Texas Research Incentive Program

Match Request Confirmation

Texas Tech University		**2015-048**

Certification Date (Deposit Date)	12/18/2014
Receipt Date	12/19/2014
Days Since Certification	1

Donation Amount	$4,000,000
Allowable Match	$4,000,000
Disallowed Amount	$0
Fundable Amount Remaining	**$4,000,000**

Percent Matched	100%
Donor Type	Private
Purpose	Program Expenses
Target Discipline	Other Sciences

Texas Higher Education Coordinating Board
Texas Research Incentive Program (TRIP)

Donor Matching Request Form

Authority
THECB Rules Section 15.10, Texas Research Incentive Program
Texas Education Code, Section 62, Subchapter F Texas Research Incentive Program

Instructions
Complete the fields below and attached a copy of the following:

- Donor Check (or payment instrument)
- Proof of deposit (Circle date and amount)
- Documentation defining the donor agreement (include any documents referenced)

Institution **Texas Tech University**	☒ Deposit verification attached
Donor Name [redacted]	☒ Fully executed donor agreement attached describing the purpose and the restrictions of the gift.
Donor Type **Private**	
Discipline Supported **Other Sciences**	
Deposit Date December 18, 2014	
Amount $4,000,000	
The Donation is to fund: **Program Expenses**	

Comments

Click here to enter text.

advice

Incoming Wire-Advice of Credit INCOMING WIRE

Date 12/18/2014 Wire Create Time:1058

Texas Tech Foundation
ATTN CRAIG FINLAYSON
PO BOX 45025
LUBBOCK TX 79409-

Account # : *******410
Amount : 4,000,000.00
GFX Reference: 20143520098600
Sender Name:
[redacted]

Beneficiary:*******410
TEXAS TECH FOUNDATION

OBI:
DONATION

BBI:

RFB:
000003704
IMAD:
20141218I1B7031R033308

To protect your account information and the account information of the beneficiary, account numbers have been masked.
Please do not respond to this email address as it is an unmonitored mailbox.
For questions regarding recurring wires, please call 1.214.525.9161.
All other questions can be directed to your local PlainsCapital branch.

DEED OF GIFT AGREEMENT

I, the undersigned ("Donor"), herewith give & donate to Texas Tech University ("Donee") cash in the amount of $2,000,000 (two million dollars in currency of the United States of America), (hereafter the "Donation"), under the following terms & conditions:

[1] the Donation is to be regarded, handled and attributed at all times and in all respects as an anonymous gift, both internally within Donee and externally, until such time as Donor may consent in writing to Donee's external/public and/or internal acknowledgment of the Donation. Until Donor's written consent is secured, neither Donee nor any individual affiliated with or employed by the Donee shall disclose Donor's identity, imply or reveal any information that could indicate Donor's identity, or otherwise expressly or implicitly attribute the Donation to Donor either internally within Donee or externally/to the public. Only those individuals affiliated with or employed by Donee with a documented and legitimate "need to know" shall be made aware of the Donor's identity;

[2] the parties acknowledge that Donee anticipates the Donation to be matched by-&-with funds not less than $2,000,000 (two million dollars of currency of the United States of America) by the State of Texas under its TRIP Program (or the functional equivalent thereof). Donee agrees to make all reasonable efforts to secure the TRIP Program matching donation, which is understood to be entirely congruent with established public policy of the State but subject to continued legislative appropriation. Donee acknowledges that the receipt of the Donation does not imply a commitment on behalf of Donor to continue funding beyond the term outlined in this Agreement and the Work Plan and Budget, and further that the Donor shall have no obligation under any circumstances to increase, renew or extend the Donation, including in the event that Donee is unable to secure the TRIP Program matching donation, as contemplated herein;

[3] the Donation, and the TRIP Program matching amount from the State of Texas, if any, are to be both exclusively applied to comprise the "Aggregated Donation," and are to be allocated and expended under the sole-&-exclusive judgment & determination of the Vice President for Research (VPR) of Donee, subject in all instances to the stipulations and restrictions as to the use of the Aggregated Donation set forth in this Agreement and in the attached Work Plan and Budget, incorporated herein by reference. The Aggregated Donation will be used exclusively to fund the research activities and objectives stated within this Agreement and in the attached Work Plan and Budget. Donee agrees that no administrative costs will be funded from the Aggregated Donation. Donee further agrees that only facility modifications that are specifically required to accomplish the stated objectives set forth in this Agreement and the attached Work Plan and Budget will be permitted as costs to be funded by the Aggregated Donation, and further that any such costs will not exceed US $200,000 over the life of the Donation. Donee further agrees that no 'rent' will be charged for the laboratory space utilized by the research program that is funded through Aggregated Donation. All research activities to be funded by the Aggregated Donation will be conducted within the Center for Emerging Energy Sciences (CEES), which will be established at Texas Tech University, reporting to the VPR, and charged to operate the research effort funded by the Aggregated Donation. The VPR will keep the Donor's designated representative informed on all matters regarding the research direction of the Center and a report on progress and expenditures will be submitted to the Donor quarterly or at other time intervals designated by the Donor;

[4] the Aggregated Donation is to be expended expeditiously and essentially entirely on research for the express purpose of highly efficiently-&-swiftly obviating the major extant technical ambiguities surrounding the set of phenomena in metal hydrides generally known as "Anomalous Heat Effects (AHE)" and more distantly termed "cold fusion," in a prejudice-free manner, in full accordance with modern scientific principles and the best

professional practices of the pertinent scientific and engineering disciplines, consistent with the sound precepts of the recommendations of the U.S. Department of Energy's 2005 review of this subject;

[5] the Donation is made by Donor subject to the provisions of the USA Internal Revenue Code Section 170 and are tax deductible under section 170(a)(1) as contributions in recognition of the Donee's formally recognized status as an entity described in section 170(b)(1)(A)(v) of the Internal Revenue Code of 1986 (the "Code", as amended, and in the expectation that all expenditures of the Donation will be made exclusively for and in support of public purposes. Donee shall comply with the substantiation requirements of section 170(f)(8) of the Code by providing the Donor with a contemporaneous written acknowledgement of the Donation meeting the requirements of Treas. Reg. section 1.170A-13(f);

[6] Donee shall inform Donor's Representative in writing no less than 60 days in advance of "publication" (in the US Patent-&-Trademark Office sense of the term) of any-&-all results arising from the efforts supported in whole or in part by the Donation, and Donee shall act prudently to secure any-&-all intellectual property arising from these efforts so that their economic consequences are devoted principally to public charitable purposes;

[7] if any of the foregoing conditions is not met, the entire unexpended balance of the Donation shall be returned promptly to the Donor;

[8] the Donation shall be subject to the pertinent laws of the State of Texas and of the USA, and any disputes arising shall be resolved by nonbinding agreement mediated by the American Arbitration Association, with expenses thereof shared equally by Donor and Donee.

Donated this day in the city of Seattle of the State of Washington and accepted in the city of Lubbock of the State of Texas, both of the United States of America

/s/ Oct 31, 2014

Date

Accepted-&-agreed, for Texas Tech University (Donee),

Scotty W. Cooksey 11/3/14

Scotty W. Cooksey, Vice Chancellor for Institutional Advancement
Texas Tech University System Date

M Duane Nellis 11-5-14

M. Duane Nellis, President Date
Texas Tech University

COPY

AMENDMENT TO DEED OF GIFT AGREEMENT

This Amendment ("Amendment") serves to amend that certain Deed of Trust Agreement dated October 31, 2014 (the "Agreement"), by and between [redacted] ("Donor") and Texas Tech University ("Donee"). Capitalized terms not otherwise defined in this Amendment shall have the same meaning as set forth in the Agreement. Donor desires to increase the Donation from $2,000,000 to $6,000,000 (six million dollars) under the following terms and conditions:

1. The first sentence of Paragraph 2 of the Agreement is amended to reflect that the parties acknowledge that Donee anticipates the Donation to be matched by and with funds of not less than $6,000,000 (six million dollars of currency pf the United States of America) by the State of Texas under its TRIP Program (or the functional equivalent thereof). Any budgets related to the original Donation shall be increased accordingly.

2. Except as specifically amended in this Amendment, all of the remaining terms of the Agreement shall remain in full force and effect as contained in the Agreement.

