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PURDUE UNIVERSITY
International Education and Research
International Programs in Agriculture



**PORTUGAL UNIVERSITY
INSTITUTES
DEVELOPMENT PROJECT**

(Contract AID/NE-C-1701)

**REPORT ON
SHORT-TERM STAFF ASSIGNMENT**

**Submitted by
DR. HASSAN M. BEHERY
School of Textiles
Clemson University
Clemson, South Carolina**

May 23 through July 16, 1984

PORTUGAL UNIVERSITY INSTITUTES DEVELOPMENT PROJECT
(Contract AID/NE-C-1701)

REPORT ON
SHORT-TERM STAFF ASSIGNMENT
AT THE
INSTITUTO UNIVERSITARIO DA BEIRA INTERIOR (IUBI)
COVILHA, PORTUGAL

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TABLE OF CONTENTS

INTRODUCTION	1
AREA OF CONSULTANCY	1
OBJECTIVES OF THE CONSULTANCY	2
DURATION OF THE ASSIGNMENT	3
PORTUGUESE COUNTERPARTS	3
ACCOMPLISHMENTS WITH RESPECT TO OBJECTIVES	4
Scientific and Extension	
Research Projects	4
Short Course	4
Seminars	4
Faculty-Related Activities	5
IDENTIFICATION OF PROBLEMS ENCOUNTERED	6
RECOMMENDATIONS FOR SOLVING PROBLEMS	7
BOOKS AND PUBLICATIONS PROVIDED IUBI LIBRARY	7
APPENDICES	
Appendix A - Itinerary of Activities During Assignment	
Appendix B - Acknowledgement Letter for Receipt of Book Donated to IUBI Library	
Appendix C - Program for Seminar on Nonwovens	
Appendix D - Announcement and Program for Seminar on Textile Physics	
Appendix E - Minutes of Meeting Held on July 5, 1984	

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REPORT OF ACTIVITIES AT THE
INSTITUTO UNIVERSITARIO DA BEIRA INTERIOR
COVILHA, PORTUGAL

INTRODUCTION

This report covers the activities rendered as part of the technical assistance to the Instituto Universitario da Beira Interior (IUBI) as required by the agreement between the Government of Portugal and the Government of the United States under Prime Contract AID/NE-C-1701. The assistance is provided for the purpose of developing and strengthening the IUBI.

The activities were comprised of courses offered to graduating seniors, seminars, faculty-related activities, visits to area textile mills, discussions of revised program, and serving as "acting long-term advisor." A summary of daily activities is provided in this report as Appendix A.

AREA OF CONSULTANCY

The major area of the consultancy requested by IUBI was "Instruments of Textile Control."

OBJECTIVES OF THE CONSULTANCY

The specific Objectives of the consultancy were as follows:

A. Scientific and Extension

1. To initiate and provide follow-up on research projects with staff in the Textile Department.
2. Short course. Develop and provide a short course of 3 to 4 days duration for staff, students and professionals from the textile industry on the theme, "Problems and Requirements for Instrumentation and Process Control in the Textile Industry."
3. Seminars. (a) In the area of Non-Wovens. To conduct a one day seminar on the theme of "Non-Wovens--What Future?" This seminar will also include participation of a national Portuguese specialist in this area. The seminar will meet the requirement of satisfying a large number of requests on the part of the Portuguese textile industry regarding this subject.
(b) In the area of Textile Physics. Together with Prof. J. Mumby of the Polytechnic University of Barcelona and with Prof. A. Kirschner of the University of the Upper Alsace, the consultant will participate in a seminar with a two-day duration which will cover various complementary areas of textile physics and textile technology.

B. Instructional Topics Related to Staff Development

Given that IUBI has a very substantial interest in the existence and further development of a support service in the area of instrumentation and process control, as a component of the Departments of

Physics and Textiles, the institution wants to take advantage of the consultant's presence, together with the staff of the two departments, to define the appropriate orientation for such a service and to define the equipment necessary to carry out its activities.

DURATION OF THE ASSIGNMENT

The activities outlined above were performed between May 23 through July 16, 1984.

PORTUGUESE COUNTERPARTS

Due to the diversified activities during this assignment, several of IUBI's faculty worked with me as counterparts in the various areas. The following is a summary of activities and the counterpart involved.

- Prof. Jose Miguel Fiadeiro aided in coordinating the activities in the textile area, since he is the principal coordinator of the textile program of the contract.
- Prof. Manuel Jose dos Santos Silva worked actively in organizing and moderating the seminars presented during the consultancy.
- Lic. Helder Jacome worked on the administrative activities concerning the changes and amendments in the management part of the program.
- Eng. Mario Figueiredo Nunes worked with the classes and provided interpretations during the seminar.

ACCOMPLISHMENTS WITH RESPECT TO OBJECTIVES

Scientific and Extension

1. Research Projects: I participated in the initiation and follow-up on the following research projects which will be conducted by IUBI faculty in collaboration with outside organizations:

- "Alternate Fabric for the Air Force Uniform" -- This project was initiated after a seminar was presented at the Air Force Academy on July 11, 1984.
- "Application of Laser Technology in Fabric Cutting" -- This research project was in the initiation stage and needed follow-up meetings with the EFACEC group in Porto.
- Discussed with Eng. Mario Nunes the possibility of continuing research commenced for his M.S. degree and for further studies for the Ph.D. degree in the area of "Morphology of Deformation of Wrapped Yarn."

