

**REPORT TO THE
LOUISIANA BOARD OF REGENTS**

**RESEARCH & DEVELOPMENT COMPONENT
OF THE BOARD OF REGENTS SUPPORT FUND**

INDUSTRIAL TIES RESEARCH SUBPROGRAM

FY 2023-24 COMPETITION

March 2024



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

FY 2023-24

BACKGROUND INFORMATION

Twenty-eight (28) proposals requesting a total of \$3,055,243 in first-year funds were submitted for funding consideration in fiscal year (FY) 2023-24 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 proposals submitted were each reviewed by two experts in their respective fields. The ratings and reviews were submitted to competition chair Dr. Erdal Ozkan, Department of Petroleum Engineering, Colorado School of Mines.

After careful consideration of all proposal reviews during March of 2023, the competition chair highly recommended six (6) proposals for a total of \$576,750 in first-year funds. In total \$1,541,865 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 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 2024, 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.

Table I
FY 2023-24 Proposals Highly Recommended for Funding

Rank	Proposal #	Institution	Category	1st Year Request	1st Year Recommendation
1	006B-24	LSU A&M	Clean Technology & Energy	\$ 95,700	\$84,178
2	024B-24	ULL	Coastal & Water Management	\$ 75,991	\$66,842
3	022B-24	ULL	Clean Technology & Energy	\$ 149,488	\$131,490
4	020B-24	ULL	Digital Media & Enterprise Software	\$ 124,043	\$109,109
5	025B-24	ULL	Digital Media & Enterprise Software	\$ 126,560	\$111,323
6	003B-24	LSU-AG	Other-Agriculture	\$ 83,910	\$73,808
			Totals	\$655,692	\$576,750

Table II

FY 2023-24 ITRS Reviewers		
Name	School	Discipline
Erdal Ozkan, competition chair	Colorado School of Mines	Petroleum Engineering
Nilanjan Banerjee	University of Maryland-Baltimore County	Cybersecurity/Manufacturing
Brad Bundy	Brigham Young University	Chemical Engineering
ZhiQiang Chen	University of Missouri-Kansas City	Disaster Response
Jack Dekkers	Iowa State University	Animal Science
Christina DeWitt	Oregon State University	Seafood Research
Melanie Gall	Arizona State University	Disaster Response
Philipp Gutruf	University of Arizona	Biomedical Engineering
András Gyenis	University of Colorado	Quantum Engineering
John Hall	University of Buffalo	Civil Engineering
Keighobad Jafarzadegan	University of Alabama	Hydrosystems
Moncef Krarti	University of Colorado	Building Systems Engineering
Lance Manuel	University of Texas	Civil Engineering
Xiangbo Meng	University of Arkansas	Mechanical Engineering
Tam V. Nguyen	University of Dayton	Computer Science
James Reecy	Iowa State University	Animal Science
Rodrigo Salgado	Purdue University	Geotechnical Engineer
James Sheng	Texas Tech University	Petroleum Engineering
Yun-Pil Shim	University of Texas El Paso	Physics
Amit Kumar Sinha	University of Arkansas-Pine Bluff	Aquaculture
Limei Tian	Texas A&M University	Biomedical Engineering
Brandon Weeks	University of Nevada-Reno	Chemical Engineering
Taylor Weiss	Arizona State University	Algae Technology
Qi Yu	Rochester Institute of Technology	Computer Science
Wenqiao Yuan	North Carolina State University	Bioenergy/Bioproducs

**FY 2023-24 Industrial Ties Research Subprogram
Priority Ranking of Proposals Highly Recommended for Funding**

Rank	1
Proposal #	006B-24 (Clean Technology & Energy)
PI/Institution	Ipsita Gupta/Louisiana State University and A&M College
Title	Microbially Mediated Hydrogen-Brine-Cement-Rock Interactions for Underground Hydrogen Storage
Requested	\$271,000 (Y1: \$95,700; Y2: \$88,150; Y3: \$87,150)
Recommended	\$252,534 (Y1: \$84,178; Y2: \$84,178; Y3: \$84,178)

The applicant proposes to experimentally investigate hydrogen-brine-cement-rock biogeochemical interactions under ambient conditions of high pressure and temperature to explore the capacity for environmentally safe underground hydrogen storage. The proposed research is innovative and has high potential to make a significant impact on the scientific and technological aspects of underground H₂ storage. The research results will have the potential for immediate and direct applications to develop new products and screening criteria for the selection of storage sites. This will encourage technology-based businesses to invest in H₂-storage facilities and products. Baker Hughes is a major company that has provided services for the oil and gas industry for decades and is highly interested in extending their business into the energy-storage area. Their interest and support are an excellent indication of a strong potential for a long-term relationship.

