BOARD OF REGENTS SUPPORT FUND

REVIEW OF COMPETITIVE PROPOSALS SUBMITTED FOR FUNDING CONSIDERATION IN THE INDUSTRIAL TIES RESEARCH SUBPROGRAM (ITRS)

FY 2022-23 COMPETITION

March 2023

REPORT OF THE FINAL PANEL
BOARD OF REGENTS SUPPORT FUND R&D PROGRAM
INDUSTRIAL TIES RESEARCH SUBPROGRAM (ITRS)

FY 2022-23

BACKGROUND INFORMATION

Twenty-four (24) proposals requesting a total of $2,466,875 in first-year funds were submitted for funding consideration in fiscal year (FY) 2022-23 to the Industrial Ties Research Subprogram (ITRS) of the Board of Regents Support Fund (BoRSF). Proposals were submitted in five targeted industry sectors including Advanced Materials and Manufacturing, Coastal and Water Management, Clean Technology and Energy, Digital Media and Enterprise Software, and Life Sciences and Bioengineering, as well as other disciplines as permitted in the RFP.

THE REVIEW PROCESS

The twenty-four (24) proposals submitted were each reviewed by two experts in their correlating fields. The ratings and reviews were submitted to Dr. Jennifer Miskimins, head of the Department of Petroleum Engineering at the Colorado School of Mines.

After careful consideration of all proposal reviews during March 2023, the final panel chair highly recommended five (5) proposals for a total of $481,673 in first-year funds. In total $1,294,282 was recommended over three (3) years.

Table I of this report contains the rank-order list of all proposals highly recommended for funding. Table II contains a rank-order list of proposals recommended for funding if additional monies become available. Table III lists the final panel chair and contributing consultants across all categories. These are followed by a compilation of written comments submitted by the discipline-based review panels for each of the highly recommended proposals. Appendix A contains a list of all ITRS proposals submitted, and Appendix B contains the rating form used by all consultants to evaluate proposals.

All proposals not recommended for funding (i.e., any proposal not listed in Table I) will receive debriefing material summarizing reviewer assessments of the project in July 2023, to assist applicants in development of future submissions to ITRS and other grant programs. These materials will be distributed via the PI LOGAN account used to submit the original proposal.

LETTERS OF SUPPORT FOR FUNDED PROJECTS

Unless otherwise indicated in panel recommendations, all ITRS awards are contingent upon receipt by the Board no later than **June 30, 2023**, of updated documentation from the provider(s) of the external match reconfirming commitment of the match pledged in the proposal. For subsequent project years, funding will be contingent upon receipt by the Board no later than **March 31** of the fiscal year prior to the award year of updated documentation from the provider(s) of the external match reconfirming commitment of the required second- and third-year external match. Letters (originals) from the partnering entity providing the required match must be furnished to the Board on company or agency letterhead and signed by authorized representatives of the companies or agencies.

Table I
Proposals Highly Recommended for Funding

Rank	#	Institution	Category	1st Year Request	1st Year Recommendation
1	014B-23	ULL	Clean Technology & Energy	$107,128	$107,128
1	024B-23	UNO	Advanced Materials & Manufacturing	$114,239	$114,239
3	012B-23	LaTech	Advanced Materials & Manufacturing	$77,413	$77,413
4	016B-23	ULL	Clean Technology & Energy	$101,243	$101,243
5	006B-23	LSU A&M	Other: Construction & Infrastructure	$81,650	$81,650
			Totals	$481,673	$481,673

Table II
Proposals Recommended for Funding if Additional Funds become Available

Rank	#	Institution	Category	1st Year Request	1st Year Recommendation
6	004B-23	LSU A&M	Clean Technology & Energy	$89,805	$89,805
7	019B-23	ULL	Clean Technology & Energy	$138,270	$138,270
8	020B-23	ULL	Digital Media & Enterprise Software	$106,390	$106,390
			Totals	$334,465	$334,465