2. Short Course. A short course of four days on "Problems and Requirements for Instrumentation and Processes Control in the Textile Industry" was outlined and notes prepared. These notes were made available to Professor Fiadeiro. A book used in the course, entitled "Microprocessors and Microcomputers in the Textile Industry," was subsequently donated by me to the IUBI library. A copy of the letter acknowledging receipt of the book is shown in Appendix B.

3. Seminars: A two-day seminar was organized on the theme of "Non-wovens--What Future?". This seminar was held on July 13-14, 1984.

The program and a copy of the brochure is shown in Appendix C. Seminar participants included Portuguese specialists from the Covilha area.

I offered two seminar presentations and assisted my former student, Eng. Mario Nunes, with his seminar presentation. The seminar program indicates that the seminar obviously met the requirement of satisfying a large number of requests from the Portuguese textile industry on the subject of non-wovens.

A second seminar was organized in the area of Textile Physics together with Prof. J. Mumbry of the Polytechnic University of Barcelona and with Prof. A. Kirschner of the University of Upper Alsace. I made two presentations during the two-day seminar which was held on July 6 and 7, 1984. A copy of the brochure with the program and schedule is included in this report as Appendix D. Due to the international nature of this seminar it was announced in the newspaper. A copy of the announcement is also shown in Appendix D.

Faculty-Related Activities

In this area of activity, the following diversified activities were carried out as part of the consultancy.

1. A report was prepared for the Reitor on the "Input for Coordination of Military Academy and Civilian Universities in Education and Research." The report was based upon previous study by the Reitor as well as personal discussion with the Reitor. Due to the length of the report and study, they are not included in this report.

2. An analysis was made of a report presented by the World Bank to modernize the textile industry. The report was obtained through the USAID office in Lisbon. Since a substantial amount of the report dealt

with training and IUBI could benefit from such an opportunity, the analyses of the training portion of the report was presented to IUBI for follow-up and participation in the program.

3. The finalization of the project was carried out in a meeting with Reitor Morgado, Professor Fiadeiro and Lic. Helder Jacome. The meeting covered services of short-term advisors, short-term and long-term training, and identification of IUBI faculty who would receive training in the United States and Clemson faculty who would serve as advisors in Portugal. The minutes of this meeting are included in this report as Appendix E.

4. Preparation of PIOP's for short-term advisors, short-term and long-term trainees were initiated.

5. Arrangements were made for two long-term trainees to take their TOEFL examinations in Madrid, Spain, and for five faculty members to take ALLIGUE tests in Lisbon in preparation for their training.

IDENTIFICATION OF PROBLEMS ENCOUNTERED

The activities during my consultance at IUBI were carried out without difficulty. The concern of the Reitor and the Portuguese counterparts made working conditions most comfortable. As shown in the accomplishments section of this report, certain activities were carried out at the personal invitation of the Reitor which expanded my scope-of-work. This was done in order to make the consultancy as beneficial as possible for IUBI staff and other institutions.

The only problems encountered were the availability of the faculty

in the textile area, and the overloading of the present faculty with too much work and activity.

RECOMMENDATIONS FOR SOLVING PROBLEMS

The development of personnel in any organization is a very lengthy and time-consuming operation. As indicated before, it is obvious that the faculty in the textile area are overloaded with work which is due to the small number of staff members and also to the wide scope of activities they are carrying out with the textile industry in Covilha. It is recommended that the USAID program be extended for another year or two. This would provide additional opportunity for faculty development and would also increase the benefits of the overall program.

BOOKS AND PUBLICATIONS PROVIDED TO IUBI LIBRARY

1. "Microprocessors and Microcomputers in Textile Industry," edited by Perry L. Grady and Gary N. Mock.
2. "INDA Annual Technical Symposium," 1980, 1981, 1982
3. "Applied Fiber Science," Volumes 1, 2, and 3, F. Happey, editor.

The following books were recommended to obtain for the IUBI library.

1. "Open-end Spinning," by V. Rohlena.
2. "Polyester Fibers--Chemistry and Technology," by H. Ludewig.
3. "Shuttleless Weaving Machines," by O. Talavasekt and V. Svaty.

APPENDIX A

Itinerary of Activities During Assignment

Thursday, May 31 Studied Dr. Jim Davis' report covering his short-term advisory assignment at IUBI

Arranged trip to Madrid for long-term trainees to take TOEFL examination

Departed to Madrid

Friday, June 1 Met with the administrator of the TOEFL exam in and sent a letter to Educational Testing Service (ETS) in New Jersey, U.S.A., to ask approval for accepting and grading the tests

Saturday, June 2 (Weekend)

Sunday, June 3

Third Week

Monday, June 4 Met with Reitor Morgado to discuss: Military Science degree, relationship between universities and military academies, research center for Military Academy, research contracts to universities, new materials for the Air Force uniforms. Seminar requested by Dr. Morgado and direction of research activity between IUBI and Air Force Academy on this subject

Meeting with Prof. Fiadeiro and Prof. Santos Silva to discuss the seminars, courses, etc.

Worked on finalization of schedule for textiles

Tuesday, June 5 Worked on summarizing the resumes and credentials of candidates for paper and pulp engineering short-term advisors

Contacted Mario Prata Barros in the United States for Reitor Morgado

Visited textile mill specializing in men's suit production--Confeccoes de Belmonte

Contacted Mr. Charles Stansfield at ETS, Princeton, N.J. for considering the tests for Jacome and Domingos

Wednesday, June 6 Met with Reitor Morgado and discussed progress in finalization of program

Meeting with Prof. Santos Silva and Eng. Mario Nunes to discuss reference for their research project

Meeting with Prof. Fiadeiro to discuss Dr. Sello's visit to IUBI

Met with Lic. Helder Jacome to discuss finalization of the management program

Meeting with Lic. Maria Jose and discussed arrangements for the nonwoven seminar.

