

CMB Number 345-0058

NATIONAL SCIENCE FOUNDATION
1800 G STREET, NW
WASHINGTON, DC 20550

BULK RATE
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National Science Foundation
Permit No. G-69

PI/PD Name and Address

Joseph D. Andrade
Bioengineering
University of Utah
Salt Lake City UT 84112

NATIONAL SCIENCE FOUNDATION FINAL PROJECT REPORT

PART I - PROJECT IDENTIFICATION INFORMATION

1. Program Official/Org.	Bonnie Thompson - INT
2. Program Name	INT-JOINT RESEARCH
3. Award Dates (MM/YY)	From: 09/90 To: 02/92
4. Institution and Address	University of Utah 302 Park Building Salt Lake City UT 84112
5. Award Number	9002542
6. Project Title	U.S.-Czechoslovak Workshop on Novel Polymers for Bioengineering (December 11-14, 1990, Prague)

This Packet Contains
NSF Form 98A
And 1 Return Envelope

PART IV -- FINAL PROJECT REPORT -- SUMMARY DATA ON PROJECT PERSONNEL

(To be submitted to cognizant Program Officer upon completion of project)

The data requested below are important for the development of a statistical profile on the personnel supported by Federal grants. The information on this part is solicited in response to Public Law 99-383 and 42 USC 1885C. All information provided will be treated as confidential and will be safeguarded in accordance with the provisions of the Privacy Act of 1974. You should submit a single copy of this part with each final project report. However, submission of the requested information is not mandatory and is not a precondition of future award(s). Check the "Decline to Provide Information" box below if you do not wish to provide the information.

Please enter the numbers of individuals supported under this grant.
Do not enter information for individuals working less than 40 hours in any calendar year.

	Senior Staff		Post-Doctorals		Graduate Students		Under-Graduates		Other Participants ¹	
	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.	Male	Fem.
A. Total, U.S. Citizens	6	2								1
B. Total, Permanent Residents	1									
U.S. Citizens or Permanent Residents ² :										
American Indian or Alaskan Native . . .										
Asian										
Black, Not of Hispanic Origin										
Hispanic										
Pacific Islander										
White, Not of Hispanic Origin	1									
C. Total, Other Non-U.S. Citizens										
Specify Country										
1.										
2.										
3.										
D. Total, All participants (A + B + C)	7	2								1
Disabled³										

Decline to Provide Information: Check box if you do not wish to provide this information (you are still required to return this page along with Parts I-III).

¹Category includes, for example, college and precollege teachers, conference and workshop participants.
²Use the category that best describes the ethnic/racial status for all U.S. Citizens and Non-citizens with Permanent Residency. (If more than one category applies, use the one category that most closely reflects the person's recognition in the community.)
³A person having a physical or mental impairment that substantially limits one or more major life activities; who has a record of such impairment; or who is regarded as having such impairment. (Disabled individuals also should be counted under the appropriate ethnic/racial group unless they are classified as "Other Non-U.S. Citizens.")

AMERICAN INDIAN OR ALASKAN NATIVE: A person having origins in any of the original peoples of North America, and who maintain cultural identification through tribal affiliation or community recognition.
ASIAN: A person having origins in any of the original peoples of East Asia, Southeast Asia and the Indian subcontinent. This area includes, for example, China, India, Indonesia, Japan, Korea and Vietnam.
BLACK, NOT OF HISPANIC ORIGIN: A person having origins in any of the black racial groups of Africa.
HISPANIC: A person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race.
PACIFIC ISLANDER: A person having origins in any of the original peoples of Hawaii; the U.S. Pacific Territories of Guam, American Samoa, or the Northern Marianas; the U.S. Trust Territory of Palau; the Islands of Micronesia or Melanesia; or the Philippines.
WHITE, NOT OF HISPANIC ORIGIN: A person having origins in any of the original peoples of Europe, North Africa, or the Middle East.