Table III

2022-23 Industrial Ties Research Subprogram Reviewers		
Name	**School**	**Discipline**
Final Panel Chair		
Jennifer Miskimins	Colorado School of Mines	Petroleum Engineering
Life Sciences & Bioengineering		
Nicholas Jacobson	Dartmouth College	Psychiatry
Ashwin Ashok	Georgia State University	Computer Sci/Neuroscience
Clean Technology & Energy		
Jennifer Miskimins	Colorado School of Mines	Petroleum Engineering
Lance Manuel	University of Texas	Civil Engineering
Laura Jarboe	Iowa State University	Chemical Engineering
Advanced Materials & Manufacturing		
Ramana Chintalapalle V	University of Texas-El Paso	Mechanical Engineering
Kuang-Ting Hsiao	University of South Alabama	Mechanical Engineering
Digital Media & Software		
Krishna Kant	Temple University	Computer & Info Systems
Wes Lloyd	University of Washington-Tacoma	Software Engineering
Stefano Iannucci	Mississippi State University	Computer Engineering
Coastal & Water Management		
Ngoc T. Bui	University of Oklahoma	Environmental/Chem Eng
ZhiQiang Chen	University of Missouri Kansas City	Civil Eng/Risk Assessment
Paolo Gardoni	University of Illinois	Civil Eng/Risk Assessment
Roger Viadero	Western Illinois University	Environmental Science
Other: Bio-/Ag Engineering		
Kasiviswanathan Muthukumarappan	South Dakota State University	Agricultural Engineering
Paul Sarnoski	University of Florida	Food Science

FY 2022-23 Industrial Ties Research Subprogram
Priority Ranking of Proposals Highly Recommended for Funding

Rank	1 (Clean Technology & Energy)
Proposal #	014B-23
Institution	University of Louisiana at Lafayette
PI	Prashanth Buchireddy
Title	Production of Carbon Black from Plastic Waste
Requested	$286,673 (Y1: $107,128; Y2: $96,314; Y3: $83,231)
Recommended	$286,673 (Y1: $107,128; Y2: $96,314; Y3: $83,231)

This project aims to perform pyrolysis on municipal waste (particularly plastic waste) and produce carbon black from the resulting bio-oil. The current source of carbon black is petroleum (#6 fuel oil). The use of municipal plastic waste to replace petroleum is highly innovative. Success of this project could lead to the development of other uses for pyrolyzed waste. This could not only help to solve landfill and plastics issues, but also provide a product that can be used for future manufacturing processes. Both of the associated processes – pyrolysis and production of carbon black – are well-established. The procedures and research methods, along with the potential for success and risks of failure, are outlined and straightforward. The timeline is realistic. The objectives are well thought out and defined in a logical order.

Louisiana already has six major carbon black production facilities in place. If successful, the proposed research would not only support and enhance their work, but also create the potential for additional industry entities to be established. It is expected that at some point the procedure for producing carbon black from bio-oil will align with the procedure for producing carbon black from petroleum, meaning that the infrastructure will not need to be changed. The proposed work is consistent with State support for reduction of plastic waste. The current global market for sustainable carbon black is increasing and is sufficiently large to make this a high-impact recycling initiative. The proposed research will expand institutional research activities in this area.

The PIs have a track record of successful research implementation. Project personnel have been appropriately assigned to specific tasks. Industry partner Envirofyx will provide consultation on technology commercialization. Partner TCCB will advise on the assembly of a bench-scale carbon black production process, as well as evaluation of the bio-oil and the carbon black produced from bio-oil. TSI, Inc. is associated with the project and will provide input on pyrolysis. Republic Services, Inc. will provide waste material for use in this process. The applicants present sufficient economic analysis to support the ability of waste-derived bio-oil to be an economically viable alternative to #6 fuel oil.

The support and interest of the current industry is evident by their very strong matching. The budget appears to be quite reasonable. Full funding is recommended.

Rank	1 (Advanced Materials & Manufacturing)
Proposal #	024B-23
Institution	University of New Orleans
PI	Matthew Tarr
Title	Extended Reality Training Technology for Wind Turbines
Requested	$284,696 (Y1: $114,239; Y2: $84,893; Y3: $85,564)
Recommended	$284,696 (Y1: $114,239; Y2: $84,893; Y3: $85,564)

This is a truly remarkable proposal that has hit on a niche area that has the potential to place Louisiana in a great position to aid in offshore wind energy development anywhere, especially in conjunction with training. Critical aspects of the training will be possible with this extended reality immersive environment and its many other technical innovations that combine AI, simulators, and crossover technologies from various media. A human-factors and/or ergonomics expert familiar with stresses and challenges in the marine environment would help the proposal. The researchers at UNO and the two collaborating partners (Top Right Corner and Gulf Wind Technology) make for a great combination. Their roles are well described in the proposal.

