

REPORT TO THE LOUISIANA BOARD OF REGENTS

REVIEW OF PROPOSALS SUBMITTED TO THE TRADITIONAL ENHANCEMENT PROGRAM IN ENGINEERING A

February 2013

Prepared by:

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FY 2012-13 LOUISIANA BOARD OF REGENTS SUPPORT FUND ENHANCEMENT COMPONENT - ENGINEERING A

Introduction

An Engineering A review panel consisting of Dr. Richard C. Seagrave, Distinguished Professor Emeritus, Chemical and Biological Engineering, Iowa State University [chair], and Dr. J. Michael Rigsbee, Professor of Materials Science and Engineering, North Carolina State University met via teleconference and e-mail during January-February 2013 to evaluate thirty-five (35) Traditional Enhancement proposals submitted in the Engineering A category and which requested a total of \$4,614,601 in first-year funds to conduct projects to enhance their departments/units through the Board of Regents Support Fund (BoRSF).

Prior to discussions, panel members reviewed and evaluated all proposals and each reviewer separately prepared a detailed review of the proposals assigned to him. They then discussed each proposal in detail, which resulted in comments, suggestions, and sometimes debate about the various aspects of the proposal, vis-à-vis the reviewers' distinct backgrounds and disciplinary fields. In each case, unanimous agreement was reached with respect to the proposal's rank and funding level. The panel believes that each proposal received a thorough and fair evaluation based on the criteria enumerated in the Traditional and Undergraduate Enhancement Program Request for Proposals (RFP).

The eight (8) proposals in Table I (all of which received a score of 94 or above) are highly recommended for full funding, for a total allocation of \$1,189,791. The four (4) proposals in Table II are recommended for full funding if additional resources become available. Twenty-three (23) proposals listed in Table III are not recommended for funding. This year, as in the FY 2009-10 proposal cycle, there were numerous outstanding proposals and no really poor ones. The overall high quality of the proposals made the cut-off point between Tables II and III very high (the bottom ranked proposal in Table II scored 91).

General Comments

The panel commends the institutions on the overall high quality of proposals submitted in this cycle. The breadth of innovative ideas continues to grow, and the leading proposals continue to be at the forefront of developments in the discipline. The quality of proposals this year is distinctly higher than those that the panel considered in 2010.

The determining characteristic that separated the proposals in Table III from those recommended for funding is the response to section B.3, "Enhancement Plan," that deals with the extent that the proposed project will catapult the department or unit into attaining or maintaining a high level of regional, national, or international eminence, commensurate with degree offerings and functions. Proposals in Table III, while usually very good otherwise, are significantly less convincing in this regard.

Panel Recommendations to Higher Education Institutions and the Board of Regents

Despite the panel's previous cautionary comments concerning this matter, some institutions continue to submit several proposals from the same organizational unit that request funds for complementary equipment supporting the same or very similar research and/or specific discipline(s) or sub-discipline(s). Since the panel lacked an institutional prioritization of relative needs, each such proposal was evaluated on its own merits. Applicants and contract administrators would be well advised to note the RFP statement requiring such a prioritization, if for no other reason than to have the PIs cognizant of other colleagues' efforts.

The reviewers strongly recommend that Board staff assign points to item B.7 on the evaluation form, regarding the Enhancement Plan section that addresses how the Board of Regents or other entity will determine whether the project has been a success and the degree to which the project has achieved its goals. Currently, reviewers are asked to respond with "yes" or "no" to the item; we do not assign points. The panel often finds discussion of this important topic to be insufficient and/or inappropriate. The panel believes that the importance of this item should be increased by assigning significant points to it.

TRADITIONAL ENHANCEMENT PROGRAM REVIEW -- ENGINEERING A

TABLE I

PROPOSALS HIGHLY RECOMMENDED FOR FUNDING

RANK	RATING	PROPOSAL NO.	INSTITUTION	YR. 1 FUNDS REQUESTED	YR. 1 FUNDS RECOMMENDED	YR. 2 FUNDS REQUESTED	YR. 2 FUNDS RECOMMENDED
1	98	011ENG-13	LSUBR	\$125,000	\$125,000		
2	97.5	033ENG-13	ULL	\$138,400	\$138,400		
3	97	013ENG-13	LA TECH	\$126,257	\$126,257		
4	96.5	023ENG-13	TULANE	\$342,184	\$342,184	\$0	\$0
5	96	019ENG-13	LA TECH	\$42,565	\$42,565		
6	95.5	021ENG-13	NICHOLLS	\$172,428	\$172,428		
7	95	030ENG-13	ULL	\$209,950	\$209,950		
8	94	014ENG-13	LA TECH	\$33,007	\$33,007		
				\$1,189,791	\$1,189,791	\$0	\$0

TABLE II

PROPOSALS RECOMMENDED FOR FUNDING IF ADDITIONAL FUNDS BECOME AVAILABLE

RANK	RATING	PROPOSAL NO.	INSTITUTION	YR. 1 FUNDS REQUESTED	YR. 1 FUNDS RECOMMENDED	YR. 2 FUNDS REQUESTED	YR. 2 FUNDS RECOMMENDED
9	93.5	029ENG-13	ULL	\$128,900	\$128,900		
10	93	032ENG-13	ULL	\$111,000	\$111,000		
11	92	010ENG-13	LSUBR	\$76,425	\$76,425	\$0	\$0
12	91	001ENG-13	LSU AG	\$277,351	\$277,351	\$0	\$0
				\$593,676	\$593,676	\$0	\$0

TABLE III**PROPOSALS NOT RECOMMENDED FOR FUNDING**

RANK	RATING	PROPOSAL NO.	INSTITUTION	YR. 1 FUNDS REQUESTED	YR. 1 FUNDS RECOMMENDED	YR. 2 FUNDS REQUESTED	YR. 2 FUNDS RECOMMENDED
13	90	006ENG-13	LSUBR	\$98,372	\$0		
13	90	008ENG-13	LSUBR	\$109,277	\$0		
15	89	022ENG-13	TULANE	\$125,506	\$0		
15	89	027ENG-13	ULL	\$76,294	\$0		
17	88	012ENG-13	LSUBR	\$147,065	\$0		
17	88	016ENG-13	LA TECH	\$80,540	\$0		
19	87	005ENG-13	LSUBR	\$96,239	\$0	\$0	\$0
19	87	007ENG-13	LSUBR	\$86,100	\$0		
19	87	031ENG-13	ULL	\$267,316	\$0		
22	86	018ENG-13	LA TECH	\$68,553	\$0		
23	84	020ENG-13	MCNEESE	\$86,167	\$0		
23	84	024ENG-13	ULL	\$115,796	\$0		
25	83	026ENG-13	ULL	\$76,580	\$0		
26	82	009ENG-13	LSUBR	\$135,000	\$0		
27	81	003ENG-13	LSUBR	\$150,000	\$0		
27	81	028ENG-13	ULL	\$122,340	\$0		
29	78	004ENG-13	LSUBR	\$441,106	\$0		
30	75	015ENG-13	LA TECH	\$73,380	\$0		
30	75	035ENG-13	UNO	\$123,932	\$0		
32	74	025ENG-13	ULL	\$75,634	\$0		
33	73	017ENG-13	LA TECH	\$82,500	\$0		
34	71	002ENG-13	LSUBR	\$94,540	\$0		
35	68	034ENG-13	UNO	\$98,897	\$0		
				\$2,831,134	\$0	\$0	\$0

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 001ENGA-13

INSTITUTION: LSU 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 No x
A.2 0 (of 5 points)
A.3 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)

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)

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 17 (of 18 points)
B.3 18 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

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.)