Meeting with Reitor Morgado to discuss: Dr. Sello's visit; Dr. Morgado's scheduled visit to the U.S.; PIOP for short-term advisors; ALLIGU test for short-term trainees; and Prato Barros view on Clemson University

Thursday, June 7

Met with Prof. Fred T. Simon and discussed items of his end-of-tour report

Attended farewell party for Prof. F. T. Simon

Met with faculty of Management Department to discuss possible short-term training

Worked with Mario Nunes on paper for publication

Friday, June 8

Studied a report on "Application of Micro-Electronics in the Metal Works, Textiles and Other Industrial Sectors in Portugal," March 1983, prepared by Rao K. Jagaraja

Saturday, June 9

Sunday, June 10

(Weekend)

Fourth Week

Monday, June 11

Worked with Mario Nunes on choosing key words to be used in computer publication search for their research project on application of laser in the textile industry

Travelled to Porto for meeting with the technical group of EFACEC company

Tuesday, June 12

Visited EFACEC and meeting regarding the research project on "Application of Laser in Fabric Cutting"

Wednesday, June 13

Visited RAPOR Company, a subsidiary of EFACEC for electric motor manufacturing to see demonstration on application of robots in automated production

Returned to Covilha

- Thursday, June 14 Worked on telex to Clemson and prepared item for telephone call from Clemson
- Discussed brochure for seminar on nonwovens with Lic. Maria Jose.
- Met with Lic. Joao Domingues and discussed his test results and trip to Clemson as long-term trainee
- Met with Lic. H. Jacome and discussed his program
- Friday, June 15 Worked on lectures on instrumentations
- Arranged for the visit of Dr. Sello with Professor Fiadeiro
- Met with Reitor Morgado, Professor Fiadeiro and Lic. H. Jacome to discuss several aspects of the project
- Saturday, June 16 (Weekend)
 Sunday, June 17

Fifth Week

- Monday, June 18 Meeting with Dr. Stephen Sello to arrange his visit to IUBI and plan his invitation as a short-term advisor in 1985
- Tuesday, June 19 Meeting with Reitor Morgado and Dr. Sello
- Worked with Prof. Santos Silva on schedule and program of seminar
- Worked on preparation for lecture series
- Wednesday, June 20 Worked on report to be presented to the Ministry of Industry on the World Bank report
- Thursday, June 21 National holiday
- Friday, June 22 Discussed with Reitor Morgado the visit to the Ministry of Industry to present my study on the World Bank report
- Meeting with Carvalho Rodregues and discussed the plans in Lisbon and the visit to the Ministry of Industry
- Arranged for the three seminars and the seminar to the Air Force Academy
- Discussed with Mario Nunes the topics for the seminars on fiber physics

Saturday, June 23
 Sunday, June 24 (Weekend)

Sixth Week

Monday, June 25 Visited the Ministry of Industry to discuss the study on the World Bank (meeting was postponed to the next morning)

Tuesday, June 26 Returned to Covilha

Wednesday, June 27 Prepared the schedule of program to be discussed with USAID office
 Preparation of lectures for fiber physics seminar (prepared slides and translation)

Thursday, June 28 Meeting with Reitor Morgado concerning Lisbon trip
 Departed to Lisbon

Friday, June 29 Visited the American Language Institute (ALI) in Lisbon with the long-term and short-term trainees (5 in total)
 Meeting with Dr. Pinheiro at USAID office in Lisbon and discussed the finalized program
 Returned to Covilha

Saturday, June 30
 Sunday, July 1 (Weekend)

Seventh Week

Monday, July 2 Worked on lecture for seminars; called AID for ALLIGU scores and requirements; called Air Force Academy in U.S.; called Military Academy in U.S.; Called Dr. Farrell Brown at Clemson to discuss Maria Jose acceptance at Clemson University.

Tuesday, July 3 Worked on lectures for nonwoven seminar

Wednesday, July 4 Prepared slides and transparencies for lectures

Thursday, July 5 Meeting with Reitor Morgado arranging the schedule of the program; prepared minutes of meeting; answered letter for USAID; worked on lectures

Friday, July 6 Participated in the seminar; attended dinner with the Reitor and faculty from the University of Coimbra

Saturday, July 7 Participated in the second day of the seminar
Sunday, July 8 (Weekend)

Eighth Week

Monday, July 9 Prepared seminar for the Air Force Academy;
worked with the long-term and short-term
trainees on the PIOP's.

Tuesday, July 10 Continued work on seminar for the Air Force
Academy; went to Lisbon

Wednesday, July 11 Presented seminar at Air Force Academy (near
Lisbon); returned to Covilha

Thursday, July 12 Prepared for seminar on nonwovens

Friday, July 13 Participated in nonwovens seminar

Saturday, July 14 Participated in nonwovens seminar

Sunday, July 15 (Weekend)

Monday, July 16 Departed to Lisbon in preparation to returning
to the U.S.

Tuesday, July 17 Returned to the United States

APPENDIX B

Acknowledgement Letter for Receipt of
Book Donated to IUBI Library



Instituto Universitário da Beira Interior

RECEIPT

I have received the book entitled "Microprocessors and Minicomputers in the Textile Industry", edited by Perry L. Grady and Gary N. Mock, ISBN 0-87664-485-X as part of the course on "Problems and Necessity of Instrumentation and Control in the Textile Industry" delivered by Dr. Hassan M. Behery at IUBI, Covilhã, June, 1984).