The offshore wind industry is poised to take off in the next few years on the Atlantic Seaboard and soon, for floating wind, on the West Coast. Despite the slower development thus far in the Gulf of Mexico, the work outlined suggests a promising technology for Louisiana to support. For one, there is tremendous State know-how from oil and gas and related industries and personnel to help define meaningful extended reality training. Also, such training paradigms are disruptive, and capitalizing on new technologies and innovations of this kind is worthy of early strong support. The project partners and their identified roles and past experiences are most relevant for the proposed work. Both partners bring relevant experience and synergy to the work proposed, and the time is right.

There is good institutional support and a strong track record from past work to expect success in this three-year effort. The budget is reasonable for the proposed work. Full funding is recommended.

Rank	3 (Advanced Materials & Manufacturing)
Proposal #	012B-23
Institution	Louisiana Tech University
PI	Shengnian Wang
Title	Generating Valuable Products from Hydrocarbon Waste Using Solid Crystallized Zeolites
Requested	$200,001 (Y1: $77,413; Y2: $77,413; Y3: $45,175)
Recommended	$200,001 (Y1: $77,413; Y2: $77,413; Y3: $45,175)

This proposal seeks to develop new technologies to utilize lignin and upcycle it into high-value, renewable energy products (biofuels and solar energy harvesting materials such as carbon quantum dots or CQDs) with mesoporous zeolites. The research work plan and statement of tasks are well designed to address the challenges and fundamental questions. Research methods are clear and targeted towards the overall goals and objectives. The methodology includes materials design, development, testing, and evaluation. The performance criteria are established so that periodic progress and assessment become much easier.

The project outcomes may benefit the State economy. The developed products from this project may advance technologies applicable to agriculture and the oil and gas industry. Success will provide opportunities to sustainably revitalize local communities with traditional agricultural business and the paper/pulp industry, while helping alleviate the corresponding environmental hazards and potentially opening new revenues for clean energy (biofuels) and advanced material manufacturing (CQDs, zeolite). The feasibility of the proposed work was verified with previous funding sources. Once the products are patented, the PI intends to spin off a startup company while partnering with major manufacturing and end-users' companies to facilitate the efforts. The PIs have partnered with Polykala Technologies, LLC, a company that specializes in transformative catalyst and chemical process development focused on clean energy and environmental protection. As described in the proposal, the company has agreed to contribute its reaction/manufacturing facilities which include its pilot-scale pyrolysis and hydrodeoxygenation facilities. The company will share its in-house expertise in the manufacturing of industrial catalysts from zeolite crystals.

The team has vast experience in research, teaching, and consulting in the areas of advanced pavement design, numerical modeling, and materials characterization. Given the track records of the PI and the team, project success is likely. They have all the required infrastructure to execute the project work and deliver the goals/objectives proposed. The budget is reasonable. Full funding is recommended.

Rank	4 (Clean Technology & Energy)
Proposal #	016B-23
Institution	University of Louisiana at Lafayette
PI	Daniel Gang
Title	Extraction of Lithium from Oilfield Produced Water Using Nano-Scale Mesoporous Lithium Ion-Sieves [NSMLIS]
Requested	$292,912 (Y1: $101,243; Y2: $98,304; Y3: $93,365)
Recommended	$292,912 (Y1: $101,243; Y2: $98,304; Y3: $93,365)

This proposal focuses on the development of nano-scale ion sieves to extract lithium from oilfield produced waters. The proposal is extremely well written and demonstrates the potential for the research team to develop these sieves, which could lead to a new industry in Louisiana via lithium production for batteries. The proposal advances state-of-the-art research in this area by development of these sieves at a new, microscopic level, which would allow lithium extraction under the proposed conditions. The procedures and research methods are well defined and easy to follow, with appropriate benchmarks. The overall project objectives are also easy to understand and logical. The PIs have linked the project directly to the potential for success in Louisiana via the use of produced water from the Smackover Formation, which has been shown to have a high, and potentially profitable, lithium content.

If successful, the project could initiate a new business via lithium extraction and subsequent battery production. The proposal is supported by strong business partners on both ends of the project – Crownquest as the oilfield water production company, and H20 LLC, which is a Louisiana-based water treatment firm. The project builds on existing oilfield production in the State, while exposing the potential for a new highly technology-based entity. The relationship between the PIs and the participating companies appears to be strong and already well established.

