

#### Department of Energy

Office of Scientific and Technical Information Post Office Box 62 Oak Ridge, Tennessee 37831

August 10, 2016

Re: OSTI-2016-01064-F

Dear Mr. Ravnitzky:

This is in final response to the request for information you sent to the Department of Energy (DOE), Office of Scientific and Technical Information (OSTI) under the Freedom of Information Act (FOIA), 5 U.S.C. 552 on June 22, 2016.

You requested a "copy of records, electronic, or otherwise, of each letter TO and FROM universities, companies, and organizations, from the OSTI 'cold fusion' documents collection." On July 11, 2016, you were emailed an interim response letter informing you of the need for OSTI to obtain release authorization from the Department of Energy. OSTI received notification to release the letters to you in their entirety on August 8, 2016. As a result, OSTI is releasing 72 cold fusion letters in this mailing on a CD-ROM because of the volume and file size of the PDFs.

In addition, there are approximately 13 letters that are currently being reviewed by the DOE's General Counsel Office (GC) for release or redaction. Upon receipt of guidance from GC, OSTI will release in whole or in part.

This decision, as well as the adequacy of the search, may be appealed within 90 calendar days from your receipt of this letter pursuant to 10 C.F.R. § 1004.8. Appeals should be addressed to Director, Office of Hearings and Appeals, HG-1, L'Enfant Plaza, U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, D.C. 20585-1615. The written appeal, including the envelope, must clearly indicate that a FOIA appeal is being made. You may also submit your appeal to OHA.filings@hq.doe.gov, including the phrase "Freedom of Information Appeal" in the subject line. The appeal must contain all of the elements required by 10 C.F.R. § 1004.8, including a copy of the determination letter. Thereafter, judicial review will be available to you in the Federal District Court either: 1) in the district where you reside; 2) where you have your principal place of business; 3) where DOE's records are situated; or 4) in the District of Columbia.

You may contact OSTI's FOIA Public Liaison, Charlene Luther, Office of Preservation and Technology at 865.576.1138 or by mail at the Department of Energy, Office of Scientific and Technical Information, 1 Science.gov Way, Oak Ridge, TN 37830 for any further assistance and to discuss any aspect of your request. Additionally, you may contact the Office of Government Information Services (OGIS) at the National Archives and Records Administration to inquire about the FOIA mediation services they offer.

The contact information for OGIS is as follows: Office of Government Information Services, National Archives and Records Administration, 8601 Adelphi Road-OGIS, College Park, Maryland 20740-6001, e-mail at ogis@nara.gov; telephone at 202-741-5770; toll free at 1-877-684-6448; or facsimile at 202-741-5769.

If you have any questions about the processing of the request or about this letter, please contact Madelyn M. Wilson at

Sincerely,

Madelyn M. Wilson

FOIA Officer DOE OSTI

1 Science.gov Way

Oak Ridge, TN 37830



31 January 1989

#### HAND CARRIED BY PRINCIPAL INVESTIGATOR

RYSZARD GAJEWSKI U S DEPARTMENT OF ENERGY ACQUISITION & ASSISTANCE MANAGEMENT DIVISION OFFICE OF ENERGY RESEARCH, ER64 DOE 19901 GERMANTOWN ROAD GERMANTOWN MD 20874 Revised Budget
ple / AAMD ER-64

SUBJECT: Revised Budget

University of Utah PID No. 8808032

Dear Mr. Gajewski:

We are enclosing one copy of the revised budget for the project entitled "THE BEHAVIOR OF ELECTROCHEMICALLY COMPRESSED HYDROGEN AND DEUTERIUM" under the direction of Dr. B. Stanley Pons, Department of Chemistry. This document has been signed by an authorized official of the University of Utah.

This budget revision is in the amount of \$216,312 for the performance period 1 October 1988 to 30 September 1989.

We appreciate your consideration of this proposal and look forward to hearing from you when your review is completed.