Maria Helena Daniel

Lica MARIA HELENA DANIEL

LIBRARIAN

27, JUNE, 1984

APPENDIX C

Program for Seminar on
"Nonwovens--What Future?"

FUNCIONAMENTO:

O SEMINÁRIO SERÁ EM PORTUGUÊS E INGLÊS (COM TRADUÇÃO SE NECESSÁRIO). AOS PARTICIPANTES SERÃO FORNECIDOS RESUMOS DAS CONFERÊNCIAS.

TEMAS:

O SEMINÁRIO FOCARÁ OS ASPECTOS TECNOLÓGICOS RELACIONADOS COM A UTILIZAÇÃO DE NÃO-TECIDOS EM PORTUGAL E NO MUNDO, COM PARTICULAR INCIDÊNCIA NO SUBSECTOR DOS GEOTÊXTEIS.

DESTINATÁRIOS:

- *QUADROS TÉCNICOS SUPERIORES, QUADROS INTERMÉDIOS E GESTORES.*
- *DOCENTES E INVESTIGADORES CIENTÍFICOS.*
- *ESTUDANTES.*

A INSCRIÇÃO SERÁ DE 3.000\$00 DEVENDO SER ENVIADA ATÉ AO DIA 6 DE JULHO DE 1984.

SE HOVER NA SUA INSTITUIÇÃO OUTRAS PESSOAS INTERESSADAS EM PARTICIPAR NO SEMINÁRIO, É FAVOR USAR FOTOCÓPIAS DA FICHA DE INSCRIÇÃO DESTACÁVEL.

INSTITUTO UNIVERSITÁRIO DA BEIRA INTERIOR

DEPARTAMENTO

DE

CIÊNCIA E TECNOLOGIA TÊXTEIS



SEMINÁRIO

13 E 14 DE JULHO DE 1984

" NÃO - TECIDOS ... QUE FUTURO ? "

- PANORÂMICA DOS NÃO-TECIDOS EM PORTUGAL
- NÃO-TECIDOS NA EUROPA
- MAQUINARIA EM NÃO-TECIDOS
- O MUNDO DOS GEOTÊXTEIS

OS TEMAS SERÃO APRESENTADOS POR UM QUALIFICADO TÉCNICO DA INDÚSTRIA NACIONAL POR UM PROFESSOR DA UNIVERSIDADE AMERICANA DE CLEMSON E POR UM DOCENTE DO IUBI.

ALOJAMENTO:

POR FAVOR RESERVE O SEU HOTEL

ALGUMAS SUGESTÕES:

TELEF.	QUARTO DUPLA	
	C/BANHO	
23001/2 PENSÃO SOLNEVE	1.740\$00	
25091 RESID.MONTALTO	2.000\$00	
22758 RESID.FLORESTA	1.100\$00	
52051 HOTEL SAMASA (FUNDÃO)	2.300\$00	
24091 HOTEL TORRALTA	2.300\$00	
24071 ESTAL.VARANDA DOS CARQUEIJAS	2.300\$00	
	QUARTO SIMPLES	
	C/BANHO	
23001/2 PENSÃO SOLNEVE	1.120\$00	
25091 RESID.MONTALTO	1.500\$00	
22758 RESID.FLORESTA	700\$00	
52051 HOTEL SAMASA (FUNDÃO)	1.600\$00	
24091 HOTEL TORRALTA	1.590\$00	
24071 ESTAL.VARANDA DOS CARQUEIJAS	1.590\$00	

PROGRAMA

6ª FEIRA 13 DE JULHO DE 1984

MODERADOR: PROF. DOUTOR M. FIADEIRO

14H00 - ABERTURA DO SEMINÁRIO

14H30 - " PANORÂMICA DOS NÃO-TECIDOS EM PORTUGAL "

ENGº CARLOS BAPTISTA (FÁBRICA DE TAPETES VITÓRIA)

16H00 - INTERVALO PARA CAFÉ

16H30 - " NÃO-TECIDOS NA EUROPA "

PROF.DOUTOR H.BEHERY (CLEMSON UNIVERSITY, U.S.A.)

17H30 - DISCUSSÃO

SÁBADO 14 DE JULHO DE 1984

MODERADOR: ENGº PORTUGAL RIBEIRO

9H00 - " MAQUINARIA EM NÃO-TECIDOS "

ENGº MÁRIO NUNES (IUBI)

10H00 - " O MUNDO DOS GEOTÉXTEIS "-PARTE I

PROF.DOUTOR H.BEHERY (CLEMSON UNIVERSITY, U.S.A.)

11H00 - INTERVALO PARA CAFÉ

11H30 - " O MUNDO DOS GEOTÉXTEIS "-PARTE II

PROF.DOUTOR H. BEHERY (CLEMSON UNIVERSITY, U.S.A.)

.....
(CORTE, PREENCHA E DEVOLVA)

FICHA DE INSCRIÇÃO

PARA ASSISTIR AO SEMINÁRIO, AGRADECEMOS QUE PREENCHA ESTA FICHA E A REMETA, COM O VALOR DA RESPECTIVA INSCRIÇÃO, À ORDEM DO INSTITUTO UNIVERSITÁRIO DA BEIRA INTERIOR, PARA O SEGUINTE ENDEREÇO:

INSTITUTO UNIVERSITÁRIO DA BEIRA INTERIOR

DEPARTAMENTO DE CIÊNCIA E TECNOLOGIA TÊXTEIS

RUA MARQUES DE ÁVILA E BOLAMA

6200 COVILHÃ

VALE DE CORREIO Nº.....

