REPORT TO THE LOUISIANA BOARD OF REGENTS

REVIEW OF ENHANCEMENT PROPOSALS IN ENGINEERING A

March 2016

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2015-16 Board of Regents Support Fund
Traditional Enhancement

Engineering A
INTRODUCTION

A review panel consisting of Dr. Chris Cherry, University of Tennessee, chair; Dr. Shaikh S. Ahmed, Southern Illinois University; and Brandon Weeks, Texas Tech University, communicated via e-mail and phone in March 2016, for the purpose of evaluating twenty-four (24) Engineering A proposals submitted to the Louisiana Board of Regents through the Traditional Enhancement component of the Board of Regents Support Fund.

The review panel received the following materials prior to their review: twenty-four (24) Engineering A proposals to be evaluated, with appropriately numbered rating forms; b) a summary of proposals listing titles, principal investigators, institutions, dollars requested, etc.; c) the FY 2015-16 Traditional and Undergraduate Enhancement Request for Proposals; and d) a copy of the 2012-13 Traditional Enhancement Final Report in Engineering A.

Prior to the review, each panel member independently evaluated and annotated each of the twenty-four proposals. During the review process, all proposals were fully discussed by the reviewers. In each case unanimous agreement was reached, and the reviewers ensured that the proposal received a thorough and fair evaluation based on criteria enumerated in the RFP.

Table I contains a rank-order list of the proposals highly recommended for funding with recommended funding levels. Proposals recommended for funding if additional monies become available are listed in Table II. Proposals not recommended for funding are listed in Table III. A detailed review of each proposal follows immediately after the tables. Due to fiscal exigencies and the need to fund only those projects assured of success, the panel did not recommend any projects with scores of 83.5 or lower. A summary of all proposals submitted (Appendix A) and a copy of the rating forms used in the evaluations (Appendix B) are attached at the end of the report.

TABLE I
PROPOSALS HIGHLY RECOMMENDED FOR FUNDING

Rank	Rating	Proposal Number	Institution	First Year Funds Requested	First Year Funds Recommended	Second Year Funds Requested	Second Year Funds Recommended
1	93	20ENGA-16	ULL	$75,192	$52,043	$12,750	$0
2	92.5	14ENGA-16	LaTech	$55,783	$55,783		
3	91	07ENGA-16	LSUA&M	$153,000	$153,000		
4	89	11ENGA-16	LaTech	$116,557	$116,557		
5	88.5	12ENGA-16	LaTech	$18,600	$18,600		
6	86	02ENGA-16	LSUA&M	$125,185	$125,185		
7	85	03ENGA-16	LSUA&M	$137,000	$77,000	$6,000	$0
TOTALS:				**$681,317**	**$598,168**	**$18,750**	**$0**

TABLE II
PROPOSALS RECOMMENDED IF ADDITIONAL FUNDING BECOMES AVAILABLE

Rank	Rating	Proposal Number	Institution	First Year Funds Requested	First Year Funds Recommended	Second Year Funds Requested	Second Year Funds Recommended
8	84.5	18ENGA-16	Tulane	$192,000	$192,000		
9	84	24ENGA-16	UNO	$125,000	$125,000		
TOTALS:				**$317,000**	**$317,000**	**$0**	**$0**

TABLE III
PROPOSALS NOT RECOMMENDED FOR FUNDING

Rank	Rating	Proposal Number	Institution	First Year Funds Requested	First Year Funds Recommended	Second Year Funds Requested	Second Year Funds Recommended
10	83.5	04ENGA-16	LSUA&M	$195,486	$0		
10	83.5	08ENGA-16	LSUA&M	$157,937	$0		
12	83	01ENGA-16	LSUAG	$302,000	$0	$0	$0
13	81	19ENGA-16	ULL	$37,720	$0		
14	80.5	22ENGA-16	ULL	$108,500	$0		
15	78	06ENGA-16	LSUA&M	$159,999	$0		
16	76.5	15ENGA-16	LaTech	$76,000	$0		
16	76.5	17ENGA-16	Nicholls	$192,743	$0		
16	76.5	23ENGA-16	UNO	$126,964	$0		
19	76	09ENGA-16	LSUS	$186,438	$0	$0	$0
20	73.5	16ENGA-16	McNeese	$143,490	$0		
20	73.5	21ENGA-16	ULL	$109,490	$0		
22	68.5	13ENGA-16	LaTech	$79,228	$0		
23	67.5	10ENGA-16	LaTech	$117,991	$0		
24	66	05ENGA-16	LSUA&M	$122,036	$0		
TOTALS:				**$2,116,022**	**$0**	**$0**	**$0**

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 01ENGA-16

INSTITUTION: Louisiana State University Agricultural Center

TITLE OF PROPOSAL: Enhancement of Preservative-Treated Wood Recycling Research at the Louisiana Forest Products Development Center

PRINCIPAL INVESTIGATOR: Todd Shupe

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8	(of 10 points)
B.2	15	(of 21 points)
B.3	5	(of 5 points)
B.4	3	(of 5 points)
B.5	3	(of 5 points)
B.6	5	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	6	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	0	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 83 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

		YEAR 1	YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$302,000	$0
	Recommended Amount:	$0	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to add a third ICP instrument to the campus for the investigation of copper and arsenic in wood products. It addresses a significant problem facing the end-of-life stage of CCA treated wood. The current research and its impact in the field is described very well, and it is clearly important to the environment and economy of Louisiana. The PIs have a strong track record of success in this area, but rightly acknowledge that they have not been able to characterize a large-scale, economically viable treatment option. Even if they develop a viable technology, the logistics and reverse distribution system required would likely make any technology unfeasible except for the largest of consumers, such as utilities. The proposal has some good teaching objectives but primarily focuses on research. The size of this proposal is large relative to the total available funding and is not easily reduced; a match from the department or industry would have helped. There are other techniques to answer the proposed questions, including numerous chromatographic techniques and atomic absorption (AA), and AA instruments have better sensitivity than ICP. There is no quote for the 7700x ICP-MS and the vendor website lists it as discontinued. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **02ENGA-16**

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Hurricane Flow Generation at High Reynolds Number for Testing Energy and Coastal Infrastructure

PRINCIPAL INVESTIGATOR: Aly Mousaad Aly

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	3	(of 5 points)
A.3	2.5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	9	(of 10 points)
B.2	18	(of 21 points)
B.3	5	(of 5 points)
B.4	2.5	(of 5 points)
B.5	4	(of 5 points)
B.6	5	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	10	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 86 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$125,185
	Recommended Amount:	$125,185