NSF Grant Conditions (Article 17, GC-1, and Article 9, FDP-II) require submission of a Final Project Report (NSF Form 98A) to the NSF program officer no later than 90 days after the expiration of the award. Final Project Reports for expired awards must be received before new awards can be made (NSF Grant Policy Manual Section 677).

Below, or on a separate page attached to this form, provide a summary of the completed project and technical information. Be sure to include your name and award number on each separate page. See below for more instructions.

PART II - SUMMARY OF COMPLETED PROJECT (for public use)

The summary (about 200 words) must be self-contained and intelligible to a scientifically literate reader. Without restating the project title, it should begin with a topic sentence stating the project's major thesis. The summary should include, if pertinent to the project being described, the following items:

- The primary objectives and scope of the project
- The techniques or approaches used only to the degree necessary for comprehension
- The findings and implications stated as concisely and informatively as possible

The purpose of this project was to conduct a one-week workshop (in Prague, Czech.) on novel polymers, their properties and their applications in biotechnology and bioengineering jointly between the Czechoslovak Academy of Sciences and nine USA scientists. A total of twenty-four lectures were presented. In addition, there were three open discussion sessions which explored the need for new polymers and what properties should they have, how does one test for compatibility, and how do we achieve these goals. The active participation of all made these discussions quite valuable in looking at new approaches to problems and the necessary expansion of interaction between biological sciences and polymer sciences.

Several of the USA scientists feel that some collaboration will occur between the two groups in the future.

PART III - TECHNICAL INFORMATION (for program management use)

List references to publications resulting from this award and briefly describe primary data, samples, physical collections, inventions, software, etc. created or gathered in the course of the research and, if appropriate, how they are being made available to the research community. Provide the NSF Invention Disclosure number for any invention.

A total of sixteen papers (based on the twenty-four lectures) have now been published in two special issues of the Journal of Bioactive and Compatible Polymers. The papers related to "Materials" are in the August 1991 issue; the papers related to "Drug Delivery" are in the October 1991 issue.

<i>M. J. Kelly</i>	3/25/92
Principal Investigator/Project Director Signature	Date

**IMPORTANT:
MAILING INSTRUCTIONS**
Return this *entire* packet plus all attachments in the envelope attached to the back of this form. Please copy the information from Part I, Block I to the *Attention block* on the envelope.

NATIONAL SCIENCE FOUNDATION
1800 G STREET, N.W. • WASHINGTON, D.C. 20550

SPONSORED PROJECTS
RECEIVED SEP 6 1990

SEP 13 1990

Grant No. INT-9002542
Proposal No. INT-9002542

Mr. Richard H. Timpson
Director, Office of
Research Administration
University of Utah
302 Park Building
Salt Lake City, UT 84112

Dear Mr. Timpson:

The National Science Foundation hereby awards a grant of \$14,925 to the University of Utah for support of the project described in the proposal referenced above, as modified by NSF.

This project, under the direction of Joseph D. Andrade, Bioengineering and Donald J. Lyman, Materials Science & Engr., is entitled:

"U.S.-Czechoslovak Workshop on Novel Polymers for Bioengineering (December 11-14, 1990, Prague)"

This award is effective September 15, 1990 and expires February 29, 1992. A 6 month unfunded flexibility period is included in this award.

This grant is awarded pursuant to the authority of the National Science Foundation Act of 1950 (42 U.S.C. 1861 et seq.) and is subject to GC-1 Grant General Conditions (10/88) and the following terms and conditions:

Pursuant to a Congressional requirement, no individual shall be reimbursed as a direct cost under this award at a rate which exceeds the equivalent of \$95,000 per annum.

By acceptance of this award the grantee certifies that it is in compliance with the provisions of the Drug-Free Workplace Act (P.L. 100-690), in accordance with the certification in Appendix C of 45 CFR 620, Subpart F.

In lieu of an indirect cost allowance at a fixed predetermined rate, this grant includes a fixed dollar amount for indirect costs, as specified in the approved budget.

F.L. 26, "Administration of NSF Conference or Group Travel Award Grant Special Conditions."

The grantee shall not change the scope of work or work plan, period of performance, participant support costs, foreign travel costs, or major participants without prior consultation with and concurrence of the cognizant NSF Program Officer.

