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OCCASION

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IQUIFIB - INSTITUTO DE QUIMICA Y FISICOQUIMICA BIOLÓGICAS

FACULTAD DE FARMACIA Y BIOQUIMICA
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19008

03 MAY 1991

BUENOS AIRES, April 26, 1991

Mr. Kohomen, M.
Acting Chief, Contracts Sections
General Services Division
Department of Administration
UNIDO, P.O. Box 300
A 1400 Vienna, Austria

Dr. Mr. Kohomen:

We are glad to submit the report about the course: Protein and Peptide Purification, Microsequencing, Biotechnological Applications.


It was held as per the program and schedule submitted.

Dr. Michel W. Hunkapiller was not able to participate and due to the very short notice it was not possible to find a suitable substitute.

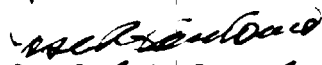
We should like to point out the great value of the contribution given by Professors Hellman, Wernsterdt and Asenjo.

The above also applies to the local professors and assistant professors.

In the selection of participants we endeavoured to bring representatives from as many as possible Latin American countries, as well as, from various Argentine regions. In all cases it was ascertained that the participants were to apply the knowledge and techniques to be acquired during the course, in their future research.


Dr. Alejandro C. Paladini

Sincerely,


Dr. José A. Santomé

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International Course
PROTEIN AND PEPTIDE PURIFICATION, MICROSEQUENCING,
BIOTECHNOLOGICAL APPLICATIONS

Dates 11 - 27 March 1991

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LECTURES

- 11 - 3 Dr. José A. Santomé
" Importance of peptide and protein purification and sequencing
in Biotechnology"
- 12 - 3 Dra. Carlota Wolfenstein - Todel
" Theoretical principles of current purification techniques".
- 13 - 3 Dra. Carlota Wolfenstein - Todel
" Purity degree evaluation".
- 14 - 3
- 15 - 3 Dra. Cristina Nowicki
" High performance liquid chromatography in protein purification".
- 18 - 3 Dr. Osvaldo Cascone
" Protein purification by two aqueous phase partition".
- 19 - 3 Dra. Mirtha J. Biscoglio
" Protein sequencing and amino acid analysis".
- 20 - 3 Dr. Ulf Hellman
" SDS - PAGE and Blotting to membranes".
- 21 - 3 Dr. Ulf Hellman
"HPLC micropreparative"
- 22 - 3 Dr. Osvaldo Cascone
" Recovery and purification of products obtained from biotechnological
processes".
- 25- 3
- 26 - 3 Dr. Juan Asenjo
" Utilization of expert systems for the logical design of protein
purification processes".

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Experimental Work

It consisted of daily individual practice for 6 hours and participants were trained in the following techniques:

- HPLC in its different modes: reverse phase, ionic exchange, size exclusion. Microbore and narrowbore columns.
- Two - aqueous - phase partition.
- Polyacrylamide gel electrophoresis.
- SDS - polyacrylamide gel electrophoresis.
- High density polyacrylamide gel electrophoresis. Staining methods: Coomassie Brilliant Blue, silver, protein identification through its enzymatic activity.
- Isoelectrofocusing.
- Transfer of proteins to immobilizing membranes.
- Isolation of gel band material in order to analyze its sequence.
- Automatic microsequencing.
- Separation of amino acid phenylthiohydantoin by reverse phase HPLC.
- Amino acid analysis

Evaluation

At the end of the course the participants presented their plans to apply the knowledge acquired and their statements and answers to questions were evaluated.

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	US\$
1) Fundacion Antorchas Travel and subsistence costs of one of the guest lecturers.	2.500
2) Applied Biosystems Travel of six participants	4.000

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FINANCIAL REPORT

1) Travel and per diem of keynote speakers		
a) 2 tickets Stockholm - Buenos Aires - Stockholm	3,143	
b) Food expenses	1,334	
c) Hotel	<u>300</u>	5,277
2) Subsistence cost of other participants		
a) Hotel	5,090	
b) Other services (trips, week end meals)	1,050	
c) Meals (Restaurant Brujildas)	3,510	
d) Lunch "La cautiva"	<u>93</u>	10,543
3) Miscellaneous		
a) Transfer from and to airport	244,50	
b) Secretarial work	500	
c) Telefax	300	
d) Door, to door mail	20,30	
e) Traveling expenses	60	
f) Photocopies	105,24	
g) Banking expenses	760	
h) Miscellaneous expenses	<u>24,42</u>	2,022,40
4) Expendables		
a) Laboratory expenses (LANAIS)	2,320	
b) Reagents	<u>760</u>	3,080
5) Minor non expendable equipment		
a) Phast transfer Electro - Transfer	1,730,50	
b) Electrophoresis Power Supply and cell	<u>2,055</u>	3,791,00
		<u><u>24,715,96</u></u>