The past performance of the lead PI, with efforts in sieve development, suggests the strong potential for success. Additionally, the co-PI and industry partners bring the needed knowledge of production water behaviors and treatment. Highly qualified personnel have been assigned to all pertinent and required tasks. Existing laboratory equipment also supports the potential for success.

The personnel and equipment costs all appear quite reasonable. Additionally, if successful, there is tremendous potential for a high rate of return on the proposed investment. Full funding is recommended.

Rank	5 (Other: Construction & Infrastructure)
Proposal #	006B-23
Institution	Louisiana State University and A&M College
PI	Ali Kazemian
Title	Towards Sustainable Robotic Construction: Concrete 3D Printing with Quarry By-products and Low Portland Cement Content
Requested	$230,000 (Y1: $81,650; Y2: $77,650; Y3: $70,700)
Recommended	$230,000 (Y1: $81,650; Y2: $77,650; Y3: $70,700)

This proposal focuses on using by-products from Louisiana quarries as materials in construction 3D printing. In general, the proposal does have the potential to advance state-of-the-art research in this area by focusing on the use of by-products that are otherwise not usable in construction materials. The procedures and research methods are thorough and logical and should be accomplished in the timeframe outlined in the proposal. The overall project objectives and annual objectives are reasonable and coherent.

The private-sector benefit will be substantial if this project is successful. There could be multiple positive outcomes including use of a by-product directly from Louisiana quarries, improved 3D printing of construction materials that could be used on a daily basis as well as in natural disaster recovery, and minimization of the emissions of CO2 during cement processing. The industry partners engaged in this project appear to be strong and a logical fit for the planned research work. If the project is successful, their support will be critical for expansion within the industry sector. The expansion of 3D printing to commercial levels could immediately impact local industry.

The PIs all appear to have strong backgrounds to support this project. Appropriate personnel with proven expertise are involved in the critical areas. All budgeted costs appear to be appropriate. The potential rate of return for the projected costs is significant if the project obtains its goals. Full funding is recommended.

APPENDIX A

Proposals Submitted to the Research and Development Program - Industrial Ties Research Subprogram (ITRS)
FY 2022-23 Review Cycle

Proposal #	PI Name	Category	Institution	Project Title	Amount Requested			
					Year 1	Year 2	Year 3	Total
001B-23	Dr. Subramaniam Sathivel	Other - Agriculture	Louisiana State University Agricultural Center	Polysaccharide and Amino Acid Solution Treatment as a Phosphate Substitute in the Processing of Gulf Shrimp	$71,410	$68,410	$0	$139,820
002B-23	Dr. Shengli Chen	Clean Technology and Energy	Louisiana State University and A & M College	Impacts of plasticity and anisotropic poroelasticity on wellbore stability during drilling operations in non-hydrostatic stress field	$83,803	$83,303	$70,303	$237,409
003B-23	Dr. Yuanhang Chen	Clean Technology and Energy	Louisiana State University and A & M College	Full-Scale Spatio-Temporal Cement Displacement Modeling and Monitoring for Carbon Storage Integrity Assurance	$107,600	$89,600	$82,400	$279,600
004B-23	Dr. Amirhosein Jafari	Clean Technology and Energy	Louisiana State University and A & M College	Developing a Smart Energy Management System by Integrating Centralized and Local Systems in Commercial Buildings	$89,805	$83,305	$66,305	$239,415
005B-23	Dr. Amin Kargarian Marvasti	Clean Technology and Energy	Louisiana State University and A & M College	Smart Equitable Energy Resilience [SEER]: A Coordinated Utility-Community Approach for Grid Resilience and Restoration	$76,251	$75,751	$75,251	$227,253
006B-23	Dr. Ali Kazemian	Other - Construction and Infrastructure	Louisiana State University and A & M College	Towards Sustainable Robotic Construction: Concrete 3D Printing with Quarry By-products and Low Portland Cement Content	$81,650	$77,650	$70,700	$230,000
007B-23	Dr. Yong-Cheol Lee	Coastal and Water Management	Louisiana State University and A & M College	Participatory Sensing and City Digital Twin for Enhancing Disaster Response and Recovery Capabilities and Resiliency of Vulnerable Communities	$149,439	$99,909	$99,909	$349,257
008B-23	Dr. Olufemi Olorode	Clean Technology and Energy	Louisiana State University and A & M College	A Coupled Flow and Fracture Propagation Simulator for Fractured Tight Rocks	$79,185	$59,623	$58,623	$197,431
009B-23	Dr. Dandina Rao	Clean Technology and Energy	Louisiana State University and A & M College	Converting Orphan Wells in Louisiana into Carbon-Neutral Production Wells	$96,000	$89,500	$85,500	$271,000
010B-23	Dr. Chao Sun	Clean Technology and Energy	Louisiana State University and A & M College	Developing a holistic low-cost structural health monitoring system for offshore wind turbines	$95,980	$82,360	$81,900	$260,240
011B-23	Dr. Hao Wang	Digital Media and Enterprise Software	Louisiana State University and A & M College	Developing Serverless Computing Platforms over Heterogeneous HPC and Cloud Computing Resources for Louisiana Industries	$131,600	$100,000	$98,400	$330,000
012B-23	Prof. Shengnian Wang	Advanced Materials and Manufacturing	Louisiana Tech University	Generating valuable products from hydrocarbon waste using solid crystallized zeolites	$77,413	$77,413	$45,175	$200,001
013B-23	Dr. Prashanth Buchireddy	Clean Technology and Energy	University of Louisiana at Lafayette	Development of ceramic catalytic filter for syngas cleanup to produce green hydrogen via biomass gasification	$100,328	$92,420	$81,250	$273,998
014B-23	Dr. Prashanth Buchireddy	Clean Technology and Energy	University of Louisiana at Lafayette	Production of Carbon Black from Plastic Waste	$107,128	$96,314	$83,231	$286,673
015B-23	Dr. Ling Fei	Clean Technology and Energy	University of Louisiana at Lafayette	From Biowaste to Energy Storage: Developing Solid State Electrolyte from Louisiana Crustacean Shells Biowaste Materials	$99,098	$88,610	$87,873	$275,581
016B-23	Dr. Daniel Gang	Clean Technology and Energy	University of Louisiana at Lafayette	Extraction of Lithium from Oilfield Produced Water Using Nano-Scale Mesoporous Lithium Ion-Sieves [NSMLIS]	$101,243	$98,304	$93,365	$292,912
017B-23	Dr. Daniel Gang	Coastal and Water Management	University of Louisiana at Lafayette	Removal of Lead [Pb] from Waters and Wastewaters Using Specially Tuned Functional Adsorbents	$112,639	$99,986	$99,825	$312,450
018B-23	Dr. Raju Gottumukkala	Life Sciences and Bioengineering	University of Louisiana at Lafayette	Intelligent Wearable for Continuous and Energy Efficient Health Monitoring for Psychiatric Patients	$136,014	$91,293	$45,983	$273,290
019B-23	Prof. Boyun Guo	Clean Technology and Energy	University of Louisiana at Lafayette	Conversion of End-of-life Oil Wells to Geothermal Energy Wells: A Heat Transfer Enhancement Study	$138,270	$98,199	$99,976	$336,445

Proposals Submitted to the Research and Development Program - Industrial Ties Research Subprogram (ITRS)
FY 2022-23 Review Cycle

Proposal #	PI Name	Category	Institution	Project Title	Amount Requested			
					Year 1	Year 2	Year 3	Total
020B-23	Dr. Arun Kulshreshth	Digital Media and Enterprise Software	University of Louisiana at Lafayette	Collaborative Exploration of Location-based Data in Virtual Reality	$106,390	$91,021	$90,754	$288,165
021B-23	Prof. Kari Smith	Advanced Materials and Manufacturing	University of Louisiana at Lafayette	Portable Lactation Unit for Disaster Response and Recovery	$148,609	$95,886	$92,989	$337,484
022B-23	Prof. Uttam Chakravarty	Clean Technology and Energy	University of New Orleans	An Innovative RF Energy Harvester with High Efficiency in Regions with Low RF Power	$56,048	$54,128	$53,474	$163,650
023B-23	Prof. Uttam Chakravarty	Advanced Materials and Manufacturing	University of New Orleans	Composite Sandwich Structures with Architected Cellular Core Materials for Advanced Multifunctional Properties	$106,733	$79,330	$76,759	$262,822
024B-23	Dr. Matthew Tarr	Advanced Materials and Manufacturing	University of New Orleans	Extended Reality Training Technology for Wind Turbines	$114,239	$84,893	$85,564	$284,696

Total Number of Proposals Submitted	24
Total Funds Requested for First Year	$2,466,875
Total Funds Requested for Second Year	$2,057,208
Total Funds Requested for Third Year	$1,825,509
Total Funds Requested	$6,349,592

APPENDIX B

BOARD OF REGENTS SUPPORT FUND
INDUSTRIAL TIES RESEARCH SUBPROGRAM (ITRS)
Science/Engineering

A. RESEARCH INNOVATION AND SCIENTIFIC RIGOR (35 Points) _____

-Does the proposal show innovative approaches and potential to advance the state of the art in science, engineering, or technology?
-Are the procedures and research methods clear, appropriate, and realistic within the amount of time proposed?
-Are the objectives clearly defined and able to be accomplished by the proposed approach?

COMMENTS:

B. CONTRIBUTION TO ECONOMIC DEVELOPMENT (30 Points) _____

-What is the expected economic impact of the proposed study on the Louisiana economy, and in general?
-Does the project have significant potential to achieve the following?
- a. The establishment of a new business or industry
  - i. Evaluation of the potential for commercial use of research results within the Louisiana economy
  - ii. Extent to which technology-based business would be interested in the project
- b. The enhancement of existing business or industry
  - i. Evaluation of the extent to which the proposed project would establish a new relationship between the researchers and one or more corporate sponsors (rather than simply reinforce--or subsidize--an existing relationship)
  - ii. Evaluation of the extent to which the project is part of a coherent plan for expanding university R & D activities in this area over a multi-year period

-To what extent has the principal investigator demonstrated private-sector involvement and/or support?

COMMENTS:

C. POTENTIAL FOR SUCCESS (25 Points)

-Do the training, past performance, and potential of the investigators suggest a high potential for success?
-Do the institutional commitment, support, and capabilities suggest high potential for success?
-Have the personnel been appropriately assigned to specific tasks?

COMMENTS:

D. APPROPRIATENESS OF BUDGET (10 Points) _____

-Is the budget reasonable for the scope of work to be performed?
-Is the request for personnel costs reasonable?
-Is the request for equipment/supply costs appropriate?

COMMENTS:

TOTAL SCORE (Out of 100) ____

OVERALL RATING OF PROPOSAL

Poor	Fair	Good	Very Good	Excellent
____	____	____	_____	_____

BOARD OF REGENTS SUPPORT FUND
INDUSTRIAL TIES RESEARCH SUBPROGRAM
Non-Science/Non-Engineering

A. RESEARCH INNOVATION AND ACADEMIC/INTELLECTUAL RIGOR (35 Points) _____

-Does the proposal demonstrate conceptual originality and clear potential to advance the quality and/or availability of Louisiana's academic and/or cultural resources?
-Are the procedures and research methods clear, appropriate, and realistic within the amount of time proposed?
-Are the objectives clearly defined? Can they be accomplished by the proposed approach?

COMMENTS:

B. SIGNIFICANCE OF THE PROJECT AND ITS CONTRIBUTION TO ECONOMIC DEVELOPMENT (30 Points) _____

-Will the proposed research have a broad positive impact on state/national academic and/or cultural resources?
-Does the proposed research address an important problem or need and represent an improvement upon, or a valid departure from, an existing practice?
-Will the project yield products and/or outcomes, such as information, materials, processes, or techniques, that can be disseminated to and/or utilized in other settings?
-Did the applicant explain how the project would promote and/or enhance economic development in Louisiana?

COMMENTS:

B. **POTENTIAL FOR SUCCESS** (25 Points) _____

-Do the training, past performance, and potential of the investigators suggest a high potential for success?
-Do the institutional commitment, support, and capabilities suggest high potential for success?
-Have the personnel been appropriately assigned to specific tasks?
-Has the applicant demonstrated a commitment to the project and a capacity to build upon the project when BoRSF support ends?
-Does the proposal offer the strong prospect of attracting private-sector and/or federal funds or present a plan to leverage Support Fund dollars?

COMMENTS:

D. APPROPRIATENESS OF BUDGET (10 Points)

-Is the budget reasonable for scope of work to be performed?
-Is the request for personnel costs reasonable?
-Is the request for equipment/supply costs appropriate?

COMMENTS:

TOTAL SCORE (Out of 100) ____

OVERALL RATING OF PROPOSAL

Poor	Fair	Good	Very Good	Excellent
____	____	____	_____	_____