PI
①
NSF - Czech Workshop

Carol -
Please work with
Joe w/ Res. Admin
to learn best process
to reimburse
participants
for
travel
expenses -
AJ

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INT-9002542

This project is supported under the cooperative science program shown below. Your rights in inventions, writing, and data may be affected.

"U.S. - Czechoslovakia"

The attached budget indicates the amounts, by categories, on which NSF has based its support.

The cognizant NSF program official for this grant is Bonnie Thompson (202) 357-7494. The cognizant NSF grants official is Nick Nayak (202) 357-9802.

Sincerely yours,

H. D. Wolff, III

Grants Officer

Enclosures



INSTITUTE OF MACROMOLECULAR CHEMISTRY
CZECHOSLOVAK ACADEMY OF SCIENCES

162 06 PRAQUE 6, CZECHOSLOVAKIA
Prague 360 241 (phone)
Marek Prague Gebiel
122019 IMCP C (telex)
+42(2) 367981 (fax)

September 26, 1990

Professor Joseph D. Andrade, Ph.D.

Department of Bioengineering
2480 Merrill Engineering Building
University of Utah
Salt Lake City, Utah 84112
U.S.A.

Dear Professor Andrade:

Thank you for your letter of August 31, 1990, addressed to Dr Rypáček (who is in USA for the period September 9 - October 27). Although we have not succeeded in finding an adequate accommodation for participants from USA yet (cf. the earlier FAX), we would like to hold our joint USA - Czechoslovak workshop "Novel Polymers and Properties for Biotechnology and Bioengineering" as intended in December.

The agreed seminar schedule assumes eight working half-days. The PANM air connection between Prague and New York in December (arrivals Friday and Sunday, departures Monday and Saturday) gave us the idea to arrange the seminar as suggested in the enclosure. Please kindly consider the proposed schedule and let us know your opinion, so that we could adjust the preparation of the meeting accordingly.

The list of the US participants has been passed on to Dr K. Ulbrich, who will deal with the choice of CS participants, bearing in mind suitable topics. The final list of the participants will be submitted to you at the earliest convenience for the preparation of the schedule of lectures.

With best regards,
Sincerely,

teřtin
Pavel Čefelín, Ph.D., DSc. Secretary
Kratochvíl
Pavel Kratochvíl, Ph.D., DSc. Director

Enclosure

cc: D.J. Lyman
K. Ulbrich

Joint USA - Czechoslovak Workshop on
Novel Polymers and Properties for Biotechnology and Bioengineering
Praha, Czechoslovakia, December 1990

Sunday	9.12.	Arrival of US participants, accommodation
Monday	10.12.	morning Visit of participants in the premises of IMC CSAS (where the seminar will be held), discussion of detailed program
		afternoon Opening of the seminar, lectures
Tuesday	11.12.	Lectures and discussion
Wednesday	12.12.	morning Lectures
		afternoon Sightseeing tour in Prague, dinner
Thursday	13.12.	Lectures and discussion
Friday	14.12.	morning Lectures
		afternoon Discussion and closing of the seminar
Saturday	15.12.	Departure of participants



January 3, 1991

Dr. J.D. Andrade
Chairman, Bioengineering
2480 MEB
University of Utah
Salt Lake City, Utah

Dear Joe:

The meeting in Prague went very well. All of our speakers did an excellent job, as did the speakers from the Czech side. I think that some interactions will be coming out of this meeting. Everyone sent their best wishes to you and said that they were sorry that you were not able to be there.

I am writing a brief summary of the meeting for sending to Dr. Bikalis. I will send you a copy when I've got it done. We will also be publishing the papers presented in a special issue of Journal of Bioactive and Compatible Polymers.

I picked up an extra copy of the group picture for you and I have made up a list of who is who to go along with it. I thought that you might like it.

Once I get things sorted out I will give you more details of the speakers and their topics.

My very best wishes to you for this new year.

Sincerely,

Donald J. Lyman
Professor Emeritus