CHEQUE Nº

(S/BANCO

NOME: FUNÇÃO:
ORGANISMO/EMPRESA:
DIRECÇÃO: TELEFONE:
DATA:/...../..... ASSINATURA:

APPENDIX D

Announcement and Program for Seminar on
Textile Physics

FUNCIONAMENTO:

O SEMINÁRIO SERÁ EM INGLÊS, FRANCÊS E ESPANHOL (COM TRADUÇÃO EM SIMULTÂNEO), SENDO FORNECIDOS AOS PARTICIPANTES OS RESUMOS DAS CONFERÊNCIAS EM PORTUGÊS.

TEMAS:

O SEMINÁRIO FOCARÁ ASPECTOS TECNOLÓGICOS RELACIONADOS COM O PROCESSAMENTO E PROPRIEDADES FÍSICAS DOS MATERIAIS TÊXTEIS.

SERÃO TRATADOS OS PROBLEMAS DE CONTROLO DE QUALIDADE E SUA APLICAÇÃO NA INDÚSTRIA TÊXTIL.

SERÁ AINDA APRESENTADO UM TEMA DE PLENA ATUALIDADE E RELEVÂNCIA A NÍVEL MUNDIAL RELACIONADO COM O COMPORTAMENTO AO FOGO DOS TÊXTEIS.

DESTINATÁRIOS:

- QUADROS TÉCNICOS SUPERIORES, QUADROS INTERMÉDIOS E GESTORES.
- DOCENTES E INVESTIGADORES.
- ESTUDANTES.

A INSCRIÇÃO SERÁ DE 3.000\$00 DEVENDO SER ENVIADA ATÉ AO DIA 4 DE JULHO DE 1984.

SE HOUVER NA SUA INSTITUIÇÃO OUTRAS PESSOAS INTERESSADAS EM PARTICIPAR NO SEMINÁRIO, É FAVOR USAR FOTOCÓPIA DA FICHA DE INSCRIÇÃO DESTACÁVEL.

INSTITUTO UNIVERSITÁRIO DA BEIRA INTERIOR

DEPARTAMENTO

DE

CIÊNCIA E TECNOLOGIA TÊXTEIS



SEMINÁRIO

PROCESSOS FÍSICOS E CONTROLO
DE QUALIDADE NOS TÊXTEIS

ESTE SEMINÁRIO É UMA REALIZAÇÃO CONJUNTA DO DEPARTAMENTO DE CIÊNCIA E TECNOLOGIA TÊXTEIS DO IUBI E DO INSTITUTO DOS TÊXTEIS.

OS TEMAS SERÃO APRESENTADOS POR ESPECIALISTAS DE RENOME MUNDIAL, O PROF. H. BEHERY DA UNIVERSIDADE DE CLEMSON - EUA, PROF. A. KIRSCHNER DA ESCOLA NACIONAL SUPERIOR DAS INDÚSTRIAS TÊXTEIS DE MULHOUSE - FRANÇA E O PROF. J. MUMBRU DA ESCOLA TÉCNICA SUPERIOR DE ENGENHEIROS INDUSTRIAIS DE TARRASSA - ESPANHA.

SERÁ MODERADOR O ENG.º BARTOLOMEU MONTEIRO PRESIDENTE DO INSTITUTO DOS TÊXTEIS.

21

ALOJAMENTO:

POR FAVOR RESERVE O SEU HOTEL.

ALGUMAS SUGESTOES:

TELEF.		QUARTO DUPLO C/BANHO
23001/2	PENSÃO SOLNEVE	1.740\$00
25091	RESID. MONTALTO	2.000\$00
22758	RESID. FLORESTA	1.100\$00
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24071	ESTAL. VARANDA DOS CARQUEIJALS	2.300\$00
		QUARTO SIMPLES C/BANHO
23001/2	PENSÃO SOLNEVE	1.120\$00
25091	RESID. MONTALTO	1.500\$00
22758	RESID. FLORESTA	700\$00
52051	HOTEL SAMASA (FUNDÃO)	1.600\$00
24091	HOTEL TORRALTA	1.500\$00
24071	ESTAL. VARANDA DOS CARQUEIJALS	1.500\$00

PROGRAMA

MODERADOR: ENGE BARTOLOMEU MONTEIRO

SEXTA-FEIRA - 6 DE JULHO DE 1984

- 14H30 - ABERTURA
PROF. DR. C.M. PASSOS MORGADO - REITOR DO IUBI
- 14H45 - PRINCÍPIOS DE FÍSICA TÊXTIL
PROF. H. BEHERY
- 15H45 - PRINCÍPIOS DE CONTROLO DE QUALIDADE
PROF. A. KIRSCHNER
- 16H45 - INTERVALO PARA CAFÉ
- 17H00 - CARACTERÍSTICAS DOS TÊXTEIS E SEU COMPORTAMENTO AO FOGO
PROF. J. MUMBRU
- 18H00 - DISCUSSÃO

SÁBADO - 7 DE JULHO DE 1984

- 9H30 - PROPRIEDADES MECÂNICAS E ESTRUTURA DOS MATERIAIS TÊXTEIS
PROF. H. BEHERY
- 10H30 - CONTROLO DE QUALIDADE NA INDUSTRIA TÊXTIL
PROF. A. KIRSCHNER
- 11H30 - INTERVALO PARA CAFÉ
- 11H45 - TRATAMENTOS IGUMFUGOS E COMPORTAMENTO DOS TÊXTEIS AO FOGO
PROF. J. MUMBRU
- 12H45 - DISCUSSÃO E CONCLUSÃO