The training and experience of the investigators are suitable. The university has the basic resources and commitment to support the research. The establishment of native bacterial communities in the laboratory to perform some of the proposed studies appears challenging, but the PIs have a solid plan to do this successfully. Personnel assignments appear to be appropriate. Budget items are well documented and justified. Due to limited available funds, partial annual funding of \$84,178 is recommended for each year of the project.

Rank	2
Proposal #	024B-24 (Coastal & Water Management)
PI/Institution	Emad Habib/University of Louisiana at Lafayette
Title	Community-Scale Flood Monitoring and Prediction Using Machine-Learning Enabled Sensors and Cloud-Based GIS Solutions
Requested	\$208,408 (Y1: \$75,991; Y2: \$70,503; Y3: \$61,914)
Recommended	\$195,598 (Y1: \$66,842; Y2: \$66,842; Y3: \$61,914)

The applicant seeks to work with an industry partner to create improved urban flood monitoring that offers broader spatial coverage down to the neighborhood scale and a delivers a more valuable range of data. Potential for commercialization will be emphasized. The proposal demonstrates significant possibilities for advancing the state of the art in science, engineering, and technology. Considering the constraints of current flood monitoring systems, primarily utilized for water level monitoring at specific points along major rivers, this proposed enhancement of flood monitoring practices represents a substantial leap forward. Implementing such improvements would greatly contribute to upgrading flood monitoring systems on a larger scale by integrating advanced technology into the analysis. The proposal adequately addresses the procedures, outlining systematic tasks and explaining the required project activities. All objectives have been clearly defined and are achievable within the proposed timeframe.

Access to a well-designed flood monitoring system, providing real-time spatial-temporal distribution of flood characteristics, has the potential to significantly boost Louisiana's economy. The system plays a crucial role in minimizing potential damage caused by major floods in the study area. This information empowers city planners and urban developers by providing the ability to design and update infrastructure, guided by an improved understanding of urban flooding dynamics. Additionally, the project fosters collaboration among water management, smart infrastructure, and technology industries.

The PIs are qualified and interdisciplinary. Institutional capabilities are strong and there exists a clear delineation of tasks and responsibilities. The budget and justification are appropriate. Due to limited available funds, partial annual funding of \$66,842 is recommended in years one and two, and full funding in year three.

Rank	3
Proposal #	022B-24 (Clean Technology & Energy)
PI/Institution	Boyun Guo/University of Louisiana at Lafayette
Title	Conversion of End-of-Life Oil Wells to Geothermal Energy Wells: A Heat Transfer Enhancement Study
Requested	\$345,996 (Y1: \$149,488; Y2: \$99,055; Y3: \$97,453)
Recommended	\$327,998 (Y1: \$131,490; Y2: \$99,055; Y3: \$97,453)

The applicant seeks to mitigate the issue of the sustainability of heat supply by the oil reservoirs encountered in geothermal power generation. The PI proposes using polymer and nanoparticles to divert fluid flow from fractures and high-permeability channels to matrix, in order to increase heat exchange time. Use of end-of-life oil wells for geothermal energy is not a novel idea, nor is the use of polymer to control fluid channeling in high-permeability zones and natural fractures. However, due to the relatively low energy content of the converted reservoirs, the economics of such projects are strongly dependent on implementation and operation costs. The modeling studies proposed might help to better assess technical and economic viability and lead to the development of more effective chemicals. This research could ultimately advance science and technology in geothermal engineering.

The procedures and research methods are clearly described. Each team member's responsibility is well defined. The objectives and deliverables for each year or milestone are clear and specific. If the research indicates practical applicability and develops guidelines for the chemicals to be utilized, then high commercial potential is expected. Project outcomes should benefit technology-based businesses due to the high commercialization potential of the technologies. There appears to be a good relationship in place with the industry partner and a demonstrated intention to continue into the future. A good plan is set forth to convert the project into long-term research activity that includes technology transfer and commercialization focuses.

The PI and Co-PI have relevant research experience and each researcher's responsibility related to each task is clearly defined, which suggests a high possibility of success. The budget is well described and the links to the scope of work are clear. Due to limited available funds, partial funding of \$131,490 is recommended in year one, with full funding in subsequent years.