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a fan for wind tunnel testing. The requested equipment will be a great addition to the campus with the potential to make the program a leader in high velocity/volume wind studies. The facility would help in recruitment of faculty and students. The description of the research is sometimes unfocused, and while the benefits to education could be tremendous, the description of outcomes lacks details. It is not clear how the installation costs will be covered. However, this is a quality project with a potential for high impact, and full funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 03ENGA-16

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: A Nanodroplet Printing System for Sensors, Materials, and Bioelectronic Research

PRINCIPAL INVESTIGATOR: Jin-Woo Choi

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	4	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	9	(of 10 points)
B.2	18	(of 21 points)
B.3	4	(of 5 points)
B.4	3	(of 5 points)
B.5	5	(of 5 points)
B.6	4	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1	(of 2 points)
E.2a	7	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 85 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

		YEAR 1	YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$137,000	$6,000
	Recommended Amount:	$77,000	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a nanodroplet printer and a laser engraving system to carry out research in biosensor development. The proposal is well written and provides a compelling rationale. The idea of creating patterned nanostructures for sensor applications using a droplet printer aligns well with the current initiatives and priorities of the biomedical community. The PIs are well qualified and have a strong record. The requested printer would complement the existing inkjet printer and a nanoimprint system. The narrative would benefit from the inclusion of a list of challenges the team is currently facing and how this project addresses them. It remains unclear as to how the drop sizes the printer can produce relate to the dimensions, efficiency and specificity of the sensors the PI proposes to fabricate. Plans for faculty and student development are well conceived. The evaluation plan is effective. The budget justification provides only estimated costs and no quotations from any potential vendor. Plans for strengthening ties with industry partners, although small in number, are commendable. Partial funding of $77,000 in year one is recommended for the printing system and supplies, but not the engraving system. No funds are recommended in year two. The institutional match, which includes only indirect costs, may be reduced proportionately.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 04ENGA-16

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Acquisition of a Multiprobe Atomic Force Microscope to Enhance the Nanosciences at Louisiana State University

PRINCIPAL INVESTIGATOR: Kevin McPeak

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	4	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8	(of 10 points)
B.2	18	(of 21 points)
B.3	4	(of 5 points)
B.4	2	(of 5 points)
B.5	4	(of 5 points)
B.6	5	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	11	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	7.5	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 83.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$195,486
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a multiprobe atomic force microscope (AFM). There is not currently an AFM in the shared instrumentation facility (SIF), but there are a number on campus, including one in a Co-PI's lab and at CAMD. Including twelve PIs on the team demonstrates the broad potential impact on faculty research. However, it is not clearly demonstrated that all of the proposed research ideas truly need the multiprobe instrument. This is a very specialized instrument and it may be more appropriate to buy a dedicated AFM for the SIF. The educational impact argument is weak, and the instrument appears inappropriate for student training relative to a traditional AFM. The requested amount is high relative to the total available funds. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **05ENGA-16**

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Acquiring State-of-the-art Non-contact Measurement System for Material and Structural Testing

PRINCIPAL INVESTIGATOR: Ayman Okeil

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	1	(of 5 points)
A.3	2	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	4	(of 10 points)
B.2	12	(of 21 points)
B.3	4.5	(of 5 points)
B.4	4.5	(of 5 points)
B.5	4	(of 5 points)
B.6	3.5	(of 5 points)
B.7	2	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	3.5	(of 6 points)
C.2	1.5	(of 1 point)
C.3	2.5	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No	

G. Total Score: 66 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:
Requested Amount: $122,036
Recommended Amount: $0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal requests funds to acquire a non-contact measurement system for material and structural testing. The rationale is unfocused and too generic. The goals and objectives are not specific enough. It is not clear for what particular studies this equipment is essential. The table of existing instruments listed in the work plan should have been located in the Impact on Existing Resources section. Of the items listed, only the dial gauges are outdated, and a stronger justification for the requested equipment is needed. Plans for student and faculty development are not well conceived and could benefit from recruiting, retention and placement statistics. Specifics on partnership with potential industries and a convincing argument for economic development are missing. The text contains a number of typographical errors. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 06ENGA-16

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Enhancement of Metrology Capability for Detecting Single Biomolecules in Micro/Nanofluidics

PRINCIPAL INVESTIGATOR: Sunggook Park

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	3.5	(of 5 points)
A.3	3	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	6.5	(of 10 points)
B.2	17.5	(of 21 points)
B.3	4.5	(of 5 points)
B.4	3	(of 5 points)
B.5	3.5	(of 5 points)
B.6	4	(of 5 points)
B.7	2.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	4.5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	11	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	8.5	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 78 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$159,999
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

Funding is requested to acquire equipment for detecting single biomolecules in reduced dimensionality geometries within micro/nanofluidic systems. While the proposal is strong in research aspects, it lacks a compelling rationale. Given that there is an existing patch clamp system as well as many fluorescence microscopes across the campus, the need is not well justified. The faculty development plan does not provide specifics. The proposal claims to impact both undergraduate and graduate education, though no examples are given of integration into undergraduate courses. The authors do a good job of describing how the instrument will be used to complement their research. The drawback is that this will almost certainly be used by a very small number of faculty and students, almost exclusively for their research. While the projects are well described, the need and connection to this specific system is missing. Project evaluation focuses on only journal publications and external grants, and could benefit from the inclusion of both formative and summative assessment strategies. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 07ENGA-16

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Acquisition of Gravimetric Instrumentation in Support of a New Quasigeoid Model for Accurate Elevations in Louisiana

PRINCIPAL INVESTIGATOR: George Voyiadjis

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	10	(of 10 points)
B.2	19.5	(of 21 points)
B.3	4.5	(of 5 points)
B.4	4.5	(of 5 points)
B.5	3.5	(of 5 points)
B.6	3.5	(of 5 points)
B.7	4.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 91 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$153,000
	Recommended Amount:	$153,000

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This is a well-written proposal concerning a topic of importance to Louisiana: observing and modeling surface gravity variations across the State. The writing is strongly supported by citations. The project goals and objectives are well conceived and the work plan is well articulated. The current needs and challenges have been identified and there is a meticulous description on how the team plans to overcome them. The PIs are all well qualified and have an excellent track record. A clear description is provided of how the proposed equipment will complement the existing infrastructure. The requested equipment will not only promote geodetic research but also will help create an infrastructure to support land use management, economic development, and coastal sustainability for the State. Plans are provided for implementing a data repository as well as maintaining an online web portal. Descriptions of student and faculty development as well as economic development lack specifics and could benefit from projected usage and growth statistics. Full funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **08ENGA-16**

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Gas and Particulate Matter Analysis System to Enhance the Research and Teaching of Air Pollution in Louisiana