(CORTE, PREENCHA E DEVOLVA)

FICHA DE INSCRIÇÃO

PARA ASSISTIR AO SEMINARIO, AGRADECEMOS QUE PREENCHA ESTA FICHA E A REMETA, COM O VALOR DA RESPECTIVA INSCRIÇÃO, A ORDEM DO INSTITUTO UNIVERSITARIO DA BEIRA INTERIOR, PARA O SEGUINTE ENDERECC

INSTITUTO UNIVERSITARIO DA BEIRA INTERIOR

DEPARTAMENTO DE CIÊNCIA E TECNOLOGIA TÊXTEIS

RUA MARQUÊS DE ÁVILA E BOLAMA

6200 COVILHA

VALE DE CORREIO Nº
CHEQUE Nº

(S/BANCO

NOME:
ORGANISMO/EMPRESA:
DIRECÇÃO:
DATA:/...../..... ASSINATURA:
FUNÇÃO:
TELEFONE:

Seminário sobre processos físicos e controlo de qualidade nos Têxteis

Vai realizar-se no IUBI, nos dias 6 e 7 de Julho um Seminário sobre processos físicos e controlo de qualidade dos têxteis.

Este Seminário é uma realização conjunta do Departamento de Ciência e Tecnologia Têxteis do IUBI e do Instituto dos Têxteis.

Os temas serão apresentados por especialistas de renome mundial, o Prof. H. Behery da Universidade de

Clemson-EUA, Prof. A. Kirscher da Escola Nacional Superior das Indústrias Têxteis de Mulhouse-França e o Prof. J. Mumbro da Escola Técnica Superior de Engenheiros Industriais de Tarrassa-Espanha.

Será moderador o Eng. Bartolomeu Monteiro presidente do Instituto dos Têxteis.

Temas: O Seminário focará aspectos Tecnológicos relacionados com o proces-

samento e propriedades físicas dos materiais Têxteis.

Serão tratados os problemas de controlo de qualidade e sua aplicação na Indústria Têxtil.

Será ainda apresentado um tema de plena actualidade e relevo a nível mundial relacionado com o comportamento ao fogo dos Têxteis.

A inscrição será de 3.000\$00 devendo ser enviada até ao dia 4 de Julho de 1984.

BEIRA INTERIOR

NOTÍCIAS DA COVILHÃ

Propriedade: Diocese da Guarda
Fotocomposição e Impressão: Tip. "Notícias da Covilhã"
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— 23 de Junho de 1984 —

27

APPENDIX E

Minutes of Meeting Held on
July 5, 1984

24

Minutes

of

Meeting on July 5, 1984 (9:45 A.M.)

Attending: Reitor M.P.Morgado
 Lic.Helder Jacome
 Prof.Doutor J.M.Fiadeirc
 Prof.Doutor H.M.Behery

1. Dr.Behery gave a briefing on the meeting held at AID office in Lisbon with Dr.Luis Pinheiro and presented the summary of the program which he submitted at that meeting which is as follows:

ACTIVITY	TEXTILES		MANAGEMENT		TOTAL
	COMPLETED BY 7/84	TO BE COMPLETED BETWEEN 7/84 & 12/85	COMPLETED BY 7/84	TO BE COMPLETED BETWEEN 7/84 & 12/85	
SHORT TERM ADVISORS	14.75	10.5	9.75	2.00	37.0
SHORT TERM TRAINING	8.5	8.0	1.75	-	18.25
LONG TERM TRAINING	36.0	29.0	51.0	40.0	156.0

The comparison between the person month approved for the program as per June, 1984 and those submitted by Dr.Benery as shown above were made at the meeting in Lisbon by Dr.Pinheiro and was followed by telex No. 488/LV dated Lisbon, July, 1984 and the numbers were then revised and finalized as follows.

ACTIVITY	PERSON MONTH		DIFFERENCE
	SUBMITTED BY BEHERY 29/06/84	APPROVED AS PER 06/84	
S.T.A.	37.0	38.0	(1.0)
S.T.T.	18.25	21.0	(2.75)
L.T.T.	156.0	144.0	-12.0

The general situation of the program was discussed in light of the above figures and the following decisions were reached.

Short Term Advisors:

No increase in short term advisors is needed and the 37.0 PM submitted in the detailed program will be used. The cost for the 1.0 PM could be credited for other activities such as short term training.

Short Term Training:

The submitted period of 18.25 PM will not be changed at the present time.

Long Term Training:

The person month submitted for L.T.T. is 12 PM more than the approved (156 sub. vs. 144 app.). This is planned to be used starting January, 1985 due to the fact that one instructor at IUBI is working to fulfill the requirements for acceptance at Clemsor University.

Since, this instructor will use only the 12.0 PM, IUBI will provide the financial support for six months after the termination of the program.

In case, this instructor will not use these 12 PM L.T.T., an equivalent period will be used for short term training specially in the area of computer

Science.

The budget needed for the above activities could be worked out between the differences in the person months shown in the above table. A formal request will be submitted when the change for the L.T.T. will be needed as indicated in AID Telex No. 488/LV.

2. The names and the activities of S.T.A., S.T.T. and L.T.T. were discussed and were approved as shown by the attached Schedule.
3. Reitor Morgado emphasized the need that each short term trainee has to submit and discuss with Dr. Behery the following points concerning his or her activities during the assignment in the U.S.A.:
 - a. The objectives and interests to be fulfilled.
 - b. Places, institutes to be visited and persons to meet with.
 - c. Plans for future activities in the area of interest after returning to IUBI.
 - d. Any other details that may give further explanations to the assignment.