Rank	4
Proposal #	020B-24 (Digital Media & Enterprise Software)
PI/Institution	Li Chen/University of Louisiana at Lafayette
Title	Federated Deep Learners for Medical Image Analysis and Treatment Guidance
Requested	\$322,043 (Y1: \$124,043; Y2: \$99,681; Y3: \$98,319)
Recommended	\$307,109 (Y1: \$109,109; Y2: \$99,681; Y3: \$98,319)

This project aims to develop a communication-efficient and privacy-preserved federated learning infrastructure to provide patients with timely and intelligent diagnosis and treatment. The key technical novelty lies in leveraging physics-informed machine learning integrated with generative AI to tackle data scarcity, which is a critical challenge in the health domain. The overall research plan is well laid out. The main objectives are clearly defined and appropriate for the project's scope. The proposed procedures and research methods are well defined, appropriate for the project, and realistic to achieve within the given timeline. The improvements proposed for these techniques show innovation and potential to advance the state of the art. The proposed research has the potential to address a key bottleneck in applying advanced AI technologies to the healthcare system. Federated learning allows multiple health organizations to collaborate seamlessly with reduced communication overhead and improved data privacy.

Outcomes from the project can easily be generalized beyond AI-assisted musculoskeletal injury treatment to a wide variety of other diseases and their diagnosis/treatment, leading to new connections between the researchers and other corporate sponsors. Such new connections could expand the current R&D activities beyond the life of this award. Private-sector involvement and support has been clearly demonstrated. The industry partner has already contributed funds. The company will provide necessary datasets and the required expertise, so the project will benefit from a technical team of engineers and physicians. The company will also assist the PIs with onsite pilot-scale testing. The investigators have high potential for success based on their training, past performance, and prospects. They will be able to cover all the different aspects of the proposed project comprehensively.

Based on the institutional commitment, private-sector support, and capabilities available, there is a strong potential for success. The budget is reasonable. Due to limited available funds, partial funding of \$109,109 is recommended in year one, with full funding in subsequent years.

Rank	5
Proposal #	025B-24 (Digital Media & Enterprise Software)
PI/Institution	Arun Kulshreshth/University of Louisiana at Lafayette
Title	Collaborative Tool for Scouting Locations in Virtual Reality
Requested	\$326,247 (Y1: \$126,560; Y2: \$99,879; Y3: \$99,808)
Recommended	\$311,010 (Y1: \$111,323; Y2: \$99,879; Y3: \$99,808)

This proposal will develop a virtual reality (VR)-based solution to provide users with an immersive experience to explore locations in Louisiana remotely. The research plan focuses on integrating and visualizing data from multiple sources, supporting communication and interactions between users in VR, integrating multiple interaction tools for navigating and communicating in VR, and supporting location scouting checklists and contractual agreements. The proposed idea is novel and goes beyond current VR-enabled geological exploration, especially in its support for user communication and collaboration. The proposal clearly describes the research plan and links it to project goals. The project will benefit film production activities, allowing use of the proposed VR technology to reduce the costs of traveling for location scouting.

The PI has expertise relevant to the proposed research. Several industry partners have been identified to support the project, including enterprise production companies looking for filming locations in Louisiana. The PI has ongoing support from Louisiana Economic Development, which is conducting work related to the proposed research. The institutional commitment, external private and public support, and capabilities suggest high potential for success for the proposed project. The budget is reasonable. Due to limited available funds, partial funding of \$111,323 is recommended in year one, with full funding in subsequent years.

Rank	6
Proposal #	003B-24 (Other: Agriculture)
PI/Institution	Subramaniam Sathivel/Louisiana State University Agricultural Center
Title	Microfluidized Polysaccharide and Amino Acid Solution Treatment as a Phosphate Substitute in the Processing of Gulf Shrimp
Requested	\$164,820 (Y1: \$83,910; Y2: \$80,910; Y3: \$0)
Recommended	\$147,616 (Y1: \$73,808; Y2: \$73,808; Y3: \$0)

The research team proposes to use microfluidization to reduce the viscosity of gum to enable its penetration into shrimp muscle. The hypothesis is that penetration of the gum into the muscle will bind water within the muscle and prevent cook loss. The proposal demonstrates creative innovation by addressing a critical issue in the seafood industry: the need for a natural substitute for sodium tripolyphosphate (STPP) in shrimp processing.

The proposal outlines clear and appropriate research methods, including the use of microfluidization, which enhances the potential to fully realize the study within the proposed timeframe. The inclusion of a control group and comparison with STPP-soaked shrimp provide a robust experimental design. The objectives are well defined and positioned to address concerns related to shrimp processing, including reducing soaking time, yield loss, and cooking loss, while maintaining quality characteristics. The proposal outlines specific measurable outcomes, such as physiochemical properties, freezing effects, shelf-life evaluation, product acceptance, and production cost analysis.