PRINCIPAL INVESTIGATOR: Hongliang Zhang

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	4.5	(of 5 points)
A.3	4.5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8.5	(of 10 points)
B.2	16.5	(of 21 points)
B.3	4	(of 5 points)
B.4	3	(of 5 points)
B.5	3	(of 5 points)
B.6	4.5	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5.5	(of 6 points)
C.2	1	(of 1 point)
C.3	2.5	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1.5	(of 2 points)
E.2a	8.5	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 83.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$157,937
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire an air pollution gas and particulate analysis system to expand statewide air quality monitoring and enhance research opportunities for air quality control. It is led by an interesting group of PIs that includes both experimentalists and modelers with good publication records and obvious expertise in their given areas. Regarding the proposed research, it is not clear why the additional unknown gases that can be analyzed with this instrumentation (e.g., HCl) would be expected to be found in their environmental studies. It would have been better to include more background on these additional gases along with their impact in the environment the team plans to study. The impact on faculty development section is weak. Many examples provided are things that should already be done by a faculty member. It is not made evident how this instrumentation will attract excellent students. The contribution to the curriculum is not substantial. The institutional match is robust. No funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **09ENGA-16**

INSTITUTION: Louisiana State University of Shreveport

TITLE OF PROPOSAL: Acquisition of an AFM for Nanoscience Education and Research

PRINCIPAL INVESTIGATOR: William Yu

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	4	(of 5 points)
A.3	4.5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	7	(of 10 points)
B.2	15	(of 21 points)
B.3	4	(of 5 points)
B.4	4	(of 5 points)
B.5	4	(of 5 points)
B.6	4	(of 5 points)
B.7	3.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	4	(of 6 points)
C.2	1	(of 1 point)
C.3	2	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	10	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 76 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

		YEAR 1	YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$186,438	$0
	Recommended Amount:	$0	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire an AFM for nanoscience education. The rationale is not compelling. The projected target for 300 undergraduate students and 25 graduate students to use this instrument each year is very ambitious. While the authors do attempt to incorporate the AFM into a variety of classes, it appears they are overestimating the versatility of the instrument. It is not easy to image in liquids, and moving back and forth between dry samples and liquids can be daunting. The project should focus on one or two simple ways of incorporating the instrument into the classroom rather than the broad variety of modes listed. The claim that the AFM requires no special sample preparation is very misleading. Many of the comments made comparing AFM to electron microscopy are valid, but one drawback is that the sample must be very flat (~ 5 microns) so many samples are not capable of being imaged without some preparation. The research aspect of the proposal, especially at the graduate level, is weak. The instrument appears to be particularly high-end and expensive for the required purposes. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **10ENGA-16**

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancement of the CET Program by Establishment of Construction Equipment Simulation Laboratory

PRINCIPAL INVESTIGATOR: Shaurav Alam

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	3	(of 5 points)
A.3	3.5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	6.5	(of 10 points)
B.2	17.5	(of 21 points)
B.3	2.5	(of 5 points)
B.4	4	(of 5 points)
B.5	3	(of 5 points)
B.6	3.5	(of 5 points)
B.7	2	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	4.5	(of 6 points)
C.2	0.5	(of 1 point)
C.3	2	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	10	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1	(of 2 points)
E.2a	4	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 67.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$117,991
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to establish a construction equipment simulation laboratory. It is an interesting project, though a compelling case is not established that learning to operate construction equipment should be taught at the university level. An understanding of the capabilities of all types of construction equipment is clearly essential. However, teaching operations, through simulators, of a small subset of possible technologies does not seem to advance the capabilities of the program substantially. Not many substantial synergies with existing facilities are established, and a strong plan for growth of simulator technology is not presented. It is unclear how the simulator will provide strong contributions to construction management exercises (e.g. estimation, budgets, etc.). No plan for maintenance and upkeep of the simulators is outlined, and economic impact is not addressed. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **11ENGA-16**

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: A Campus-Wide Tool to Enhance the Scientific Study of Next-Generation Engineering Products

PRINCIPAL INVESTIGATOR: Niel Crews

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	4	(of 5 points)
A.3	4	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	9.5	(of 10 points)
B.2	18.5	(of 21 points)
B.3	4.5	(of 5 points)
B.4	3.5	(of 5 points)
B.5	4	(of 5 points)
B.6	5	(of 5 points)
B.7	4.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	6	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	11	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1.5	(of 2 points)
E.2a	9	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 89 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$116,557
	Recommended Amount:	$116,557

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

The proposal seeks to acquire a 3D laser-scanning confocal microscope for use in non-destructive imaging of micro- and nano-structured patterns on silicon substrate. The equipment will complement the existing optical and electron microscopy-based characterization facilities available at the Institute for Micromanufacturing, which currently involves 18 faculty members and trains both graduate and undergraduate students. The equipment is expected to serve a wide range of research projects on emerging devices, which generally involve or exploit soft materials. The current research challenges and routes to overcome them using the proposed equipment are elucidated. A detailed work plan is in place. The management and evaluation plans are well thought out and effective. However, the section on potential for achieving recognized eminence mainly highlights grants and publications and could benefit from discussions of diversity, scope for collaborations, and student placement. Vitas for the co-PIs are missing. The discussion of relationship with industries is largely unfocused, and it is not clear what new opportunities centering around the equipment could be created. Nevertheless, the proposal is founded on a convincing and sound scientific rationale, possesses a strong interdisciplinary focus, and has the potential to accelerate the discovery of new materials with important technological implications. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **12ENGA-16**

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancement of Structural Health Monitoring Capabilities at Louisiana Tech University Using a Wireless Structural Testing System

PRINCIPAL INVESTIGATOR: Fatmir Menkulasi

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8	(of 10 points)
B.2	18.5	(of 21 points)
B.3	4	(of 5 points)
B.4	5	(of 5 points)
B.5	4	(of 5 points)
B.6	4	(of 5 points)
B.7	3	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	6	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 88.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY	**Requested Amount:**	$18,600
RECOMMENDATIONS:	**Recommended Amount:**	$18,600

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This well-written, modest proposal seeks to acquire a mobile wireless structural testing system, an important technology that students need to be familiar with. The objectives are clearly stated. There is a detailed work plan that aligns well with the goals. The PIs are well qualified. The planned activities will support an ongoing project sponsored by the Louisiana Transportation Research Center. The plan to use the SHM system in classroom activities is expected not only to have a strong impact on student learning of essential concepts but also to create training opportunities in an emerging technological area. The evaluation plan covers both research and educational outcomes. The synergy between the existing and the requested toolkits is well articulated. The PIs have a sound plan to procure and validate the performance of the system. It may be useful to expand the project scope to include field testing, the real strength of wireless sensors. The discussion of partnership with industry is vague and the section on economic development focuses mainly on current projects and does not provide details on how the equipment could create new routes for collaboration and sustainable growth. Given the modest funding requested and positive implications for engineering education and research, however, the panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **13ENGA-16**