Also, Dr. Behery will indicate how these activities will be fulfilled.

4. The information concerning the research and publications of Dr. R.C. Peterson (Miami University of Ohio) was received and the decision on the short term advisor for paper engineering was made to be Dr. Peterson.
5. The results of the ALIGU test for the five participants who took the test on June 29, 1984 was presented with the minimum requirements issued for AID. Efforts will be made to arrange for the three S.T.T. and two L.T.T. to travel to the U.S.A. within the next two months.

The meeting ended at 11:30am.

Respectfully Submitted

Hassan Behery

27



Instituto Universitário da Beira Interior

TABLE (I)
 SUMMARY OF SHORT TERM ADVISORS.....
 IN ..TEXTILES.....
AS PER JULY, 1984.....

AREAS OF ACTIVITY	NAME OF SHORT TERM... ...ADVISOR...	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>E. TEXTILE TECH & MANAGEMENT</u>						
a) Organization of textile Products	LaRoche	FEB3,81	MAY30,81	5	4	1.0
b) Instruments of Textile Control	H. Behery	MAY23,84	JUL16,84	2	1.75	0.25
c) Nonwovens	H. Behery	MAY15,81	JUL15,81	2	2	-
<u>PHYSICS</u>						
a) Color Science	F. T. Simon	MAR7,84 MAY18,84	APR12,84 JUN3,84	2	1.75	0.25
b) Rheology	D. Edie	MAY 1,82	JUN30,82	2	2	-
c) Fiber & Textile Physics	H. Behery	JUN 1,82	JUL15,82	2	1.5	+0.5
<u>G. TEXTILE CHEMISTRY</u>						
a) Chem. Degredation of Fibers	G. Spencer	OCT22,82	DEC,82	2	1.75	0.25
b) Efluent Treatment	--	--	-	2	-	+2
c) Physical Chem of Polymers	--	--	-	3	-	+3
<u>H. OTHER AREAS</u>						
a) Energy Conservation	--	--	-	4	-	+4
b) Management	--	--	-	4	-	+4
				30	14.75	15.25

28



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TABLE (I-A)
SUMMARY OF SHORT TERM ADVISERS.....
IN TEXTILES.....
TO BE FULFILLED BETWEEN AUG1,84. & DEC31,85

AREAS OF ACTIVITY	NAME OF SHORT TERM ADVISOR ..	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>G. TEXTILE CHEMISTRY</u>				2.25	-	+2.25 *
b)Efluent Treatment	J.J.Porter	MAR15,85	MAY15,84	2	2	-
c)Physi.Chem.of Polymers	_____	-	-	3	-	+3
<u>H. OTHR AREAS</u>						
a)Energy Conservation	G.L.Gaddis	MAY10,85	JULY10,85	4	2	+2
Chemical Analysis	S.B.S. do		APR30,85		2	+2
c)Pulp & Paper Eng.	R.C.Peterson	MAR15,85	MAY15,85	-	2	-2
d)Graduate Studies	F.Brown	FEB1,85	MAR31,85	-	1	-1
e)Latest Development	H.Behery	JUN1,85	JUL15,85	-	1.5	-1.5
				15.25	10.5	+4.75

* - Balance as shown in Table I

29



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TABLE (II)
 SUMMARY OF SHORT TERM TRAINING.....
 IN TEXTILES.....
 AS PER JULY, 1984.....

AREAS OF ACTIVITY	NAME OF SHORT TERM .. TRAINEE	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>E. TEXTILE TECH. & MANAGEMENT</u>						
a) Organization of textile Products	_____	-	-	3	-	+3
<u>F. TEXTILE PHYSICS</u>						
a) Color Science	J.M. Lucas	Aug15,81	Dec31,81	4.5	4.5	-
<u>G. TEXTILE CHEM.</u>						
a) Effluent Treatment	M. Fiadeiro			2	2	-
b) Phys. Chem. of Poly.	_____	-	-	3	-	+3
c) Chem. Deg. of Fibers	M. Teresa Amorim			2	2	-
<u>H. OTHERS</u>						
a) Energy Conservation	_____	-	-	2	-	+2
				16.5	8.5	+8

20



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TABLE (II-A)
 SUMMARY OF SHORT TERM TRAINEE.....
 IN TEXTILES.....
 TO BE FULFILLED BETWEEN AUG. 1, 84 & DEC 31, 85

AREAS OF ACTIVITY	NAME OF SHORT TERM... ...TRAINEE.....	ASSIGNMENTS		PERSON MONTH		
		DATES		(PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
E. TEXTILE TECH. & MANAGEMENT						
a) Organization of Textile Products	_____	-	-	3	-	+3
G. TEXTILE CHEM.						
b) Physical Chem. of Polymers	_____	-	-	3	-	+3
H. OTHERS						
a) Energy Conservation	A. Morgado			2	1.5	+0.5
b) Fiber Physics				-	1.5	-1.5
c) Textile Technology (Automation)	Santos Silva			-	1.5	-1.5
d) T.L.R.C. (Library)	H. Daniel			-	1.5	-1.5
e) General Admin.	Reitor Morgado					
	Dr. Pinheiro			-	2	-2
	Dr. Pinto Machado					
				8	8	0

31



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TABLE (III)
SUMMARY OF LONG TERM TRAINING.....
IN TEXTILES.....
AS PER JULY, 1984.....