The commitment of the industry partners, both financially and through technical assistance, enhances the credibility and potential success of the project. The engagement of established seafood processors reflects a promising opportunity to address the demand for natural compounds, contributing positively to the Louisiana economy. The study will provide results that will be useful for processors seeking to find alternatives to soaking shrimp in STPP.

The investigators are fully capable of completing the study as designed. The PI's extensive experience managing projects related to seafood processing, along with a history of success, provides confidence of a high potential for real advances through the proposed project. Due to limited available funds, partial annual funding of \$73,808 is recommended for years one and two.

Appendix A

Proposals Submitted to the Research and Development Program - Industrial Ties Research Subprogram (ITRS)
FY 2023-24 Review Cycle

Proposal #	PI Name	Category	Institution	Project Title	Amount Requested			
					Year 1	Year 2	Year 3	Total
001B-24	Dr. Richard Cooper	Life Sciences and Bioengineering	Louisiana State University Agricultural Center	Gene editing commercial breeds of swine for accelerated trait selection and improvemnt	\$116,250.00	\$99,400.00	\$99,150.00	\$314,800
002B-24	Dr. Subramaniam Sathivel	Other - Agriculture	Louisiana State University Agricultural Center	Crawfish flavor powder, water-soluble chitosan, and encapsulated astaxanthin from Louisiana crawfish shells for nutraceutical and food ingredient markets	\$58,160.00	\$51,160.00	\$0.00	\$109,320
003B-24	Dr. Subramaniam Sathivel	Other - Agriculture	Louisiana State University Agricultural Center	Microfluidized Polysaccharide and Amino Acid Solution Treatment as a Phosphate Substitute in the Processing of Gulf Shrimp	\$83,910.00	\$80,910.00	\$0.00	\$164,820
004B-24	Dr. Myriam Evelyn Watts	Life Sciences and Bioengineering	Louisiana State University Agricultural Center	Improving Louisiana Seafood Market Opportunities through Improved Harvesting and Preservation Methods	\$84,438.00	\$83,938.00	\$80,938.00	\$249,314
005B-24	Dr. Shengli Chen	Digital Media and Enterprise Software	Louisiana State University and A & M College	Development of a novel graphical method for cavity expansion analysis and its applications to geotechnical in situ tests interpretation	\$91,116.00	\$85,616.00	\$65,950.00	\$242,682
006B-24	Dr. Ipsita Gupta	Clean Technology and Energy	Louisiana State University and A & M College	Microbially Mediated Hydrogen-Brine-Cement-Rock Interactions for Underground Hydrogen Storage	\$95,700.00	\$88,150.00	\$87,150.00	\$271,000
007B-24	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	\$108,959.00	\$98,959.00	\$98,959.00	\$306,877
008B-24	Dr. Naohiro Kato	Advanced Materials and Manufacturing	Louisiana State University and A & M College	Simultaneous extraction of multiple biocompounds from microalgae	\$108,977.00	\$99,213.00	\$90,725.00	\$298,915
009B-24	Dr. YONG-CHEOL LEE	Other - Smart City and Disaster Management	Louisiana State University and A & M College	Participatory Sensing and City-Scale Digital Twin for Disaster Resilient Communities and Cities	\$149,989.00	\$99,991.00	\$99,967.00	\$349,947
010B-24	Prof. William Monroe	Life Sciences and Bioengineering	Louisiana State University and A & M College	Smartective: a biometric sensor and internet-based industrial safety monitoring system	\$150,000.00	\$100,000.00	\$100,000.00	\$350,000
011B-24	Dr. Dandina Rao	Clean Technology and Energy	Louisiana State University and A & M College	Accelerated CCUS through a novel process utilizing orphan/marginal wells for sustaining Louisiana's energy economy	\$92,763.00	\$92,763.00	\$88,763.00	\$274,289
012B-24	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	\$99,949.00	\$98,529.00	\$76,082.00	\$274,560
013B-24	Dr. Chao Sun	Digital Media and Enterprise Software	Louisiana State University and A & M College	Synergistic Computational Software for Safer Offshore Wind Plants in the Gulf of Mexico	\$93,999.00	\$81,779.00	\$80,082.00	\$255,860
014B-24	Prof. Xun Tang	Advanced Materials and Manufacturing	Louisiana State University and A & M College	Open-Source Automated Time Series-based Optimization of Operating Conditions for Chemical Manufacturing	\$145,200.00	\$95,219.00	\$88,436.00	\$328,855
015B-24	Dr. Jennifer Lavergne	Coastal and Water Management	McNeese State University	Robust 3D model-based flood, erosion, and damage prediction utilizing high dimensional big data	\$89,353.00	\$81,187.00	\$0.00	\$170,540
016B-24	Dr. Firouz Rosti	Advanced Materials and Manufacturing	McNeese State University	Experimental and Numerical Modeling of Pressure Grouted Helical Piles for Application in Louisiana Subsurface Soils	\$134,915.00	\$97,455.00	\$99,455.00	\$331,825
017B-24	Prof. Douglas Chrisey	Advanced Materials and Manufacturing	Tulane University	Controlled Insertion of Long Coherence Time Defects for Scalable Qubit Manufacturing	\$74,367.00	\$75,594.00	\$76,855.00	\$226,816
018B-24	Prof. Vijay John	Clean Technology and Energy	Tulane University	Mitigating Asphaltene Deposition through Fundamental Characterization of the Mechanism of Deposition Inhibitors	\$100,000.00	\$100,000.00	\$100,000.00	\$300,000