Very truly yours,

Richard H. Timpson

Director

Sponsored Projects

kb

Enclosure

cy: B. Stanley Pons Dr. Hugo Rossi, Dean

### **DISCLAIMER**

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

		SSISTANCE	CANT'S APPLI	a NAMER	CATION:	L NAMER				
	SUBMISSION PRE	APPLICATION LICATION	CATION SDENTI- PIER	19 89 01 31	PER NOTE TO ME AMBONED BY STATE	b. DATE ASSIGNED Year month der	,			
BECTION I_APPLICANT/PECIPIENT DATA			Lorse Blank				П			
	a LEGAL APPLICANT/RECEPTENT a Applicant Name University of Utah b. Organization Unit stanley Pons c. Street/P.O. Box Department of Chemistry d. City Salt Lake City County Salt Lake 1. State Utah Stanley Pons a Telephone Na.) Stanley Pons a Telephone Na.)  7. TITLE OF APPLICANTS PROJECT (Use section IV of this form to provide a summary description of the project.)  The Behavior of Electrochemically Compressed Hydrogen and Deuterium					8. EMPLOYER IDENTIFICATION NUMBER (EIN)  187600525A1  8. PRO- GRAM  (Prom CPZAU)  MULTIPLE  Basic Energy Sciences  8. TYPE OF APPLICANT/RECIPIENT  Communication formation  Communication formation				
	9. AREA OF PROJECT IMPAC Salt La	T (Names of cities, counties, mass ke City	s, esc.)	10. ESTIMATED NUMB OF PERSONS BENEFT	ER 11. TYPE	G A-base Grant D-baseron B-Otto				
	12. PROPOSED FUNC		CONGRESSIONA	L DISTRICTS OF:	14. TYPE	14. TYPE OF APPLICATION  A New C-Newton E-Augmenton				
	10	40,000 litah 2r		Utah 2nd		Exer appropriate lates: A				
	c. STATE	.00 15. PROJECT				17. TYPE OF CHANGE (Par 1 de ar 1 de)				
	d LOCAL	.00 18 8	Ener appro-	$\overline{}$						
	Total \$ 256,	prate letter(a)	_							
	18. FEDERAL AGENCY TO RI a ORGANIZATIONAL UNIT (II Office of Ener c. ADDRESS Acquisi	F APPROPRIATE)	(re konown) Ki	20. EXISTING FEDERAL GR IDENTIFICATION NUMB 21. REMARKS ADDED						
SECTION 8—CENTIFICATION	22. THE data in this pare true and comply suff body of the ap will comply with	my knowledge and belief, a. Yi preapplication/application orrect, the document has horized by the governing plicant and the applicant the attached assurances b. N	ES, THIS NOTICE RECUTIVE ORDE ATE		TON/APPLICATION ON:	ON WAS MADE AVAILABLE TO THE STATE				
	23. CERTIFYING REPRE- SENTIATIVE  Vice President for Research  24. APPLICA- TION  10. BIGNATURE  JAMES J. Brophy Vice President for Research  25. FEDERAL APPLICATION NUMBER 26. FEDERAL GRANT IDENTIFICATION									
	RECEIVED 19 27. ACTION TAKEN	28. FUNDING	3	-1	Year	month day 30. Year month	desc			
ž	Da AW ADED			29. ACTION DATES	10	STARTING DATE 19	-			
W ACTION	D b. REJECTED D c. RETURNED FOR a. FEDERAL 8			.00 31. CONTACT FOR ADD		ENDING	day			
	D & RETURNED FOR	6. STATE	.00		Ž.	DATE 18 33. REMARKS ADOED	-			
AGENCY		& LOCAL		.00		SS. MEMANIKS ADDED				
25	D . DEFERRED	e. OTHER		.00						
	D f. WITHDRAWN	f. TOTAL 8		OFFICIAL	FILE	COPY O No				
	7540-01-006-8182			494 400		STANDARD FORM IN DIOS & Mar				

PREVIOUS EDITION IS NOT USABLE STANDARD FORM 424 PAGE 1 (Nov. 4-8 Prescribed by OMB Circular A-102 ER F 4620.1 (7-85)