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancement of Undergraduate Surveying Laboratory

PRINCIPAL INVESTIGATOR: Sanjay Tewari

A. The Current Situation
(Total of 10 Points)

A.1	Yes	x	No	
A.2		4	(of 5 points)	
A.3		4.5	(of 5 points)	

B. The Enhancement Plan
(Total of 56 Points)

B.1	7	(of 10 points)
B.2	13.5	(of 21 points)
B.3	3	(of 5 points)
B.4	5	(of 5 points)
B.5	3.5	(of 5 points)
B.6	2	(of 5 points)
B.7	3	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	4	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	10	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	0	(of 2 points)
E.2a	5	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1	Yes	x	No	

G. Total Score: 68.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$79,228
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire equipment to enhance the undergraduate survey laboratory in the Department of Civil Engineering. The proposal lacks a compelling rationale. There are ten total stations currently available in the department. The proposal is also weak in research, collaborative efforts, and graduate educational aspects. Plans for student and faculty development are not well conceived. The discussions of synergy with and impact on existing resources lack clarity. The impact of the technology is not broad. The existing systems are fully operational and the acquisition of such toolkits, especially for undergraduate teaching labs, should be supported by the institution. The idea for survey camps is innovative. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **14ENGA-16**

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancement of the Geotechnical Engineering Laboratory

PRINCIPAL INVESTIGATOR: Jay Wang

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	9.5	(of 10 points)
B.2	19	(of 21 points)
B.3	4.5	(of 5 points)
B.4	4.5	(of 5 points)
B.5	4	(of 5 points)
B.6	4.5	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5.5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	9	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 92.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$55,783
	Recommended Amount:	$55,783

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to obtain an instrument for testing of heterogeneous soil samples. This is a very good proposal with strong research and education components. It includes novel research activities that are supported by and help advance many courses. The PI has a significant amount of experience in this area. More specific details on what courses and modules will be affected would have improved the proposal. However, it is clear that the proposed research and education activities are impossible with current equipment and this specialized upgrade will vastly improve capability. The proposed equipment also has direct regional significance and will help the department achieve a higher level of prominence. Full funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **15ENGA-16**

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancing Chemical Engineering and Energy Education with Pyrolyzer and GCMS Systems

PRINCIPAL INVESTIGATOR: Shengnian Wang

A. The Current Situation
(Total of 10 Points)

A.1	Yes	x	No	
A.2		4.5	(of 5 points)	
A.3		5	(of 5 points)	

B. The Enhancement Plan
(Total of 56 Points)

B.1	5	(of 10 points)
B.2	11.5	(of 21 points)
B.3	4.5	(of 5 points)
B.4	4	(of 5 points)
B.5	4	(of 5 points)
B.6	4.5	(of 5 points)
B.7	2.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	6	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	11	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1	Yes		No	x

G. Total Score: 76.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY	**Requested Amount:**	$76,000
RECOMMENDATIONS:	**Recommended Amount:**	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire a pyrolyzer and a gas chromatograph/mass spectrometer system. The aim is to redesign four undergraduate and two graduate-level courses by incorporating advanced topics in separation, reaction kinetics, and catalytic reaction engineering. The requested equipment will primarily be used in laboratory teaching activities, though no plans are mentioned to develop any new undergraduate or graduate courses. Important details are lacking for the actual experiments to be performed. The gas chromatograph columns do not appear to be universal and specific ones are needed for the experiments; it is not evident the system will be able to connect. It is not clear if the CMEN and MSE labs are in the same location or how this system would be incorporated into these two departments. The timelines for developing new lab activities and incorporating them into courses quickly appear very ambitious. The description of potential contributions to economic development is vague and largely unconvincing. No funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **16ENGA-16**

INSTITUTION: McNeese State University

TITLE OF PROPOSAL: Enhancement of Power System and Energy Conversion Laboratory at McNeese State University

PRINCIPAL INVESTIGATOR: Kaisar Khan

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	3	(of 5 points)
A.3	4	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	7.5	(of 10 points)
B.2	13	(of 21 points)
B.3	3.5	(of 5 points)
B.4	3	(of 5 points)
B.5	4	(of 5 points)
B.6	2	(of 5 points)
B.7	3	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1.5	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 73.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$143,490
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This is a proposal for basic equipment to teach hands-on modules on power systems management and engineering. The educational goals are the strength of this proposal, especially as the power sector transitions to newer technologies and management strategies. The strong ties with industry partners and a record of student placements, as well as the practice of working on industry-defined projects, are commendable. Overall, however, the proposal lacks a compelling rationale. Given that the institution is currently in the process of installing an industrial-grade microgrid system, the acquisition of a new, second system is not well justified. While safety has been projected as an obstacle in integrating the existing system into classroom activities, it should be the responsibility of the institution to install a mechanism for providing safety training for the students (or other users) and take appropriate measures to ensure continued and unhampered operation of such facilities. The potential and scope of research is not adequately addressed. Plans for curriculum, student, and faculty development are weak and lack specifics. No funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 17ENGA-16

INSTITUTION: Nicholls State University

TITLE OF PROPOSAL: Geospatial Hydrographic and Terrain Data Analysis

PRINCIPAL INVESTIGATOR: Stephen Flynn

A. The Current Situation
(Total of 10 Points)

A.1	Yes	x	No	
A.2		4	(of 5 points)	
A.3		4	(of 5 points)	

B. The Enhancement Plan
(Total of 56 Points)

B.1	6.5	(of 10 points)
B.2	13.5	(of 21 points)
B.3	4	(of 5 points)
B.4	4	(of 5 points)
B.5	4.5	(of 5 points)
B.6	2.5	(of 5 points)
B.7	2.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5.5	(of 6 points)
C.2	1	(of 1 point)
C.3	2	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1.5	(of 2 points)
E.2a	9	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1	Yes	x	No	

G. Total Score: 76.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$192,743
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to upgrade the Geomatics program through the acquisition of equipment including an imaging rover, a robotic total station, a laser scanning system, and a digital level. Due to the growth in new technologies for surveying, it is essential that the workforce is engaged and well trained in this evolution, and this equipment will support that. Overall, however, the project lacks a compelling rationale. A laser scanner purchased in 2010 is already on hand. A robotic station is also currently in place. The argument that the equipment is not being supported by the vendor is not convincing, and the statement that these types of tools should be updated every five years or so is not well justified. Plans for student and faculty development are vague. The evaluation plan only addresses ABET requirements and could benefit from the inclusion of both formative and summative assessment strategies. No funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **18ENGA-16**