**Proposals Submitted to the Research and Development Program - Industrial Ties Research Subprogram (ITRS)
FY 2023-24 Review Cycle**

Proposal #	PI Name	Category	Institution	Project Title	Amount Requested			
					Year 1	Year 2	Year 3	Total
019B-24	Prof. Magdy Bayoumi	Clean Technology and Energy	University of Louisiana at Lafayette	Equitable Resilience: Empowering Disadvantaged Communities in South Louisiana with Mobile Battery Storage and Resilient Charging Infrastructure	\$73,055.00	\$66,610.00	\$60,214.00	\$199,879
020B-24	Dr. Li Chen	Digital Media and Enterprise Software	University of Louisiana at Lafayette	Federated Deep Learners for Medical Image Analysis and Treatment Guidance	\$124,043.00	\$99,681.00	\$98,319.00	\$322,043
021B-24	Dr. Raju Gottumukkala	Life Sciences and Bioengineering	University of Louisiana at Lafayette	AI-based wearable device platform for psychiatry	\$68,096.00	\$63,428.00	\$46,496.00	\$178,020
022B-24	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	\$149,488.00	\$99,055.00	\$97,453.00	\$345,996
023B-24	Prof. Boyun Guo	Clean Technology and Energy	University of Louisiana at Lafayette	Investigations of Nano-Assisted Clay-Swelling Inhibitors for Re-development of the Giant Tuscaloosa Marine Shale Energy Resource to Promote Economic Growth in the Mid-Louisiana	\$149,346.00	\$99,026.00	\$97,425.00	\$345,797
024B-24	Dr. Emad Habib	Coastal and Water Management	University of Louisiana at Lafayette	Community-Scale Flood Monitoring and Prediction Using Machine-Learning Enabled Sensors and Cloud-Based GIS Solutions	\$75,991.00	\$70,503.00	\$61,914.00	\$208,408
025B-24	Dr. Arun Kulshreshth	Digital Media and Enterprise Software	University of Louisiana at Lafayette	Collaborative Tool for Scouting Locations in Virtual Reality	\$126,560.00	\$99,879.00	\$99,808.00	\$326,247
026B-24	Prof. Martin Margala	Digital Media and Enterprise Software	University of Louisiana at Lafayette	Open Source AI-based Design Frameworks for Future Open Cloud Systems	\$148,370.00	\$99,976.00	\$0.00	\$248,346
027B-24	Prof. Martin Margala	Life Sciences and Bioengineering	University of Louisiana at Lafayette	Sustainable Cardiovascular Medical Devices	\$149,621.00	\$99,680.00	\$0.00	\$249,301
028B-24	Prof. Uttam Chakravarty	Clean Technology and Energy	University of New Orleans	Design and Analysis of Sandwich Structures for Enhancing the Performance of Offshore Wind Turbine Blade	\$112,628.00	\$83,899.00	\$81,261.00	\$277,788

Total Number of Proposals Submitted	24
Total Funds Requested for First Year	\$2,518,064
Total Funds Requested for Second Year	\$2,108,166
Total Funds Requested for Third Year	\$1,794,333
Total Funds Requested	\$6,420,563

Appendix B

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

Proposal Number	
Proposal Title	
Submitting PI/Institution	
Amount Requested	

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

-Does the proposal show innovation and potential to advance the state of the art in science, engineering, or technology?

-Are the procedures and research methods are clear, appropriate, and realistic within the amount of time proposed?

-Are the objectives are clearly defined and can 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 for 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)

- Does the training, past performance, and potential of the investigators suggest a high potential for success?
- Does 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 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
_____	_____	_____	_____	_____

Funding Recommendation:

Year One _____
Year Two _____
Year Three _____

Funding Stipulations: