meeting to compete in the oral portion with their registration fee waived.

B. The top three submissions will be awarded a certificate of recognition and cash prizes:

1. First Place = $500
2. Second Place = $300
3. Third Place = $200

C. The first-place winner’s paper may be submitted by the contestant to one of the Society’s technical journals with the page charges waived if accepted for publication.

D. The engineering department developing the first-place winner will also receive a commemorative certificate.

E. The final placing will be announced at the ASABE Annual International Meeting Student Awards program.

F. Award materials will be sent to winners after the meeting.

G. The committee reserves the right to not invite low quality papers to participate in the oral portion of the competition. The committee reserve the right to not declare a winner in the event the submissions are not of high enough quality.
V. Selection of Winners
A. Selection of winners will be completed in two phases.
   1. Phase I: Each written submission will be judged by at least three judges in accordance with
      the score sheet defined in Article VI.
   2. Phase II: The top three contestants will be invited to attend the ASABE International
      Meeting to participate in the oral presentation portion of the competition. Should any of the
      top three be unable to participate, the next ranking entries shall be invited. Judges will
      evaluate the oral presentations of participants and the overall impressions and quality of
      the project as presented per the scoresheet defined in Article VI.
B. Decision of the judges is final.

VI. Scoring Rubric
A. The overall placing shall be determined by combining the written and oral grades with a 80/20
   respective weighting. This weighting is done to reinforce the importance of developing
   technical writing skills.
B. The written papers shall be scored according to the following schedule of points:
   1. Importance of the subject in the field of agriculture, food, or biological engineering or
      mechanization 10
   2. Proper use and/or interpretation of data 15
   3. Originality and/or thoroughness of study 10
   4. Validity and worth of conclusions 10
   5. Conformance to good paper and technical writing standards:
      a. Clarity, simplicity and ease of reading 20
      b. Style, organization, grammatical accuracy, straightforwardness, coherence 20
      c. Appearance and neatness, including quality of tables, graphs and drawings 15
C. The oral presentation shall be scored according to the following schedule of points:
   1. Stage presence and ease of presentation:
      a. Mentally responsive to audience.
      b. Sincerity, enthusiasm and poise.
      c. Satisfactory rate of presentation,
      d. Appropriate gestures and movement,
      e. Quality of vocal delivery
      f. Continuous presentation, without excess "er's and ah's",
      g. Ability to handle questions from the audience 30
   2. Organization of oral presentation:
      a. Satisfactory number of main points
      b. Progressive sequence of ideas
      c. Adapted to audience attitude
      d. Adapted to audience knowledge level
      e. Properly developed conclusions drawn 20
   3. Development and clarity of presentations:
      a. Use of initial summary
      b. Definition of necessary terms
      c. Concrete and specific presentation
      d. Consistent sequence of points
      e. Clear transition between points
      f. Final summary 20
   4. Quality of illustrative material (if used):
      a. Continuous contact with audience during use of illustrative material
      b. Quality of visual material
      c. Material kept simple 20
d. Material legible at rear of room

e. Display of material only when discussed

5. Compliance with 15-minute presentation time schedule 10

VII. Disposition of Entries

A. ASABE reserves the right to publish entries in whole or in part in Society publications and online. ASABE also reserves the right to use photographs and videos, as well as entrant names, cities and states of residence, and university affiliations without compensation, notification, or permission, for the purpose of advertising and promoting the competition. Further, ASABE expressly disclaims any responsibility and entrants agree to release, indemnify, and hold ASABE harmless for liability, damages, or claims for injury or loss to any person or property (including death) relating to participation in this competition.