# U.S. Department of Energy Grant Application Budget Period Summary (See Reverse for Definitions and Instructions)

OMB Approval No. 1910-1400

Please Print or Type

Organization:	Period Coverin				FOR DOE USE ONLY	
University of Utah	Fn	From: 10-1-88 To: 9-30-89			Proposal No:	
Principal Investigator (P.I.)/Project Director (P.D.):	To				Award No.:	
Stanley Pons						
A SENIOR PERSONNEL PIPD Co Pis, Faculty and Other Senior Associates (List each separately with title, A.6 show number in brackets.  Attach separate sheel. If required.)	DOE Funded Person-Mos. Cal. Acad. Sumr.			Funds Requested By Applicant		
Martin Fleischmann, Co PI, Professor	4	Picato.	Sunir.	16	,000	
No Employee Benefits/From England				10	,000	
3.						
				40		
5.						
6 (1) TOTAL SENIOR PERSONNEL				7.0		
B. OTHER PERSONNEL (SHOW NUMBERS IN BRACKETS)			0			
1. ( ] ) POST DOCTORAL ASSOCIATES	12		A	> 20	,000	
2. ( ] ) OTHER PROFESSIONALS (TECHNICIAN, PROGRAMMER, ETC.)	12	100	1		,000	
3. ( 2) GRADUATE STUDENTS	12				,000	
4. ( ) UNDERGRADUATE STUDENTS		1				
5. ( ) SECRETARIAL-CLERICAL		-				
6. ( ) OTHER	-	- 100000			12000	
TOTAL SALARIES AND WAGES (A + B)		- 111		74	,000	
C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) Postdoc 14%; Techn.	. 30%: Grad	Stu	1. 8%		,750	
TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A + B + C)	13	HI .			.750	
D. EQUIPMENT (LIST ITEM AND DOLLAR AMOUNT FOR EACH ITEM) Calorimeter 1	for temp msn	it			,500	
3 Potentiostat-galvanostats-power for ce				17,940		
1 Waveform generator for potential progr				5,790		
Temp tranducers, PC for control and recording				11,000 58,230		
TOTAL EQUIPMENT				58	230	
E. TRAVEL 1, DOMESTIC (INCL. CANADA AND U.S. POSSESSIONS)						
2 FOREIGN Fleischmann to Utah to participa	ate in work		N. Jan	2	,500	
F. OTHER DIRECT COSTS					•	
1. MATERIALS AND SUPPLIES Rods, heavy water, other meta	ale		Ç-	48	,000	
2. PUBLICATION COSTS/PAGE CHARGES	113		32.00	500		
THE RESIDENCE OF THE PERSON OF	amatian Other Th		-		VVV	
3. CONSULTANT SERVICES FOR Further Info						
* FOI FEITHER THIS						
4. COMPUTER (ADPE) SERVICES Technical Contact	n Brens J.H. Timp	son				
4. COMPUTER (ADPE) SERVICES Technical Contact		son				
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOT PUT HET HAM  Technical Contracts Sponsored Proj	n Brens J.H. Timp	son		A0	500	
COMPUTER (ADPE) SERVICES     Technical Contest     CONTRACTS AND SUBGRANTS     Sponsored Project Contest     Total other direct costs	n Brens J.H. Timp	son			,500	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  TOTAL DIRECT COSTS (A THROUGH F)	n Bions III Timp Jedia avv. 561-690	son 3			,500 ,980	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE) 47% Direct Costs, exce	n Bions III Timp Jedia avv. 561-690	son 3		192	,980	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE)  TOTAL INDIRECT COSTS	n Bions III Timp Jedia avv. 561-690	son 3		192 63	,980 ,332	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE)  TOTAL INDIRECT COSTS  I. TOTAL DIRECT AND INDIRECT COSTS (G & H)	n Bions III Timp Jedia avv. 561-690	son 3		192 63 256	,980 ,332 ,312	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE)  TOTAL INDIRECT COSTS  I. TOTAL DIRECT AND INDIRECT COSTS (G & H)  J. APPLICANT'S COST SHARING (IF ANY)	n Bions III Timp Jedia avv. 561-690	son 3		192 63 256	,980 ,332	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE)  1. TOTAL DIRECT AND INDIRECT COSTS (G & H)  J. APPLICANT'S COST SHARING (IF ANY)	n Bions III Timp Jedia avv. 561-690	son 3		63 256 40	,980 ,332 ,312 ,000	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE)  1. TOTAL INDIRECT COSTS  1. TOTAL DIRECT AND INDIRECT COSTS (G & H)  J. APPLICANT'S COST SHARING (IF ANY)  K. TOTAL AMOUNT OF THIS REQUEST (ITEM I LESS ITEM J	n Bions III Timp Jedia avv. 561-690	son 3		192 63 256 40 216	,980 ,332 ,312	
4. COMPUTER (ADPE) SERVICES  5. CONTRACTS AND SUBGRANTS  6. OTHER  TOTAL OTHER DIRECT COSTS  G. TOTAL DIRECT COSTS (A THROUGH F)  H. INDIRECT COSTS (SPECIFY RATE AND BASE)  TOTAL INDIRECT COSTS  I. TOTAL DIRECT AND INDIRECT COSTS (G & H)	n Bions III Timp Jedia avv. 561-690	son 3		192 63 256 40 216	,980 ,332 ,312 ,000	