INSTITUTION: Tulane University

TITLE OF PROPOSAL: Atomic Force Microscope for Fast Imaging and Dynamic Systems

PRINCIPAL INVESTIGATOR: Julie Albert

A. The Current Situation
(Total of 10 Points)

A.1	Yes x	No
A.2	3	(of 5 points)
A.3	3	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8	(of 10 points)
B.2	17	(of 21 points)
B.3	5	(of 5 points)
B.4	3	(of 5 points)
B.5	4.5	(of 5 points)
B.6	5	(of 5 points)
B.7	4.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	6	(of 6 points)
C.2	1	(of 1 point)
C.3	2.5	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1	Yes x	No

G. Total Score: 84.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:

Requested Amount: $192,000

Recommended Amount: $192,000

(if additional funds become available)

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to upgrade the scan speed of a current atomic force microscope (AFM). Specifically, the upgrade includes a new FastScan scanner and a Bio Application module which will allow faster imaging of various dynamical processes and broaden research capabilities. The proposal is well written and the underlying vision is crisp. The team has an excellent track record of securing external grants and conducting cutting-edge research in areas of emerging materials and surface science. They aim to include other regional institutions as users. The objectives are clearly stated. The proposal identifies current scientific and technological research challenges that the upgraded equipment will help overcome. There are opportunities to create new knowledge that may lead to important engineering innovations. There are some concerns that the instrument may not be able to provide useful information for all experiments proposed. For example, it is not clear if they can truly image in the polymer melt as it crystallizes. In terms of educational impact, the majority of efforts described for undergraduate students would not need fast scan AFM. It is not evident whether the current AFM has been incorporated into courses. The involvement of faculty members in startup companies as well as strong ties with various industry partners are commendable. The interdisciplinary focus of the proposal is strong. The evaluation plan is broad and effective. The panel recommends full funding if additional funds become available.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **19ENGA-16**

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Acquisition of Material Studio [8.0] for Hydraulic Fracturing Backflow Water Treatment Education and Research

PRINCIPAL INVESTIGATOR: Daniel Gang

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	4.5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8.5	(of 10 points)
B.2	16	(of 21 points)
B.3	4.5	(of 5 points)
B.4	2.5	(of 5 points)
B.5	3.5	(of 5 points)
B.6	3	(of 5 points)
B.7	3	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	4.5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	11	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	9	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 81 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$37,720
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire modeling and simulation software Materials Studio for aiding in understanding fracking backflow water treatment. The team wishes to secure a permanant license for software that expires this year. This is an interesting topic that is timely and important. Backflow water characterization, modeling, and visualization are major issues in fracking. While a strong case is made for need, other, comparable open-source software options are available. It is not clear if the requested hardware is well matched for the software, and the request for only one license is a weakness. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **20ENGA-16**

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Superpave Binder Testing System for the Enhancement of Infrastructure and Materials Testing Laboratories

PRINCIPAL INVESTIGATOR: Mohammad Khattak

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	5	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	9.5	(of 10 points)
B.2	18.5	(of 21 points)
B.3	5	(of 5 points)
B.4	4.5	(of 5 points)
B.5	5	(of 5 points)
B.6	5	(of 5 points)
B.7	5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5.5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	7	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 93 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

		YEAR 1	YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$75,192	$12,750
	Recommended Amount:	$52,043	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to acquire various equipment items to strengthen research in pavement surfaces. This is a very good proposal, well thought out and with strong justification. The impact on students and faculty is clearly outlined. A strong rationale is presented for the impact of the equipment on education, and a compelling case is made for the relevance of the equipment to current asphalt research at ULL. Having the appropriate testing equipment for SuperPave binder material is essential for advanced asphalt testing and will propel the program to the cutting edge. A plan is presented to comprehensively integrate the project with the core course curriculum, and will improve both graduate and undergraduate education. The replacement of the two general ovens should be covered by the institution. It was not made clear that the request for the graduate student was essential or a worthy investment of these funds. Partial funding of $52,043 is recommended in year one, with no funding recommended in year two. Funding is not recommended for the ovens or the graduate student. There is no institutional match.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **21ENGA-16**

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Enhancement of Microfabrication Laboratory at UL Lafayette for Rapid Prototyping

PRINCIPAL INVESTIGATOR: Mohammad Madani

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	3.5	(of 5 points)
A.3	3	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	6.5	(of 10 points)
B.2	11.5	(of 21 points)
B.3	4.5	(of 5 points)
B.4	3.5	(of 5 points)
B.5	4	(of 5 points)
B.6	4	(of 5 points)
B.7	2.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5.5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	7	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No	

G. Total Score: 73.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$109,490
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

The proposal requests funds to acquire a maskless lithography system. The equipment will be used for prototyping and fabrication of sensors, MEMS and photonic devices. It will be good for training and hands-on experience. However, the proposal lacks important specifics. Although a maskless lithography system seems to complement the existing resources, the lack of a description of the research projects to be undertaken, as well as the key technical challenges the team plans to overcome with the proposed equipment, makes it difficult to assess the rationale and quality of the possible outcomes. Given that the fields are quite mature and opportunities for collaboration exist with many experimentalists in related areas, the argument for acquiring such equipment to supplement and bolster theoretical research is weak. The section on curriculum development lacks focus. The long list of courses that could benefit from the equipment appears to be unrealistic. Solid plans for project evaluation with both formative and summative phases, as well as a convincing argument for economic development contributions, are missing. The goal of supporting ten new companies appears too ambitious. No funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **22ENGA-16**

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: CAPE Satellite Communications Laboratory Upgrades

PRINCIPAL INVESTIGATOR: George Thomas

A. The Current Situation
(Total of 10 Points)

A.1	Yes	x	No	
A.2		5	(of 5 points)	
A.3		4.5	(of 5 points)	

B. The Enhancement Plan
(Total of 56 Points)

B.1	9.5	(of 10 points)
B.2	15	(of 21 points)
B.3	4	(of 5 points)
B.4	4	(of 5 points)
B.5	4	(of 5 points)
B.6	3	(of 5 points)
B.7	4	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	3.5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	9	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	9	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1	Yes	x	No	

G. Total Score: 80.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$108,500
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to upgrade a mini-satellite infrastructure currently installed as a function of the student-led CAPE project in the Electrical and Computer Engineering Department. The project is very interesting and stands out at ULL. Student involvement in the project over the years has been significant. There are considerable opportunities for the students to be trained in an important technical area, and the project's potential for contributing to economic development is strong. A persuasive argument is provided for how this project will increase visibility and improve the laboratory. However, the proposal is weak in research, collaborative efforts, and graduate education. There are no real research projects described. Although there is a plan to support graduate-level satellite systems engineering research, a detailed description is missing. The plan for faculty development is not well conceived. Discussions of synergy with and impact on existing resources lack clarity. The current system is fully functional and such infrastructure, especially equipment used in engineering teaching labs, should receive appropriate support from the institution. This is particularly important as far as long-term sustainability is concerned. Funding is not recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **23ENGA-16**