AREAS OF ACTIVITY	NAME OF LONG TERM TRAINEE.....	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>F.FIBER PHYSICS</u>						
a)Color Science	J.M.Lucas	JAN1,82	JUL31,83	19	19	0
b)Rheology	M.F.Nunes	JAN1,83	MAY31,84	19	17	+2
c)Fiber & Textile Physics	-	-	-	19	-	+19
				57	36	21



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TABLE (IIIJA)
 SUMMARY OF LONG TERM TRAINING.....
 IN TEXTILES.....
 TO BE FULFILLED BETWEEN AUG.15,84 & DEC.31,85

AREAS OF ACTIVITY	NAME OF LONG TERM... TRAINEE.....	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
F. <u>FIBER PHYSICS</u>			(Balance from Nunes			+ 2
c) Fiber & Textile Physics	M.J.Geraldes	AUG1,84	DEC31,85	19	12	+ 7
d)Fiber & Polymer Formation	J.P.Domingues	AUG1,84	DEC31,85	-	17	-17
				19	20	0

33



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TABLE (1)
 SUMMARY OF (LONG) & SHORT TERM ADVISORS
 IN .MANAGEMENT.....
 .. AS .PER .JULY, .1984.....

AREAS OF ACTIVITY	NAME OF ADVISORS....	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>A. GENERAL PROGRAM DEVELOPMENT</u>						
1. Long Term Advisor	J. Atkinson	OCT. 80	DEC. 81	27	15	-
a) Agrobusiness Planning & Reg. Development	T. Gunter	JAN. 83	DEC. 83			
2. Short Term Advisors				27	27	
a) Research Methods and Approach	C. WHITEHURST	AUG 15, 83	SEPT 15, 83	2	2	-
b) Teaching/Learning Resources	_____	-	-	2	-	+2
c) Extensive Communications Method	R. Pricer	JUNE, 81	JULY, 81	4	2	+2
<u>B. REGIONAL PLANNING</u>						
a) Preparation & Appraisal of Investment Project	_____		-	3	-	+3
<u>C. INDUSTRIAL MANAGEMENT</u>						
a) Budget Techniques	C. Whitehurst (Managerial Eco)	SEP 15, 83	DEC 15, 83	4	2	0
<u>D. AGROBUSINESS MANAGEMENT</u>						
a) Management	J. Davis (Accoun. Inf. Sys) D. Grigsby	MAR 15, 84 MAY 10, 84	MAY 15, 84 JUN 29, 84	2	1.75	+0.25
				17	9.75	+7.25

24

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TABLE (1-A)
SUMMARY OF SHORT TERM ADVISORS.....
IN MANAGEMENT.....
TO BE FULFILLED BETWEEN AUG,1,.84-DEC.31, 85

AREAS OF ACTIVITY	NAME OF ADVISORS.....	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>B.REGIONAL PLANNING</u> a)Preparation and Appraisal of Investment Project	G.Friedlob	April15,85	Jun15,85	3	2	+1

15



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TABLE (2)
 SUMMARY OF SHORT TERM TRAINEE.....
 IN MANAGEMENT.....
 AS PER JULY, 1984.....

AREAS OF ACTIVITY	NAME OF SHORT TERM .. TRAINEE..	ASSIGNEMENT'S DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>B. REGIONAL PLANNING</u>						
a) Regional Planning (T.L.R.C.)	Nicolau Raposo	OCT ,83	NOV. ,83	2	1.75	+0.25
<u>C. INDUSTRIAL MGT</u>						
a) Quantitative Method	_____	-	-	4	-	+4
b) Management	_____	-	-	3	-	+3
<u>D. AGROBUSINESS MGT</u>						
a) Active Planning	_____	-	-	3	-	+3
				12	1.75	+10.25

26



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TABLE (3)
 SUMMARY OF LONG TERM TRAINEE.....
 IN MANAGEMENT.....
 AS PER JULY 1984.....

AREAS OF ACTIVITY	NAME OF LONG TERM ..TRAINEE....	ASSIGNMENTS DATES		PERSON MONTH (PM)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
<u>C. INDUSTRIAL M.G.T.</u>						
a) Quantitative Method	J.Lisboa	AUG, 81 AUG,83	DEC,81 JUL,84	19	15	+4
c) Admi. & Decision	A.Pereira	AUG,83	JUL,84	19	11	+8
d) Ind.Eng.&Manag	M.Prata Barros	JAN,83	JUL,84	19	18	+1
Cooperation Research	A.Baia	JAN,83	JUL,84	-	7	-7
				57	51	+6

31



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TABLE (3-A)
SUMMARY OF LONG TERM TRAINEE.....
IN MANAGEMENT.....
TO BE COMPLETED BETWEEN JULY, 84 AND DECEMBER, 1985

AREAS OF ACTIVITY	NAME OF LONG TERM..... TRAINEE.....	ASSIGNMENTS DATES		PERSON MONTH (:M)		
		BEGINNING	ENDING	PLAN.	ACCOM.	BAL.
		(Balance P.Barros)		+1	-	-
C. <u>INDUSTRIAL MANAGEMENT</u>						
a) Quantitative Methods	J.Lisboa	AUG,84	DEC.84	+4	5	- 1
b) Admi.& Decision	A.F.Pereira	JUL,84	DEC,84	+8	6	+ 2
c) Oper.Research	A.Baia	AUG,84	JUL,85	-7	12	-19
d) Accounting	H.Jacome	AUG 84	DEC,85		17	-17
				+6.0	40	-34

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