#### Equipment Justification

Potentiostat-galvanostats are instruments used for accurately controlling the potential and/or current applied between the electrodes in the cell. There will be several of these operating at the same time, and for extended periods of time. We have requested three of these to control three cells simultaneously. Suitable instruments cost \$5,980 each.

The calorimeter setup requested will consist of glass evacuated dewar type cells to contain the rods, counter electrodes, and solutions; two constant temperature baths to hold the cells; accurate thermistors and voltmeters to monitor relative changes in the temperature of the cells and bath; and a scintillation counter to monitor the changes in the tritium content of the dewars. The cost of these components is \$23,500.

A waveform generator is requested to drive the potentiostats above when applying potential programs to the experiments. This device will be required for experiments dealing with the determination of the heavy water equivalent of each cell. These experiments require precise timing of applied voltage/current levels. The cost for a suitable instrument is \$5,790.

A personal computer is requested for recording of the various variables in the experiments: cell current, cell voltage, applied voltage, bath temperature, dewar temperature, and scintillation counts for blanks, controls, and dewars. The device will also be used for calculation and plotting of the cooling curves and thermal equivalents, as well as general calculations. Interfaces for the various transducers (A/D converters; suitable bus configuration), extended memory, large hard disk, and a printer output are required. The components cost \$11,000.

#### Travel Justification

Professor Fleischmann intends to travel from the University of Southampton, Southampton, UK, to London to Salt Lake, and return, two times during the first year. Travel to London return is calculated to be \$70, and airfare (return) from Gatwick to Salt Lake (recent cheapest fare) calculated to be \$1,180 either on Delta or British Air-Continental. For two trips, this is \$2,500. Professor Pons will be responsible for local expenses in Salt Lake City.

#### Materials and Supplies

The metal rod electrodes are to be purchased in 10 to 20 cm lengths and in diameters from 1 to 30 mm. High purity metals are required. High purity deuterium oxide is used as the solvent and fuel. We estimate that we will require 20 kG during the first year. Platinum wire will be used as the counter electrode in each cell. Each cell requires approximately 5 feet of wire. In addition, there will be Pt supports, framing, and wire necessary for the neutron counting experiment, as well as a 50 x 50 x 1 mm Pd sheet as the working electrode. The costs for primary electrode metals will be \$35,500, platinum \$4,500, and deuterium oxide \$8,000.

## U.S. Department of Energy GRANT APPLICATION PROJECT PERIOD SUMMARY

OMB Approval No 1910-1400

(Must be completed for all new and renewal applications.)

Please Print or Type

<u> </u>		1	r		
Categories	01 Budget Period	02 Budget Period	03 Sudget Period	04 Budget Period	05 Budget Perio
A. Senior Personnel Totals	16000	18000	20000		
B. Other Personnel Totals	58000	60000	62000		
C. Fringe Benefit Totals	9750	9910	10070		11
Total of A, B & C	83750	87910	92070		
D. Equipment	58230	10000	10000		
E. Travel 1. Domestic					
2. Foreign	2500	3000	3500		
F. Other Direct Costs	48500	52000	58000		
G. Total Direct Costs	192980	152910	163570		
H. Total Indirect Costs	63332	67168	72178		
I. Total Direct & Indirect Costs	256312	220078	235748		
J. Applicant's Cost-Sharing (if any)	40000	8000	8000		
K. Total Amount of Request (Item I. Less Item J.)	216312	212078	227748	(4)	(5)
		)			

<sup>\*</sup>This should equal item K on Budget Period Summary (ER/F/4620.1)

ESTIMATE

TOTAL COST OF PROJECT

\$

656,138

(add K(1) thru (5))