Donated this day in the City of Seattle, State of Washington and accepted in the City of Lubbock of the State of Texas, both of the United States of America,

[redacted] 12/16/14

[redacted] Date

Accepted and agreed, for Texas Tech University (Donee),

Scotty W. Cooksey 12/18/14

Scotty W. Cooksey, Vice Chancellor for Institutional Advancement, Texas Tech University System — Date

M. Duane Nellis 12.18.14

M. Duane Nellis, President
Texas Tech University — Date

Work Plan and Budget: Center for Emerging Energy Sciences (CEES)

Objectives:

1) Conclusively demonstrate that the Anomalous Heat Effect (AHE) is repeatable upon demand at energy production levels that are at least a thousand times larger than is consistent with a chemical origin.
2) Conclusively determine if the AHE produces helium-4 gas in proportion to the energy output. If so, then experimentally determine this constant of proportionality.
3) On a 'best effort' basis, determine that the AHE consumes D_2 in proportion to the energy output. If so, then experimentally determine this constant of proportionality.
4) Determine the intensity and the spatial distribution of the loaded metals 'hot spots' during AHE production. Examine metals for evidence of isolated, extreme heat release that evolve far faster than known thermal processes would permit. Determine how the likely heat release from these isolated regions of the metal scale with the observed AHE energy release. Establish baseline images of these surfaces before D_2 loading and/or heat release events.
5) Search experimentally for other systems that exhibit the AHE.
6) Respond flexibly to scientific developments world-wide that impact the advancement of the understanding and applications of the Anomalous Heat Effect. Add efforts to the list above as indicated to respond to rapidly emerging opportunities.

Systems:

1) Palladium cathodes loaded with deuterium, using hydrogen as a control. Energy output will be determined using conventional calorimeters.
2) Various metal structures, primarily comprised of palladium, loaded with various hydrogen isotopes, excited electrically under a suitable cryofluid, e.g., argon, with energy outputs being measured by means such as latent heat calorimeters.

   Both systems above will use various pulsed initiation means, such as an acoustic–magnetic trigger, and the effectiveness of such triggering will be experimentally determined-and-optimized

   Both systems will use precision mass spectroscopy centered around 4 AMU with adequate resolution to quantitatively determine the level of ^4He release and D_2 consumption. Other methods of ^4He and D_2 mass metrology will be applied as appropriate.

Process:

1) Independent-but-closely collaborating experimental programs will be maintained at Texas Tech University and at ENEA, the Energy and Environment National Laboratory of Italy. Cross-checks and comparison of independent results from these programs will be used to objectively evaluate the reliability and repeatability of such results. Other highly-competent

laboratories may be brought into this collaboration to extend the cross-checking of results as warranted by future events.
2) Results will be published systematically on completion of these research protocols without regard for the outcomes that are realized. All null results will be published to whatever extents they are reasonably conclusive.
3) Careful experimentation and metrology will be employed throughout to assure that the results obtained are as accurate as declared.

Budget Estimate

This $2 M gift will cover at least one full year of operations, nominally commencing Nov. 1, 2014 and culminating no sooner than October 31, 2015. Reserves and other gift funds not expended in the first year may be spent in later years. We hope that TRIP match will become available, but TTU cannot assure this outcome, even though we commit to do everything in our power to secure these funds to match this gift. Once TRIP funds do become available in future years, then these revenues will used along with revenues from future gifts and other sources (such as grants) to support the operations of the CEES, with all TRIP funds used in the same manner and with the same restrictions as defined within this gift. The CEES will be 'right-sized' throughout all of its operations, meaning only those who contribute significantly and sustainably to the research team will enjoy continued employment.

Equipment, Supplies, and Facilities Modifications:

1) Facility modifications to cover safe hydrogen storage and handling, exhaust, mass spectrometer implementation, laboratory and other workspace customization: $120 K
2) Ultra-high resolution mass spectrometer: $500K
3) Deuterium, heavy water, high-purity palladium, liquid argon, and other technical supplies: $100 K
4) Laboratory instrumentation, including flow meters, calorimeters, readout electronics, LabVIEW, environmental sensors, computers, control electronics, etc.: $95 K
5) Core facility support (electron microscopy surface imaging, electron beam welding, etc.): $45 K

Subtotal: $860 K

Salaries:

1) Robert Duncan, 25%, with 32% fringe: $82.5 K
2) Consultant Mike McKubre, $1.25 K/day plus travel & expenses: $100 K
3) Other consultants as needed for specific functions: $50 K
4) Post-doc, 100% with 32% fringe: $50 K
5) Two graduate student assistantships: $25 K each, $50 K total

Subtotal: $332.5 K

Other Expenses:

1) ENEA contract to Prof. Vittorio Violante and lab, $550 K (400,000 €)
2) Travel, $5 0K
3) Publication expenses, $5 K

Subtotal: $605 K

Total: $1,797.5 K

This budget estimate enables a $202.5 K reserve, which will remain under the control of Prof. R. V. Duncan to cover presently-unanticipated expenses, or to expand the budget estimates above, with concurrence from the Donor's representative. These are all 'best effort' budget estimates.