	YEAR 1	YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS:		
Requested Amount:	<u>\$277,351</u>	<u>\$0</u>
Recommended Amount:	<u>\$277,351</u>	<u>\$0</u>

(if additional funds become available)

This is an excellent proposal on an important topic: the recycling of preservative-treated wood. The project's potential for contributing to economic development in the State is very high. The principal investigators have excellent records and significant extramural funding. The work plan is appropriate, although it is somewhat concealed in the proposal's text. It is obvious that there is copious external interest in the project, demonstrated by numerous letters of support. Unfortunately, two required sections of the proposal (4.a.1 and 4.a.2), which describe background information about the institution and the extent to which the project would enhance the affected department, are missing, thereby eliminating points in the evaluation that would have been assigned to those sections. Because of the project's many strengths, the panel recommends full funding if additional resources become available.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 002ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Reactive Ion Etching System for Fabrication of Semiconductor
Materials, Device and Microstructures

PRINCIPAL INVESTIGATOR: Pratul Ajmera

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)

C. Equipment

(Total of 10 Points)

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

E. Economic and/or Cultural Development and Impact

(Total of 12 Points)

E.1 1 (of 2 points)
E.2a 6 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 15 (of 18 points)
B.3 10 (of 20 points)
B.4 3 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 10 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No

G. Total Score:

71

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$94,540</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This proposal requests funds to acquire a Reactive Ion Etcher (RIE) for microfabrication in LSU's Electronic Materials and Devices Laboratory. The current 25-year-old RIE equipment is difficult to maintain and lacks the functionality of current systems. The PI does a good job of describing how the enhanced capabilities benefit the lab and complement existing equipment. Project goals and objectives are well stated but the work plan is weak, and the impact of the equipment appears to benefit only the PI's research. The relationship between the RIE system and the enhancement plan is not clearly described. Moreover, there is no commitment of funds to maintain the RIE system and no person dedicated to training users. The potential for this equipment to promote economic development in Louisiana is not well described. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 003ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Acquisition of Instrumentation to Support Sustainable, Windstorm-Resilient, and Energy-Efficient Coastal Communities

PRINCIPAL INVESTIGATOR: Steve C.S. Cai

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 3 (of 5 points)
B.2 12 (of 18 points)
B.3 15 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes _____ No x

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

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	Requested Amount:	<u>\$150,000</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This is a good proposal concerning a topic of importance to Louisiana--acquisition of windstorm instrumentation. The proposal's goals and the work plan are extremely broad and ambitious, but not very specific. The relationship of the proposed activities to the aspirations discussed in section B.3 is unconvincing, and the identified future collaborations that might result from the project appear to be tenuous. Overall, while the goals of this project are meritorious, a good case for success is not presented. The proposal is not convincing enough for the panel to make a recommendation for funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 004ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Advanced Tools for Rapid Prototyping of Mold Inserts for Mass
Production of Multi-Scale Components

PRINCIPAL INVESTIGATOR: Jin-Woo Choi

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)

C. Equipment

(Total of 10 Points)

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

E. Economic and/or Cultural Development and Impact

(Total of 12 Points)

E.1 1 (of 2 points)
E.2a 6 (For S/E)
or (of 10 points)
E.2b _____ (For NS/NE)

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 15 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 3 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

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	Requested Amount:	<u>\$441,106</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

The LSUBR applicants request funding to acquire a large mold insert fabrication tool and a high-speed, high-precision micro-milling system to be used in an existing micro-/nano-fabrication laboratory. Both additions, it is claimed, will enhance faculty research capabilities and enable the PIs to propose establishment of an NSF Engineering Research Center in Microsystems. The proposal is weak in multiple critical areas. Details about how the equipment enhances the department and how the tool and system would complement existing resources are sketchy. The goals are reasonable and the work plan is adequate, but the case that these new capabilities would enhance the department's national reputation, which is a necessity in the NSF ERC competition, is not made. Details explaining benefits of the new equipment over existing equipment are inadequate and unconvincing. There seems to be no commitment to staff and service contracts to ensure a useful lifetime for this expensive, complex equipment. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 005ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Geomechanics Laboratory for New Energy Resources

PRINCIPAL INVESTIGATOR: Jongwon Jung

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 3 (of 5 points)
B.2 14 (of 18 points)
B.3 16 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes No x

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No

G. Total Score:

87

 (of 100 points)

	YEAR 1	YEAR 2
SPECIFIC BUDGETARY RECOMMENDATIONS:		
Requested Amount:	<u>\$96,239</u>	<u>\$0</u>
Recommended Amount:	<u>\$0</u>	<u>\$0</u>

Civil and environmental engineering faculty at LSU request funds to acquire equipment for energy research related to shale gas, hydrate-bearing sediments, geothermal energy and CO₂ sequestration. The equipment, needed for both teaching and research purposes, will allow shear strength testing of soil and rock at extreme pressures and temperatures, and measurements of pressure wave velocities in rock. These studies are grouped under the general topic of geomechanics, with participants from both departments. Faculty qualifications are appropriate to the project. Generally the proposal is well prepared, but with several weaknesses. The project rationale describing how the equipment will enhance the department is well done, but discussion of how the new equipment complements existing resources lacks important details. The same criticism applies in the work plan sections and descriptions of goals and objectives. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 006ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: A Mixed GPU/FPGA/Manycore Accelerator Laboratory

PRINCIPAL INVESTIGATOR: David Koppelman

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 15 (of 18 points)
B.3 17 (of 20 points)
B.4 5 (of 5 points)
B.5 1 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

90

 (of 100 points)

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

SPECIFIC BUDGETARY
RECOMMENDATIONS:

Requested Amount:

\$98,372

Recommended Amount:

\$0

Funding is requested for the acquisition of multiple sets of two types of GPU accelerators to replace the rapidly aging and outdated GPU accelerators currently being used for teaching and research in LSU's School of Electrical Engineering & Computer Science. The PI argues that the rapid pace of computer hardware development has resulted in the equally rapid obsolescence of existing hardware, so, to maintain appropriate levels of teaching and research, hardware needs replacement frequently. This is critical to LSU's efforts to assist Baton Rouge to become a recognized digital media center. Faculty members are well qualified to use the equipment effectively for instruction and research. The rationale for the project and discussion of how it will enhance the School's teaching and research capabilities are well presented. The equipment, though, will not complement but replace existing equipment, an expensive proposition in a lean budget year. The panel does not recommend funding for this project.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 007ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Acquiring Next Generation 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 5 (of 5 points)
A.3 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)

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)

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 14 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

87

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$86,100</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

Faculty from LSU's Department of Civil and Environmental Engineering request funds to acquire a non-contact 3-D coordinate measuring machine to enhance capabilities for structural engineering and mechanics research. The equipment, which allows the displacement of large structures under stress to be measured in three dimensions, will improve research capabilities and increase competitiveness for federal research grants. Research on large structures like roads and dams is vital to solving problems related to our nationally decaying infrastructure. A good case is made for how the equipment will improve the department's national reputation and competitiveness. Although there are no major weaknesses in the proposal, the sections on curriculum, student quality, faculty development and enhanced economic development for Louisiana could be much stronger. The panel does not recommend funding the proposal.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 008ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Enhancement of Metrology Capability for Detecting Single
Molecules in Micro/nanofluidics

PRINCIPAL INVESTIGATOR: Sunggook Park

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 15 (of 18 points)
B.3 17 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

90

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$109,277</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This is an exciting state-of-the-art proposal with potential for long-term significant results. The work plan is extremely ambitious, as are the stated goals. The investigators are highly qualified and the existence of NIH and NSF funding is commendable. The section concerning linking the goals to the existing work and capabilities, however, is not very well described. This proposal would be more competitive if the linkages were more accurately and clearly described. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 009ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: A Solar Energy Supplied Heterogeneous Computing Cluster for
Research and Instruction

PRINCIPAL INVESTIGATOR: Lu Peng

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 14 (of 18 points)
B.3 17 (of 20 points)
B.4 3 (of 5 points)
B.5 2 (of 2 points)
B.6 3 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

82

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$135,000</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This proposal requesting funds to acquire a solar energy powered computing cluster is well written. The stated goals are ambitious, though somewhat vague. The case for the project's feasibility is not made very convincingly. The work plan is very simple, but does not include application to existing or proposed projects. The panel believes that the relationship among the four existing projects is tenuous at best. The proposal does not provide specific performance measures, and the overall plan seems somewhat preliminary. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 010ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Brighter X-ray Source for Catalyst Characterization

PRINCIPAL INVESTIGATOR: James Spivey

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 16 (of 18 points)
B.3 17 (of 20 points)
B.4 4 (of 5 points)
B.5 1 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score: 92 (of 100 points)

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

SPECIFIC BUDGETARY RECOMMENDATIONS:	Requested Amount:	YEAR 1	YEAR 2
		<u>\$76,425</u>	<u>\$0</u>
	Recommended Amount:	<u>\$76,425</u>	<u>\$0</u>

(if additional funds become available)

Funding to construct a beam-line for X-ray absorption spectroscopy (XAS) at the CAMD synchrotron is requested. This analytical technique is made possible through the higher X-ray energies and 10X increase in flux achieved through the addition of an NSF-funded multi-pole wiggler to the synchrotron ring, allowing XAS characterization of bonding, oxidation states and crystallinity of catalysts containing small concentrations of high atomic number metals. This research capability is important for the US DOE's \$12.5 million Energy Frontier Research Center for Atomic Level Catalyst Design grant that was awarded in 2009. The project's rationale is thoroughly presented, in substantial scientific detail. The impact on existing resources is similarly detailed. Project goals and objectives are clearly stated and divided into specific points. The work plan describes different activities designed to achieve goals. However, discussion of the potential for achieving eminence is primarily a description of how the individuals involved in the proposal and CAMD have already achieved eminence. Despite this admission, the panel recommends full funding if additional resources become available.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 011ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Acquisition of a Strong Reaction Floor for Large-scale Testing of Coastal Infrastructure Systems

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 17 (of 18 points)
B.3 19 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

98

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$125,000</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$125,000</u>

This well-written, complete proposal is highly recommended for full funding. The primary goal of the project is to establish a strong reaction floor in LSU's new Structural Systems and Materials Laboratory (SSML). The applicant makes a very strong case for how the proposed equipment and related experimental research will positively impact Louisiana's coastal infrastructure and, the PI also claims, help to provide advanced solutions through large-scale structural testing to address the aging infrastructure problems facing the nation. The panel believes that this project has a very strong potential to increase economic development in the State. The expertise of participating faculty and the PI is very high. The panel's sole criticism is that the relationship of the work plan to existing projects could be better described. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 012ENGA-13

INSTITUTION: Louisiana State University and A&M College

TITLE OF PROPOSAL: Development of a Grating-Based X-ray Interferometer at the LSU
CAMD Tomography Beamline: Imaging Flow inside Pressure Cells

PRINCIPAL INVESTIGATOR: Clinton Willson

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 17 (of 18 points)
B.3 17 (of 20 points)
B.4 5 (of 5 points)
B.5 1 (of 2 points)
B.6 3 (of 6 points)
B.7 Yes No x

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No

G. Total Score:

88

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$147,065</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

The PI's team, consisting of three faculty from two LSU departments and a CAMD staff member, seeks funds to acquire a grating-based X-ray interferometer for CAMD. The instrumentation is needed for materials research performed in pressure cells in which the absorption-based tomography synchrotron analysis technique does not work. X-ray interferometry phase contrast imaging offers a solution to this problem. The work plan and the section on achieving national eminence are well done. The proposal, however, has several weaknesses. The project rationale focuses only on how CAMD will be improved, not on how the interferometer will impact the faculty's home departments. The impact on existing resources section contains few specifics. The goals and objectives are discussed but never specifically listed. It is unclear to the panel how the new capability would be integrated into the curricula since the section concerning the impact of the project on students was, at best, minimal. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 013ENGA-13

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancement of LTU Structural Testing Laboratory

PRINCIPAL INVESTIGATOR: Erez Allouche

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 18 (of 18 points)
B.3 19 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

97

 (of 100 points)

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

SPECIFIC BUDGETARY RECOMMENDATIONS:	Requested Amount:	<u>\$126,257</u>
	Recommended Amount:	<u>\$126,257</u>

Upgrading Louisiana Tech's College of Engineering and Science Structures Laboratory is the focus of this application. The lab is involved in mechanically testing large-scale concrete and steel structures that are used in the construction of bridges, highways and buildings. Upgraded equipment will significantly increase capabilities for tensile, compression, shear and flexure testing, and provide a much-improved teaching environment for undergraduate and graduate students in an area of national need -- our crumbling infrastructure. The equipment will improve research capabilities of existing faculty and likely of new faculty in advanced cementitious materials. Goals are clear and the work plan links with them well. The major impact of the project on the curriculum is clearly described, as are the impacts on attracting students and improving faculty effectiveness. The equipment is clearly identified, the maintenance is good, and the faculty are well qualified to use the instruments efficiently. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 014ENGA-13

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Enhancement of Undergraduate Material Testing Laboratory

PRINCIPAL INVESTIGATOR: Arun Jaganathan

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 17 (of 18 points)
B.3 17 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

94

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$33,007</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$33,007</u>

Louisiana Tech requests funding to acquire two fatigue testing machines for the undergraduate Materials Testing Laboratory in Civil Engineering. One machine is designed for bending fatigue testing and the other for rotating beam fatigue testing. The University currently has no fatigue testing capability. Since failure by fatigue is a common failure mode, the PI and his team validly argue that instruction of students in this area is critical and that the new equipment will greatly improve fracture mechanics instruction of about 700 students from three departments. This proposal presents the need for and describes the impact of the new equipment convincingly. The rationale was exceptionally well stated. The project goals are simple, brief and clear. The work plan provides details that mesh well with the goals. Although the section on achieving eminence is somewhat weak, for the modest funding requested the impact per dollar should be great. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 015ENGA-13

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Engine Research for Efficiency and Sustainability Lab Enhancement

PRINCIPAL INVESTIGATOR: Erica Murray

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)

C. Equipment

(Total of 10 Points)

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

E. Economic and/or Cultural Development and Impact

(Total of 12 Points)

E.1 1 (of 2 points)
E.2a 6 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 14 (of 18 points)
B.3 13 (of 20 points)
B.4 3 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 10 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes No x

G. Total Score:

75

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$73,380</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This application appears to the panel to be very narrowly focused on increasing the hands-on learning of undergraduates who enroll in the Internal Combustion Engines course. The equipment requested is state-of-the-art, but the proposal's goals are modest. The work plan is appropriate for the scope of the proposal, and the participating faculty members are competent to accomplish the work. The panel expects that the degree of enhancement that would result if the projects are carried out would be minimal. Overall, the proposal lacks the strength to be competitive, and thus the panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 016ENGA-13

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Acquisition of Raman Microscopy Capability for Micro/Nanosystems
Laboratory to Enhance Four Degree Programs

PRINCIPAL INVESTIGATOR: Adarsh Radadia

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 16 (of 18 points)
B.3 17 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 10 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes _____ No x

G. Total Score:

88

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$80,540</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

The applicant seeks funds to acquire a Raman microscopy system to be integrated into the existing Micro/Nanosystems Engineering teaching laboratory that supports the ABET-accredited B.S. degree in Nanosystems Engineering (NSE). Although the proposal stresses that this tool will "enable chemical characterization of nanomaterials", its lateral point-to-point resolution is certainly not in the nanoscale range. The equipment will be used primarily for research, not for teaching labs. The equipment, then, seems to have limited impact on the faculty since so much of their focus is on teaching. The discussion of how the equipment will enhance the department and complement existing facilities is well done. Project goals are clearly described and the work plan includes a timetable and chart of how the equipment will be implemented in NSE courses. However, the panel doubts that this single piece of equipment will have a significant impact on improving the eminence of this well-recognized department. The economic impact to Louisiana, because of NSE students' familiarity with this piece of equipment, is likely modest. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 017ENGA-13

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Sustainable Engineering Laboratory

PRINCIPAL INVESTIGATOR: Aziz Saber

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)

C. Equipment

(Total of 10 Points)

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

E. Economic and/or Cultural Development and Impact

(Total of 12 Points)

E.1 1 (of 2 points)
E.2a 6 (For S/E)
or (of 10 points)
E.2b (For NS/NE)

B. The Enhancement Plan

(Total of 56 Points)

B.1 3 (of 5 points)
B.2 13 (of 18 points)
B.3 13 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 10 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes No x

G. Total Score:

73

 (of 100 points)

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

SPECIFIC BUDGETARY
RECOMMENDATIONS:

Requested Amount:

\$82,500

Recommended Amount:

\$0

This proposal related to the development of a sustainable engineering laboratory in the context of a materials engineering laboratory is well motivated. However, the proposal's stated goals, though simple, are also vague. The proposed projects and experiments are diverse and appear to be disconnected from the strategic goals in this proposal. Overall, the proposal lacks the cohesiveness that is required to be competitive. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 018ENGA-13

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 16 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 10 (of 12 points)

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	Requested Amount:	<u>\$68,553</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

The proposal's goals and objectives -- to acquire testing equipment to study geothermal effects -- are very broad. While the work plan appears to be reasonable, the case for the enhancement of eminence is weak, although faculty expertise is adequate. The equipment requested is very specific, but without a demonstrably strong connection to the project's broad goals and objectives. The potential contribution to economic development is unconvincing as described. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 019ENGA-13

INSTITUTION: Louisiana Tech University

TITLE OF PROPOSAL: Acquisition of Superpave Asphalt Binder Testing Equipment for
Highway Engineering Laboratory

PRINCIPAL INVESTIGATOR: Nazimuddin Wasiuddin

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 18 (of 18 points)
B.3 19 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes No x

G. Total Score:

96

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$42,565</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$42,565</u>

This is an excellent, well-presented proposal to acquire funding for asphalt binder testing equipment. While the immediate benefits seem to be primarily academic, the longer-term impacts appear to be significant for research. The goals and objectives and the work plan are well stated and thoroughly explained. The expertise of the investigators is commendable and the project's potential contribution to Louisiana's economic development is very promising. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 020ENGA-13

INSTITUTION: McNeese State University

TITLE OF PROPOSAL: Enhancing Student's Marketability With Utilizing Fundamental
Engineering Equipment

PRINCIPAL INVESTIGATOR: Dimitrios Dermisis

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 15 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 9 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes _____ No x

G. Total Score:

84

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$86,167</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This McNeese State University PI seeks funds to improve teaching effectiveness in the Civil Engineering Hydraulics Laboratory through the acquisition of new equipment and software for erosion modeling to enable students to perform hands-on experiments in sediment transport, soil shear strength, heat transfer and stress-strain in structures. The equipment and software will allow outreach to local high school and younger students for exposure to STEM career opportunities. Overall, the proposal is good. The descriptions of how the equipment will enhance the Civil Engineering department and its impact on existing resources are well done. The goals, objectives and work plan are adequate, but could be improved with additional details and a broader perspective. The question of how the equipment would enhance the eminence of the department also could be stronger. Moreover, the equipment maintenance plan is not clearly described. In a lean budget year, the panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 021ENGA-13

INSTITUTION: Nicholls State University

TITLE OF PROPOSAL: High Performance Geospatial Computing Lab

PRINCIPAL INVESTIGATOR: Balaji Ramachandran

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 18 (of 18 points)
B.3 18.5 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No

G. Total Score:

95.5

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$172,428</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$172,428</u>

The panel recommends full funding for this well-prepared proposal for the development of a high-performance geospatial computing laboratory. Proposal goals include preparing students, assisting faculty, and providing continuing education for performing geospatial approaches in geomatics. The work plan is excellent, and the contribution of the project to the enhancement of eminence in this unique program will be significant. The panel believes there is a strong potential for this project to contribute much to economic development in Louisiana.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 022ENGA-13

INSTITUTION: Tulane University

TITLE OF PROPOSAL: Acquisition of an Atomic Force Microscope (AFM) to Enhance
Research and Education at Tulane

PRINCIPAL INVESTIGATOR: Noshir Pesika

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 16 (of 18 points)
B.3 18 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes _____ No x

G. Total Score: 89 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$125,506</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This proposal requests funds to acquire an atomic force microscope (AFM) for Tulane's Department of Chemical and Biomolecular Engineering (CBE). Because the AFM has electrochemical and force-displacement capabilities, it will be used for fundamental research on micro- and nano-scale surface structures and tribological properties of surface layers. The AFM would certainly improve the capabilities of the CBE department, especially those of the PI, and increase collaborations among faculty within and outside Tulane. In the goals and objectives section the applicant describes many interesting possibilities for using the equipment, but few specific are included. The work plan links the new capabilities of the AFM with specific activities of the PI and three CBE faculty. The equipment will have a modest impact on the CBE curriculum. The equipment description section lacks specifics regarding special and/or unique capabilities. There appears to be no plan for maintenance and support of the equipment. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 023ENGA-13

INSTITUTION: Tulane University

TITLE OF PROPOSAL: Acquisition of High-End Confocal Laser Scanning Microscopy for
Bioengineering and Life Science Applications at Tulane University

PRINCIPAL INVESTIGATOR: Anne Robinson

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 18 (of 18 points)
B.3 19 (of 20 points)
B.4 3.5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes _____ No x

G. Total Score: 96.5 (of 100 points)

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

		<u>YEAR 1</u>	<u>YEAR 2</u>
SPECIFIC BUDGETARY RECOMMENDATIONS:	Requested Amount:	<u>\$342,184</u>	<u>\$0</u>
	Recommended Amount:	<u>\$342,184</u>	<u>\$0</u>

Seventeen research-active investigators from Tulane University seek to acquire a laser scanning confocal microscope to help support the work of extremely high-performing faculty from three departments. A strong case is made for the enhancement of their research efforts and the subsequent benefit to the eminence of the institution that the additional instrument will bring. Tulane pledges to provide modest matching support for the instrumentation. The proposal is exceptional, well written and complete. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 024ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: A Process Control Systems Technology Laboratory for
Undergraduate Instruction and Research

PRINCIPAL INVESTIGATOR: Cherif Aissi

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 14 (of 18 points)
B.3 13 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 9 (of 12 points)

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	Requested Amount:	<u>\$115,796</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This University of Louisiana at Lafayette PI seeks to acquire funding for additional equipment for an undergraduate process control laboratory. The project's modest goals include upgrading the laboratory and training students. The work plan is clear but not detailed. The cases for how the acquisition will lead to increased eminence for the program and to what extent economic development of the region will be affected are unconvincing. The experience of the principal investigator, who is critical to the success of the project, appears somewhat modest. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 025ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Laboratory Enhancement for New Visualization Interfaces

PRINCIPAL INVESTIGATOR: Christoph Borst

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 12 (of 18 points)
B.3 13 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 9 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score: 74 (of 100 points)

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

SPECIFIC BUDGETARY
RECOMMENDATIONS:

Requested Amount:

\$75,634

Recommended Amount:

\$0

The ULL applicant is seeking funds to acquire hybrid (cross-dimensional) visualization interfaces that integrate handheld touch devices with 3-D displays and trackers to support new interaction styles. The proposal's stated goals are broad but not specific, and the case for the project's contribution to economic development is weak. It was unclear how the proposed equipment will significantly enhance existing resources for 3-D visualization capability. While the work plan is replete with examples, the lack of specific connection to the proposed equipment – up-to-date interface and visualization technology for game development, virtual reality, and 3-D human-computer interaction – is troubling. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 026ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Acquisition of Simultaneous Thermal Analysis System for Materials Characterization

PRINCIPAL INVESTIGATOR: Ahmed Khattab

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 15 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 9 (of 12 points)

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.)

SPECIFIC BUDGETARY	Requested Amount:	<u>\$76,580</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

Funding is sought to acquire a Simultaneous Thermal Analyzer (STA) for characterization of the thermal properties and processing behaviors of materials, like phase changes and melting points. The project's goals are clearly stated, the work plan has good milestones, and the explanation of how the equipment will enhance the affected departments and existing resources within multiple existing laboratories is reasonable. The proposal, though, contains excessive hyperbole that reduces its quality. In addition, the case for how the equipment will enhance departmental eminence, especially in the Laboratory for Composite Materials, is weak. The panel finds little justification for the request of a full year of GRA support. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 027ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Enhancement of Infrastructure and Materials Laboratory Through
Advanced Rheometer System for Novel Materials Characterization

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 16 (of 18 points)
B.3 17 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 11 (of 12 points)

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	Requested Amount:	<u>\$76,294</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This ULL PI seeks funds to add a state-of-the-art rheometer system to the Infrastructure and Transportation Materials Laboratory to support educational and research activities in the Departments of Civil Engineering, Industrial Technology, and Chemical Engineering. The system supports development of advanced smart composite materials aimed at infrastructure applications including roads, buildings and airports. The educational and research rationales are described well, and the equipment will not duplicate existing equipment or capabilities. One 12-month period is perhaps too short to accomplish all the proposed tasks. The panel feels that it would be better if the PI did not have to train users and directly oversee the equipment, although he is very qualified to use the equipment for teaching and research. In a lean economic climate such as this, the panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 028ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Acquisition of Equipment for Enhancing Microelectronic Research Lab

PRINCIPAL INVESTIGATOR: Mohammad Madani

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 3 (of 5 points)
B.2 13 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 9 (of 12 points)

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:	<u>\$122,340</u>
	Recommended Amount:	<u>\$0</u>

Funding is requested to acquire a commercial chemical vapor deposition (CVD) system to add to an otherwise well-equipped Center for Advanced Computer Studies (CACS) lab in the ULL Department of Electrical and Computer Engineering. The requested equipment will promote research development in nanotechnology and smart sensors. Good descriptions of how the equipment will enhance the department and CACS and how it will complement existing equipment are provided. Although the goals are clearly stated, a major concern is that there is no proof (testing the CVD system) that the proposed equipment actually performs as expected, specifically regarding deposition of the silica aerogel. The work plan described is overly optimistic; the timetable is too short to accomplish stated goals. The description of how this project will enhance economic development in Louisiana is weak. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 029ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Thermal Analysis System for Integration with Polymer Engineering
Teaching and Research

PRINCIPAL INVESTIGATOR: R. Devesh Misra

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 17 (of 18 points)
B.3 17.5 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

93.5

 (of 100 points)

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

SPECIFIC BUDGETARY Requested Amount: \$128,900

RECOMMENDATIONS: Recommended Amount: \$128,900
(if additional funds become available)

This is a very good proposal from a group of highly qualified PIs to acquire a thermal analysis system that would have a significant curricular impact on both students and faculty. The work plan, which concentrates on project support, is simple. The goals and objectives, however, are overly broad and not sufficiently specific. The proposal's performance measures are very well presented and explained. It is clear that the additional resources will help to maintain a high-quality, successful research program. The panel recommends full funding if additional resources become available.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 030ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Optical Modulation Analyzer for Fiber Communications Program at
EECE Department

PRINCIPAL INVESTIGATOR: Zhongqi Pan

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 16 (of 18 points)
B.3 17 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

95

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$209,950</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$209,950</u>

This proposal, with goals significantly focused on student outcomes, was written to obtain funding for a state-of-the-art optical modulation analyzer needed in order to develop a high-capacity communication system for ULL's Electrical Engineering and Computer Engineering (EECE) department. The equipment is key for advanced research on ultra-high-speed telecommunication systems and novel devices. The project's work plan is well described, as is the plan for achieving and measuring desired outcomes. The principal investigator is highly qualified and the panel believes that this project's chances for success are very high. The panel recommends full funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 031ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: SmartBlue: A Cognitive Radio Networking Testbed

PRINCIPAL INVESTIGATOR: Dmitri Perkins

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 18 (of 18 points)
B.3 16 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes No x

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 9 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No

G. Total Score:

87

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$267,316</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

The overall goal of this fairly good proposal is to develop a cognitive wireless radio network, which is a testbed for studying self-adaptive and cognitive radio networks. The proposal's benchmarked goals are well stated and the work plan is good. The proposal could be strengthened, nevertheless, by more evidence of collaboration. The record of the principal investigator, particularly in the area of external funding, is modest. There does not appear to be a significant plan for assessment of the desired outcomes. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 032ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: Development of Structural Impact Laboratory to Enhance Teaching and Research in Structural Crashworthiness and Failure in the Department of Civil and Mechanical Engineering at UL Lafayette

PRINCIPAL INVESTIGATOR: Xiaoduan Sun

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)

C. Equipment

(Total of 10 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 17 (of 18 points)
B.3 17 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 5 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

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.)

SPECIFIC BUDGETARY Requested Amount: \$111,000

RECOMMENDATIONS: Recommended Amount: \$111,000
(if additional funds become available)

ULL's Departments of Civil Engineering and Mechanical Engineering propose sharing an instrumented impact test system for the Impact Laboratory. Impact testing capabilities do not currently exist in either department. This deficiency should be remedied, it is argued, since the mechanical elements of materials and structures often behave differently when stressed at high strain rates. The application is focused on the point that many career paths for civil and mechanical engineering students require knowledge of the impact properties of materials and structures. The PI claims that the project will have a positive impact on student recruitment and faculty effectiveness. The equipment would provide impetus for development of a new undergraduate/graduate course combining experimental and computational methods to evaluate crashworthiness of structures. Even though the PI addresses most of the proposal sections fairly well, the panel has a few concerns. As presented, the work plan occurs over a much-too-short twelve months. Although the equipment is clearly described, there is no description of the size of the new lab space and no discussion of equipment maintenance issues. Nevertheless, the panel recommends full funding if additional funds become available.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 033ENGA-13

INSTITUTION: University of Louisiana at Lafayette

TITLE OF PROPOSAL: A Senior Undergraduate Laboratory for RF and Wireless
Communications

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 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)

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)

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 18 (of 18 points)
B.3 17.5 (of 20 points)
B.4 5 (of 5 points)
B.5 2 (of 2 points)
B.6 6 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 12 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

97.5

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$138,400</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$138,400</u>

This is an excellent proposal concerning an important topic that the panel highly recommends for full funding. The proposal's primary objective is development of a radio frequency wireless laboratory with a prominent focus on retention of undergraduate students. The presentation of the goals and objectives is excellent, as is the associated work plan. The laboratory will also support the Ph.D. program in systems engineering. A good case is made for the contribution of the project to the enhancement of eminence. Last but not least, the principal investigator is highly qualified to lead the project and obtain good results.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 034ENGA-13

INSTITUTION: University of New Orleans

TITLE OF PROPOSAL: Robotics Lab

PRINCIPAL INVESTIGATOR: AbdulRahman Alsamman

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)

C. Equipment

(Total of 10 Points)

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

E. Economic and/or Cultural Development and Impact

(Total of 12 Points)

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

B. The Enhancement Plan

(Total of 56 Points)

B.1 5 (of 5 points)
B.2 15 (of 18 points)
B.3 12 (of 20 points)
B.4 4 (of 5 points)
B.5 2 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes No x

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 5 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No

G. Total Score:

68

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$98,897</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

This proposal seeks funding to create and properly equip a robotics laboratory for the UNO Department of Electrical Engineering's faculty and students. A new multidisciplinary course using the new lab is also envisioned. The proposal's stated goals and associated work plan appear to be very modest. Some of the writing in the proposal is stilted. The case for the project's potential to enhance eminence of the institution is unconvincing, and the expertise of the participating faculty appears to be very limited. The panel does not recommend funding.

RATING FORM FOR ENHANCEMENT INSTRUCTIONAL AND RESEARCH EQUIPMENT REQUESTS

PROPOSAL NUMBER: 035ENGA-13

INSTITUTION: University of New Orleans

TITLE OF PROPOSAL: A Multimedia Based Peer Instruction Environment for Curriculum
Enhancement and Distance Learning

PRINCIPAL INVESTIGATOR: Huimin Chen

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)

C. Equipment

(Total of 10 Points)

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

E. Economic and/or Cultural Development and Impact

(Total of 12 Points)

E.1 1 (of 2 points)
E.2a 6 (For S/E)
or (of 10 points)
E.2b _____ (For NS/NE)

B. The Enhancement Plan

(Total of 56 Points)

B.1 4 (of 5 points)
B.2 14 (of 18 points)
B.3 15 (of 20 points)
B.4 4 (of 5 points)
B.5 1 (of 2 points)
B.6 4 (of 6 points)
B.7 Yes x No _____

D. Faculty and Staff Expertise

(Total of 12 Points)

D.1 8 (of 12 points)

F. Previous Support Fund Awards

(No Points Assigned)

G.1 Yes x No _____

G. Total Score:

75

 (of 100 points)

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

SPECIFIC BUDGETARY	Requested Amount:	<u>\$123,932</u>
RECOMMENDATIONS:	Recommended Amount:	<u>\$0</u>

Funding is requested to acquire equipment and to develop an Image Analysis and Scene Understanding laboratory to enhance the Department of Electrical Engineering's teaching and research capabilities at the graduate and undergraduate levels through promotion of conceptual and critical thinking, and peer-based teaching. The PI describes how the equipment will enhance the department and how it complements existing capabilities. Project goals are listed but not clearly explained. The work plan does not adequately describe efforts to achieve stated goals. More details regarding the impact of the equipment on the curriculum, as well as students and faculty, would have strengthened the application. It is unclear to the panel how the equipment, presented as a list in a table, is related to the enhancement plan. Lastly, the budget seems excessive, and personnel support requested is not well justified. The panel does not recommend funding.