INSTITUTION: University of New Orleans

TITLE OF PROPOSAL: Enhancement of Power Electronics and Energy Conversion Laboratories

PRINCIPAL INVESTIGATOR: Ebrahim Amiri

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	4	(of 5 points)
A.3	3.5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	6.5	(of 10 points)
B.2	13.5	(of 21 points)
B.3	4	(of 5 points)
B.4	4.5	(of 5 points)
B.5	3	(of 5 points)
B.6	4	(of 5 points)
B.7	4.5	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	6	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	11	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	1.5	(of 2 points)
E.2a	6.5	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes		No	x

G. Total Score: 76.5 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:	**Requested Amount:**	$126,964
	Recommended Amount:	$0

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

This proposal seeks to enhance a power electronics lab and an energy conversion lab within the Department of Electrical Engineering. The overall rationale is weak. The need for a more complex version of OPAL-RT is not well justified. The argument could benefit from a comparison with the current national standards. Two stations for the energy conversion lab are already on hand. The need for installing more units should be justified by appropriate statistical data on growth in student enrollment in these labs. Also, engineering students, in particular, should be exposed to detailed mathematical modeling, and bypassing this aspect of training may sometimes compromise the quality of engineering education. The proposed research projects are detailed and reasonable, but the educational opportunities could be more clearly described. Performance measures are not connected well to goals. The work plan shows a schematic but lacks in specifics. Plans for student and faculty development are not well thought out. In this regard, there should be a mechanism that could gauge the growth in student and faculty interest and involvement in the projects. The section on industry relationships is vague. No funding is recommended.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: **24ENGA-16**

INSTITUTION: University of New Orleans

TITLE OF PROPOSAL: Acquisition of a Vector Network Analyzer for Characterization of Electrical and Electronic Devices

PRINCIPAL INVESTIGATOR: Leonard Spinu

A. The Current Situation
(Total of 10 Points)

A.1 Yes	x	No
A.2	3.5	(of 5 points)
A.3	5	(of 5 points)

B. The Enhancement Plan
(Total of 56 Points)

B.1	8	(of 10 points)
B.2	17.5	(of 21 points)
B.3	4	(of 5 points)
B.4	4	(of 5 points)
B.5	4	(of 5 points)
B.6	4	(of 5 points)
B.7	3	(of 5 points)

C. Equipment
(Total of 10 Points)

C.1	5	(of 6 points)
C.2	1	(of 1 point)
C.3	3	(of 3 points)

D. Faculty and Staff Expertise
(Total of 12 Points)

D.1	12	(of 12 points)

E. Economic and/or Cultural Development and Impact
(Total of 12 Points)

E.1	2	(of 2 points)
E.2a	8	(For S/E)
or		(of 10 points)
E.2b		(For NS/NE)

F. Previous Support Fund Awards
(No Points Assigned)

G.1 Yes	x	No

G. Total Score: 84 (of 100 points)

(Note: Proposals with a total score below 70 will not be recommended for funding.)

SPECIFIC BUDGETARY RECOMMENDATIONS:
Requested Amount: $125,000
Recommended Amount: $125,000
(if additional funds become available)

COMMENTS: (Discuss proposal strengths and weaknesses, particularly in those sections where significant point deductions have been made. Include suggestions for resubmission. For proposals recommended for funding, include all applicable stipulations in budgets and scopes of work.)

The proposal seeks to acquire a vector network analyzer (VNA) to support research in magnetics and multiferroics, nanostructured rings, and novel reduced dimensionality thermoelectrics materials. The rationale is sound and the underlying vision is crisp. The current VNA is outdated, difficult to maintain, and lacks the functionality for time-domain and pulsed RF measurements for novel materials and devices. The current deficiencies and how the enhanced capabilities of the new instrument will complement existing equipment are clearly described. The PIs are well qualified and have a strong track record. Students will be trained with cutting-edge and industry-standard toolkits to make them more competitive in the workforce. However, discussions of exactly what fundamental knowledge would be explored and what new devices could be created are rather vague. Regarding the thermoelectrics research, given the extreme short time-scales for the electronic scattering processes, it remains unclear as to how the proposed VNA could capture and characterize the essential physical processes. A number of citations and statistics are outdated. A quotation for the requested equipment is also missing. The panel recommends full funding only if additional funds become available.

Appendix A

Summary List of Proposals

Proposals Submitted to the Traditional Enhancement Program - Engineering A (Chemical, Civil, Electrical, etc.)
for the FY 2015-16 Review Cycle