Appendix A

Summary List of Proposals

**Proposals Submitted to the Traditional Enhancement Program -Engineering A (Chemical, Civil, Electrical, etc.)
for the FY 2012-13 Review Cycle**

Proposal Number	PI Name	Institution	Duration	Equipment/ Non Equipment	New/ Continuation	Project Title	Amount Requested		
							Year 1	Year 2	Total
001ENG-13	Shupe, Todd	Louisiana State University And A&M College - Agricultural Center	2	E	N	Enhancement of Preservative-Treated Wood Recycling Research at the Louisiana Forest Products Development Center	\$277,351.00	\$0.00	\$277,351.00
002ENG-13	Ajmera, Pratul	Louisiana State University And A&M College - Baton Rouge	1	E	N	Reactive Ion Etching System for Fabrication of Semiconductor Materials, Device and Microstructures	\$94,540.00	\$0.00	\$94,540.00
003ENG-13	Cai, Steve C. S.	Louisiana State University And A&M College - Baton Rouge	1	E	N	Acquisition of Instrumentation to Support Sustainable, Windstorm-Resilient, and Energy Efficient Coastal Communities	\$150,000.00	\$0.00	\$150,000.00
004ENG-13	Choi, Jin-Woo	Louisiana State University And A&M College - Baton Rouge	1	E	N	Advanced Tools for Rapid Prototyping of Mold Inserts for Mass Production of Multi-Scale Components	\$441,106.00	\$0.00	\$441,106.00
005ENG-13	Jung, Jongwon	Louisiana State University And A&M College - Baton Rouge	2	E	N	Geomechanics Laboratory for New Energy Resources	\$96,239.00	\$0.00	\$96,239.00
006ENG-13	Koppelman, David	Louisiana State University And A&M College - Baton Rouge	1	E	N	A Mixed GPU/FPGA/Manycore Accelerator Laboratory	\$98,372.00	\$0.00	\$98,372.00
007ENG-13	Okeil, Ayman	Louisiana State University And A&M College - Baton Rouge	1	E	N	Acquiring Next Generation Non-contact Measurement System for Material and Structural Testing	\$86,100.00	\$0.00	\$86,100.00
008ENG-13	Park, Sunggook	Louisiana State University And A&M College - Baton Rouge	1	E	N	Enhancement of metrology capability for detecting single biomolecules in micro/nanofluidics	\$109,277.00	\$0.00	\$109,277.00
009ENG-13	Peng, Lu	Louisiana State University And A&M College - Baton Rouge	1	E	N	A Solar Energy Supplied Heterogeneous Computing Cluster for Research and Instruction	\$135,000.00	\$0.00	\$135,000.00
010ENG-13	Spivey, James	Louisiana State University And A&M College - Baton Rouge	2	E	N	Brighter X-ray Source for Catalyst Characterization	\$76,425.00	\$0.00	\$76,425.00
011ENG-13	Voyiadjis, George	Louisiana State University And A&M College - Baton Rouge	1	E	N	Acquisition of a Strong Reaction Floor for Large-scale Testing of Coastal Infrastructure Systems	\$125,000.00	\$0.00	\$125,000.00
012ENG-13	Willson, Clinton	Louisiana State University And A&M College - Baton Rouge	1	E	N	Development of a Grating-Based X-ray Interferometer at the LSU CAMD Tomography Beamline: Imaging Flow inside Pressure Cells	\$147,065.00	\$0.00	\$147,065.00
013ENG-13	Allouche, Erez	Louisiana Tech University	1	E	N	Enhancement of LTU Structural Testing Laboratory	\$126,257.00	\$0.00	\$126,257.00

Proposal Number	PI Name	Institution	Duration	Equipment/ Non Equipment	New/ Continuation	Project Title	Amount Requested		
							Year 1	Year 2	Total
014ENG-13	Jaganathan, Arun	Louisiana Tech University	1	E	N	Enhancement of Undergraduate Material Testing Laboratory	\$33,007.00	\$0.00	\$33,007.00
015ENG-13	Murray, Erica	Louisiana Tech University	1	E	N	Engine Research for Efficiency and Sustainability Lab Enhancement	\$73,380.00	\$0.00	\$73,380.00
016ENG-13	Radadia, Adarsh	Louisiana Tech University	1	E	N	Acquisition of Raman Microscopy Capability for Micro/Nanosystems Laboratory to Enhance Four Degree Programs	\$80,540.00	\$0.00	\$80,540.00
017ENG-13	Saber, Aziz	Louisiana Tech University	1	E	N	Sustainable Engineering Laboratory	\$82,500.00	\$0.00	\$82,500.00
018ENG-13	Wang, Jay	Louisiana Tech University	1	E	N	Enhancement of the Geotechnical Engineering Laboratory	\$68,553.00	\$0.00	\$68,553.00
019ENG-13	Wasiuddin, Nazimuddin	Louisiana Tech University	1	E	N	Acquisition of Superpave Asphalt Binder Testing Equipment for Highway Engineering Laboratory	\$42,565.00	\$0.00	\$42,565.00
020ENG-13	Dermis, Dimitrios	McNeese State University	1	E	N	Enhancing Student's Marketability With Utilizing Fundamental Engineering Equipment	\$86,167.00	\$0.00	\$86,167.00
021ENG-13	Ramachandran, Balaji	Nicholls State University	1	E	N	High Performance Geospatial Computing Lab	\$172,428.00	\$0.00	\$172,428.00
022ENG-13	Pesika, Noshir	Tulane University	1	E	N	Acquisition of an Atomic Force Microscope (AFM) to enhance research and education at Tulane	\$125,506.00	\$0.00	\$125,506.00
023ENG-13	Robinson, Anne	Tulane University	2	E	N	Acquisition of High-End Confocal Laser Scanning Microscopy for Bioengineering and Life Science Applications at Tulane University	\$342,184.00	\$0.00	\$342,184.00
024ENG-13	Aissi, Cherif	University of Louisiana at Lafayette	1	E	N	A Process Control Systems Technology Laboratory for Undergraduate Instruction and Research	\$115,796.00	\$0.00	\$115,796.00
025ENG-13	Borst, Christoph	University of Louisiana at Lafayette	1	E	N	Laboratory Enhancement for New Visualization Interfaces	\$75,634.00	\$0.00	\$75,634.00
026ENG-13	Khattab, Ahmed	University of Louisiana at Lafayette	1	E	N	Acquisition of Simultaneous Thermal Analysis System for Materials Characterization	\$76,580.00	\$0.00	\$76,580.00

Proposal Number	PI Name	Institution	Duration	Equipment/ Non Equipment	New/ Continuation	Project Title	Amount Requested		
							Year 1	Year 2	Total
027ENG-13	Khattak, Mohammad	University of Louisiana at Lafayette	1	E	N	Enhancement of Infrastructure and Materials Laboratory Through Advanced Rheometer System for Novel Materials Characterization	\$76,294.00	\$0.00	\$76,294.00
028ENG-13	Madani, Mohammad	University of Louisiana at Lafayette	1	E	N	Acquisition of Equipment for Enhancing Microelectronic Research Lab	\$122,340.00	\$0.00	\$122,340.00
029ENG-13	Misra, R. Devesh	University of Louisiana at Lafayette	1	E	N	Thermal Analysis System for Integration with Polymer Engineering Teaching and Research	\$128,900.00	\$0.00	\$128,900.00
030ENG-13	Pan, Zhongqi	University of Louisiana at Lafayette	1	E	N	Optical Modulation Analyzer for Fiber Communications Program at EECE Department	\$209,950.00	\$0.00	\$209,950.00
031ENG-13	Perkins, Dmitri	University of Louisiana at Lafayette	1	E	N	SmartBlue: A Cognitive Radio Networking Testbed	\$267,316.00	\$0.00	\$267,316.00
032ENG-13	Sun, Xiaoduan	University of Louisiana at Lafayette	1	E	N	Development of Structural Impact Laboratory to Enhance Teaching and Research in Structural Crashworthiness and Failure in the Department of Civil and Mechanical Engineering at UL Lafayette	\$111,000.00	\$0.00	\$111,000.00
033ENG-13	Thomas, George	University of Louisiana at Lafayette	1	E	N	A Senior Undergraduate Laboratory for RF and Wireless Communications	\$138,400.00	\$0.00	\$138,400.00
034ENG-13	Alsamman, AbdulRahman	University of New Orleans	1	E	N	Robotics Lab	\$98,897.00	\$0.00	\$98,897.00
035ENG-13	Chen, Huimin	University of New Orleans	1	E	N	A Multimedia Based Peer Instruction Environment for Curriculum Enhancement and Distance Learning	\$123,932.00	\$0.00	\$123,932.00

*The RFP restricts second year funding requests to no more than \$50,000.

Number of Proposals Submitted	35
Total Money Requested for First Year	\$4,614,601.00
Total Money Requested for Second Year	\$0.00
Total Money Requested	\$4,614,601.00

Appendix B

Rating Forms

Proposal Number: _____

Principal Investigator: _____

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BOARD OF REGENTS SUPPORT FUND ENHANCEMENT PROGRAM, FISCAL YEAR 2012-13

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. Guidelines should not be interpreted to exclude from eligibility departments and/or units engaged solely in instruction. Use the white space provided to explain the panel's ratings, especially on items given low scores. Attach additional pages, as necessary.

A. THE CURRENT SITUATION--Total of 10 points

- YES _____ NO _____ A.1 Has the applicant adequately described the institution and unit(s)/department(s) that will benefit from the proposed 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) or unit(s)?
- _____ of 5 pts. A.3 To what extent will the project complement and improve upon existing resources of the department(s) or unit(s)?

COMMENTS:

B. THE ENHANCEMENT PLAN--Total of 56 points

- _____ of 5 pts. B.1 Are the goals and objectives clearly stated? Can the objectives be completed within the timeframe detailed in the proposal?
- _____ of 18 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, a schedule of activities with benchmarks to be accomplished, and a description detailing how each objective will be evaluated?
- _____ of 20 pts. B.3 To what extent will the proposed project catapult the department(s) or 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 quality of curricular offerings and instructional methods within the affected department(s) or unit(s)? Appropriate to current thinking in the specific field(s) or discipline(s) of the proposed project, is reform of undergraduate education and/or teacher preparation encouraged?
- _____ of 2 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 6 pts. B.6 To what extent will the project contribute to improving the quality and effectiveness of faculty teaching and improve faculty pedagogical practices within the context of current thinking on reform of undergraduate education and teacher preparation, specific to field(s) or discipline(s) of the proposed project?
- No Points Given, but this is a required component. B.7 Does the proposal indicate how the Board of Regents or other entity will determine whether or not the project has been a success and the degree to which it has achieved its goals?

Proposal Number: _____

Principal Investigator: _____

Page 2 of 3

COMMENTS:

C. EQUIPMENT--Total of 10 points

- | | | |
|-----------------|-----|---|
| _____ of 6 pts. | C.1 | To what extent has the proposal established a relationship between the enhancement plan and the items of equipment requested? Is the equipment well-justified? Will it significantly enhance the existing technological capability of the department? Does it reflect current and projected trends in technology? |
| _____ of 1 pt. | C.2 | Has there been a thorough survey of the current equipment inventory and does the proposal plan to make full use of it? |
| _____ 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? |

COMMENTS:

D. FACULTY AND STAFF EXPERTISE--Total of 12 points

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

COMMENTS:

E. ECONOMIC AND/OR CULTURAL DEVELOPMENT AND IMPACT--Total of 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 university or consortium of universities, federal government agency)? |
|-----------------|-----|---|

NOTE TO REVIEWER: Depending on the discipline of the submitting department or unit, provide rating points for either E.2a OR E.2b:

- | | | |
|------------------|------|--|
| _____ of 10 pts. | E.2a | <u>For science/engineering proposals only:</u> To what extent will the project assist the submitting department(s)/unit(s) in promoting or enhancing the economic development of the State of Louisiana? |
| | E.2b | <u>For non-science/non-engineering proposals only:</u> To what extent will the project contribute to the academic and/or cultural resources of the State of Louisiana? |

COMMENTS:

Proposal Number: _____

Principal Investigator: _____

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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?

COMMENTS:

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 \$ _____

COMMENTS:

=====

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 2012)

Proposal Number: _____

Principal Investigator: _____

Page 1 of 3

**BOARD OF REGENTS SUPPORT FUND ENHANCEMENT PROGRAM, FISCAL YEAR 2012-13
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. Guidelines should not be interpreted to exclude from eligibility departments and/or units engaged solely in instruction. Use the white space provided to explain the panel's ratings, especially on items given low scores. Attach additional pages, as necessary.

A. THE CURRENT SITUATION--Total of 10 points

- | | | |
|-----------------|-----|--|
| YES_____NO_____ | A.1 | Has the applicant adequately described the institution and unit(s)/department(s) that will benefit from the proposed 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) or unit(s)? |
| _____ of 5 pts. | A.3 | To what extent will the project complement and improve upon existing resources of the department(s) or unit(s)? |

COMMENTS:

B. THE ENHANCEMENT PLAN--Total of 66 points

- | | | |
|------------------|-----|---|
| _____ of 5 pts. | B.1 | Are the goals and objectives clearly stated? |
| _____ of 23 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, a schedule of activities with benchmarks to be accomplished, and a description detailing how each objective will be evaluated? |
| _____ of 25 pts. | B.3 | To what extent will the proposed project catapult the department(s) or 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 quality of curricular offerings and instructional methods within the affected department(s) or unit(s)? Appropriate to current thinking in the specific field(s) or discipline(s) of the proposed project, is reform of undergraduate education and/or teacher preparation encouraged? |
| _____ of 2 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 6 pts. | B.6 | To what extent will the project contribute to improving the quality and effectiveness of faculty teaching and improve faculty pedagogical practices within the context of current thinking on reform of undergraduate education and teacher preparation, specific to field(s) or discipline(s) of the proposed project? |

C. FACULTY AND STAFF EXPERTISE--Total of 12 points

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

Proposal Number: _____

Principal Investigator: _____
Page 2 of 3

COMMENTS:

D. ECONOMIC AND/OR CULTURAL DEVELOPMENT AND IMPACT--Total of 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, another university or consortium of universities, federal government agency)?

NOTE TO REVIEWER: Depending on the discipline of the submitting department or unit, provide rating points for either D.2a OR D.2b:

_____ of 10 pts. D.2a For science/engineering proposals only: To what extent will the project assist the submitting department(s)/unit(s) in promoting or enhancing the economic development of the State of Louisiana?

D.2b For non-science/non-engineering proposals only: To what extent will the project contribute to the academic and/or cultural resources of the State of Louisiana?

COMMENTS:

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?

COMMENTS:

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

_____ of 100 points

Proposal Number: _____

Principal Investigator: _____
Page 3 of 3

SPECIFIC BUDGETARY RECOMMENDATIONS

Requested Amount:\$ _____ Recommended Amount:\$ _____

COMMENTS:

=====

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.2012)