Proposal Number	PI Name	Institution	Duration	Equipment/Non Equipment	New/ Continuation	Project Title	Amount Requested		
							Year 1	Year 2	Total
001ENGA-16	Prof. Todd Shupe	Louisiana State University Agricultural Center	2 Years	E	New Request	Enhancement of Preservative-Treated Wood Recycling Research at the Louisiana Forest Products Development Center	$302,000.00	$0.00	$302,000.00
002ENGA-16	Prof. Aly Mousaad Aly	Louisiana State University and A & M College	1 Year	E	New Request	Hurricane Flow Generation at High Reynolds Number for Testing Energy and Coastal Infrastructure	$125,185.00	$0.00	$125,185.00
003ENGA-16	Prof. Jin-Woo Choi	Louisiana State University and A & M College	2 Years	E	New Request	A Nanodroplet Printing System for Sensors, Materials, and Bioelectronic Research	$137,000.00	$6,000.00	$143,000.00
004ENGA-16	Prof. Kevin McPeak	Louisiana State University and A & M College	1 Year	E	New Request	Acquisition of a Multiprobe Atomic Force Microscope to Enhance the Nanosciences at Louisiana State University	$195,486.00	$0.00	$195,486.00
005ENGA-16	Prof. Ayman Okeil	Louisiana State University and A & M College	1 Year	E	New Request	Acquiring State-of-the-art Non-contact Measurement System for Material and Structural Testing	$122,036.00	$0.00	$122,036.00
006ENGA-16	Prof. Sunggook Park	Louisiana State University and A & M College	1 Year	E	New Request	Enhancement of metrology capability for detecting single biomolecules in micro/nanofluidics	$159,999.00	$0.00	$159,999.00
007ENGA-16	Prof. George Voyiadjis	Louisiana State University and A & M College	1 Year	E	New Request	Acquisition of Gravimetric Instrumentation in Support of a New Quasigeoid Model for Accurate Elevations in Louisiana	$153,000.00	$0.00	$153,000.00
008ENGA-16	Prof. Hongliang Zhang	Louisiana State University and A & M College	1 Year	E	New Request	Gas and Particulate Matter Analysis System to Enhance the Research and Teaching of Air Pollution in Louisiana	$157,937.00	$0.00	$157,937.00
009ENGA-16	Dr. William Yu	Louisiana State University in Shreveport	2 Years	E	New Request	Acquisition of an AFM for Nanoscience Education and Research	$186,438.00	$0.00	$186,438.00
010ENGA-16	Dr. shaurav alam	Louisiana Tech University	1 Year	E	New Request	Enhancement of the CET Program by Establishment of Construction Equipment Simulation Laboratory	$117,991.00	$0.00	$117,991.00
011ENGA-16	Dr. Niel Crews	Louisiana Tech University	1 Year	E	New Request	A Campus-Wide Tool to Enhance the Scientific Study of Next-Generation Engineering Products	$116,557.00	$0.00	$116,557.00
012ENGA-16	Dr. Fatmir Menkulasi	Louisiana Tech University	1 Year	E	New Request	Enhancement of Structural Health Monitoring Capabilities at Louisiana Tech University Using a Wireless Structural Testing System	$18,600.00	$0.00	$18,600.00
013ENGA-16	Dr. Sanjay Tewari	Louisiana Tech University	1 Year	E	New Request	Enhancement of Undergraduate Surveying Laboratory	$79,228.00	$0.00	$79,228.00
014ENGA-16	Dr. Jay Wang	Louisiana Tech University	1 Year	E	New Request	Enhancement of the Geotechnical Engineering Laboratory	$55,783.00	$0.00	$55,783.00
015ENGA-16	Prof. Shengnian Wang	Louisiana Tech University	1 Year	E	New Request	Enhancing Chemical Engineering and Energy Education with Pyrolyzer and GCMS systems	$76,000.00	$0.00	$76,000.00
016ENGA-16	Dr. Kaisar Khan	McNeese State University	1 Year	E	New Request	Enhancement of Power System and Energy Conversion Laboratory at McNeese State University	$143,490.00	$0.00	$143,490.00
017ENGA-16	Mr. Stephen Flynn	Nicholls State University	1 Year	E	New Request	Geospatial Hydrographic and Terrain Data Analysis	$192,743.00	$0.00	$192,743.00
018ENGA-16	Prof. Julie Albert	Tulane University	1 Year	E	New Request	Atomic Force Microscope for Fast Imaging and Dynamic Systems	$192,000.00	$0.00	$192,000.00

Proposals Submitted to the Traditional Enhancement Program - Engineering A (Chemical, Civil, Electrical, etc.)
for the FY 2015-16 Review Cycle

Proposal Number	PI Name	Institution	Duration	Equipment/Non Equipment	New/ Continuation	Project Title	Amount Requested		
							Year 1	Year 2	Total
019ENGA-16	Dr. Daniel Gang	University of Louisiana at Lafayette	1 Year	E	New Request	Acquisition of Material Studio [8.0] for Hydraulic Fracturing Backflow Water Treatment Education and Research	$37,720.00	$0.00	$37,720.00
020ENGA-16	Dr. Mohammad Khattak	University of Louisiana at Lafayette	2 Years	E	New Request	Superpave Binder Testing System for the Enhancement of Infrastructure and Materials Testing Laboratories	$75,192.00	$12,750.00	$87,942.00
021ENGA-16	Dr. Mohammad Madani	University of Louisiana at Lafayette	1 Year	E	New Request	Enhancement of Microfabrication Laboratory at UL Lafayette for Rapid Prototyping	$109,490.00	$0.00	$109,490.00
022ENGA-16	Dr. George Thomas	University of Louisiana at Lafayette	1 Year	E	New Request	CAPE Satellite Communications Laboratory Upgrades	$108,500.00	$0.00	$108,500.00
023ENGA-16	Dr. Ebrahim Amiri	University of New Orleans	1 Year	E	New Request	Enhancement of Power Electronics and Energy Conversion Laboratories	$126,964.00	$0.00	$126,964.00
024ENGA-16	Prof. Leonard Spinu	University of New Orleans	1 Year	E	New Request	Acquisition of a Vector Network Analyzer for Characterization of Electrical and Electronic Devices	$125,000.00	$0.00	$125,000.00

Total Number of Proposals submitted	24
Total Money Requested for First Year	$3,114,339.00
Total Money Requested for Second Year	$18,750.00
Total Money Requested	$3,133,089.00

Appendix B

Rating Forms

BOARD OF REGENTS SUPPORT FUND ENHANCEMENT PROGRAM, FISCAL YEAR 2015-16

RATING FORM FOR TRADITIONAL AND UNDERGRADUATE ENHANCEMENT PROPOSALS
PURCHASE OF INSTRUCTIONAL AND RESEARCH EQUIPMENT

INSTRUCTIONS: The completed evaluation form should represent the consensus of the expert members of the review panel and, as such, must reflect the final decisions of that panel. Review this form and the program guidelines prior to reading the proposal. The higher the score, the more clearly the proposal satisfies the criterion under consideration.

A. THE CURRENT SITUATION—10 points

YES_____NO_____	A.1	Has the applicant adequately described the institution and unit(s)/department(s) that will benefit from the project, especially in terms of mission, faculty, students, and relevant institutional or departmental resources?
_____ of 5 pts.	A.2	To what extent will the proposed project enhance the affected department(s)/unit(s) and/or curricula?
_____ of 5 pts.	A.3	To what extent will the project complement and improve upon existing resources of the department(s) or unit(s)?

B. THE ENHANCEMENT PLAN—56 points

_____ of 10 pts.	B.1	Are the goals and objectives clearly stated? Are they realistic? Are the objectives measurable? Can the objectives be completed within the timeframe detailed in the proposal?
_____ of 21 pts.	B.2	Does the work plan sufficiently describe the activities that will be undertaken to achieve the goals and objectives of the proposal with responsible individuals listed for each activity and a schedule of// activities with benchmarks to be accomplished?
_____ of 5 pts.	B.3	To what extent will the proposed project propel the department(s)/ unit(s) into attaining a high level of regional, national, or international eminence--or maintaining a current high level of eminence--commensurate with degree offerings and/or functions?
_____ of 5 pts.	B.4	To what extent will the proposed project have an impact on the variety and/or quality of curricular offerings and instructional methods within the affected department(s) or unit(s)?
_____ of 5 pts.	B.5	To what extent will the proposed project enhance the ability of the department(s) or unit(s) to attract and/or retain students of high quality, particularly high quality students from Louisiana?
_____ of 5 pts.	B.6	To what extent will the project contribute to improving the quality and effectiveness of faculty teaching and improve faculty pedagogy?
_____ of 5 pts.	B.7	To what extent does the proposal indicate how the PIs will assess/evaluate the degree to which the project has achieved its goals?

C. EQUIPMENT—10 points

_____ of 6 pts.	C.1	To what extent has the proposal established a relationship between the enhancement plan activities and the type of equipment requested? Is the equipment well-justified? Will it significantly enhance the existing technological capability of the department(s)/units(s)? Does it reflect current and projected trends in technology?
_____ of 1 pt.	C.2	Is there a thorough survey of the current equipment inventory and does the proposal plan to make full use of the equipment?
_____ of 3 pts.	C.3	To what extent does the proposal present a reasonable plan to ensure a maximum usable lifetime for the equipment? Are housing and maintenance arrangements for equipment adequate?

D. FACULTY AND STAFF EXPERTISE—12 points

_____ of 12 pts D.1 Are the faculty and support staff appropriately qualified to implement this project? If special training will be required for faculty and/or other personnel, has an appropriate plan been developed?

E. ECONOMIC AND/OR CULTURAL DEVELOPMENT AND IMPACT—12 points

_____ of 2 pts. E.1 To what extent will the project assist in establishing a new relationship or strengthen an existing relationship with one or more industrial/institutional sponsors (e.g., private business, trade organization, professional organization, non-profit or community organization, another college or university or consortium of colleges and universities, federal government agency)?

_____ of 10 pts. E.2 To what extent will the project assist the submitting department(s)/unit(s) in promoting or enhancing economic, cultural and/or academic development and/or resources in Louisiana?

F. PREVIOUS SUPPORT FUND AWARDS—No points assigned

YES___ NO_____ F.1 If the Project Director or Co-Project Director has received previous Support Fund support, has it been adequately documented?

G. TOTAL SCORE (NOTE: Proposals with a total score below 70 will not be recommended for funding.)
_____ of 100 points

SPECIFIC BUDGETARY RECOMMENDATIONS

Requested Amount $_____ Recommended Amount $_____

I agree to maintain in confidence any information, documentation and material of any kind (hereinafter referred to as "Material") included in this proposal; I further agree not to disclose, divulge, publish, file patent application on, claim ownership of, exploit or make any other use whatsoever of said "Material" without the written permission of the principal investigator. To the best of my knowledge, no conflict of interest is created as a result of my reviewing this proposal.

Reviewer's Name and Institution:_____

Reviewer's Signature:_____Date:_____

(Form 6.11, rev 2015)

BOARD OF REGENTS SUPPORT FUND ENHANCEMENT PROGRAM, FISCAL YEAR 2015-16

RATING FORM FOR TRADITIONAL AND UNDERGRADUATE ENHANCEMENT PROPOSALS
REQUESTS OTHER THAN EQUIPMENT PURCHASES (e.g., Colloquia, Curricular Revisions, etc.)

INSTRUCTIONS: The completed evaluation form should represent the consensus of the expert members of the review panel and, as such, must reflect the final decisions of that panel. Review this form and the program guidelines prior to reading the proposal. The higher the score, the more clearly the proposal satisfies the criterion under consideration.

A. THE CURRENT SITUATION—10 points

YES_____NO_____ A.1 Has the applicant adequately described the institution and department(s)/unit(s) that will benefit from the project, especially in terms of mission, faculty, students, and relevant institutional or departmental resources?

_____ of 5 pts. A.2 To what extent will the proposed project enhance the affected department(s)/unit(s) and/or curricula?

_____ of 5 pts. A.3 To what extent will the project complement and improve upon existing resources of the department(s)/ unit(s)?

B. THE ENHANCEMENT PLAN—66 points

_____ of 10 pts. B.1 Are the goals and objectives clearly stated? Are they realistic? Are the objectives measurable? Can the objectives be completed within the timeframe detailed in the proposal?

_____ of 20 pts. B.2 Does the work plan sufficiently describe the activities that will be undertaken to achieve the goals and objectives of the proposal with responsible individuals listed for each activity and a schedule of activities with benchmarks to be accomplished?

_____ of 8 pts. B.3 To what extent will the proposed project propel the department(s)/unit(s) into attaining a high level of regional, national, or international eminence--or maintaining a current high level of eminence—commensurate with degree offerings and/or functions?

_____ of 8 pts. B.4 To what extent will the proposed project have an impact on the variety and quality of curricular offerings and instructional methods within the affected department(s) or unit(s)?

_____ of 8 pts. B.5 To what extent will the proposed project enhance the ability of the department(s) or unit(s) to attract and/or retain students of high quality, particularly high quality students from Louisiana?

_____ of 8 pts. B.6 To what extent will the project contribute to improving the quality and effectiveness of faculty teaching and improve faculty pedagogy?

_____of 4 pts. B.7 To what extent does the proposal indicate how the PIs will assess/evaluate the degree to which the project has achieved its goals?

C. FACULTY AND STAFF EXPERTISE—12 points

_____ of 12 pts. C.1 Are faculty and support staff appropriately qualified to implement the project? If special training will be required for faculty and/or other personnel, has an appropriate plan been developed?

D. ECONOMIC AND/OR CULTURAL DEVELOPMENT AND IMPACT—12 points

_____ of 2 pts. D.1 To what extent will the project assist in establishing a new relationship or strengthen an existing relationship with one or more industrial/institutional sponsors (e.g., private business, trade organization, professional organization, non-profit or community organization, or another college or university or consortium of colleges and universities, federal government agency)?

_____ of 10 pts. D.2 To what extent will the project assist the submitting department(s)/unit(s) in promoting or enhancing economic, cultural and/or academic development and/or resources in Louisiana?

E. PREVIOUS SUPPORT FUND AWARDS—No points assigned

YES___ NO_____ E.1 If the Project Director or Co-Project Director has received previous Support Fund support, has it been adequately documented?

F. TOTAL SCORE (NOTE: Proposals with a total score below 70 will not be recommended for funding.)
_____ of 100 points

SPECIFIC BUDGETARY RECOMMENDATIONS

Requested Amount $_____ Recommended Amount $_____

I agree to maintain in confidence any information, documentation and material of any kind (hereinafter referred to as "Material") included in this proposal; I further agree not to disclose, divulge, publish, file patent application on, claim ownership of, exploit or make any other use whatsoever of said "Material" without the written permission of the principal investigator. To the best of my knowledge, no conflict of interest is created as a result of my reviewing this proposal.

Reviewer's Name and Institution:_____

Reviewer's Signature:_____Date:_____

(Form 6.12, rev 2015)