

## บันทึกข้อความ

### มหาวิทยาลัยเทคโนโลยีสุรนารี

Center	for International Affairs
Date	29 Dec 9
Time	13150 V
File	

Center for Scientific and Technological Equipment.

Ref.No. 1140

วันที่

December 1995.

เรื่อง

Renomination of trainees in the field of Electron Microscopy.

เรียน Professor Dr. Umaly, Director of Center for International Affairs.

Dear Professor Umaly

Please refer to our letter Ref.No. 5132/1070 dated 21 November 1995 and our recent conversation about the offer from CUTC for the training on Electron Microscopy early next year. As a result we would like to renominate the trainees as follows:

- 1. Ms. Warawan Ratanachai (already nominated)
- 2. Ms. Anik Janyooyen (new nominee)

Both of them appear in the list of the EM's trainees proposal submitted to the CUTC last year.

Thank you for your kind attention

(Virul Mangclaviraj)

Visual Mangelairaj

Director

Center for Scientific and Technological Equipment.

The Center for Scientific and Technological Equipment. Tel. 6123, 3133

Ref.No. 5132/ 10 70"

November 1995.

Training Period.

Dear Prof. Dr. Umaly.

The training period in Canada for Ms. Warawan Ratanachai in Biological Electron Microscopy and Ms. Boontharica Muangkratoke in Nuclear Magnetic Resonance Spectrometry will be from 9 to 28 April 1996. Please arrange accordingly.

Thank you for your kind attention.

Vine

(Virul Mangclaviraj)

Director

Center for Scientific and Technological Equipment.

AS 42m38

#### PROPOSED STUDY TOUR IN CANADA

- 1. Mr. Sarawut Sujitjorn , Ph.D., member IEEE
  - Assistant Professor of Electrical Engineering and Chair , School of Electrical Engineering , Suranaree University of Technology , Thailand
- 2. (To be identified)

Senior or Chair of School of Mechanical Engineering

- a. Date: 27 April 3 June 1995
- b. Areas of Interest to be discussed:
  - Academic policies concerning promotion, graduation, student conduct, code of ethics etc.
  - Faculty appointment, supporting staff appointment, tennure track and tennure requirement etc.
  - Research administration matters;
  - Curriculum planning , development and implementation ;
  - Co op administration and implementation;
  - Professional program acreditation procedures ;
  - Management issues and functions, authorities and responsibilities, morale and the collegial system of governance;
  - Post graduate program planning and implementation;
  - Enrolment planning and associated human resource allocation;
  - Budget allocation and control mechanism;
  - Staffs exchange and joint research activities.
- c. Purposes of visit
- (1) To discuss with Head and staffs of Mechanical Engineering Department, University of Waterloo and Head and staffs of Electrical Engineering Department, Ryerson Polytechnic University in:
- Curriculum planning and development including outline in program structures, course and curriculum \_\_
   guidelines, laboratory design, major equipment lists, laboratory manuals
  - Staffs exchanges
  - Joint research and other cooperative activities
- (2) To visit and discuss with Academic adminstrators and staff members of CUTC of various topics in the area of interest stated above in (b)

### d. Proposed schdule:

27 April 1995 Leaving Bangkok

28 April Arrival in Toronto

1 - 10 May Visiting University of Waterloo

11 - 19 May Visiting Ryerson Polytechnic University

22 - 25 May Visiting University of Nova Scotia

26 - 31 May Visiting University of Guelph

2 June Leaving Toronto

3 June Arriving Bangkok

ตำนัก	วิชาเทคโบโลยีอุตอาหกรรม
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## บันทึกช้อความ มหาวิทยาลัยเทคโนโลยีสุรนารี

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## Facsimile Communication Cover Sheet

DATE:

February 3, 1995

**DESTINATION FAX #:** 

011-66-44-216127

Please deliver attached pages to:

NAME/TITLE:

Dr. Ruben Umaly

COMPANY/INSTITUTION:

Suranaree University of Technology

ADDRESS:

Nakhon Ratchasima, Thailand

You will receive\_2\_ page(s) of copy including this cover sheet. If the entire transmission is not received, please contact us as soon as possible. Our operator can be reached at (416) 979-5026.

FROM:

Jennifer Sherwood

Dear Dr. Umaly:

In response to your recent faxes:

I have tried to contact the Ontario Science Centre on your behalf, but to this point have not had any success in getting thought to Ms. Szczasiuk. I will continue to work on that.

I've received your request for CUTC promotional material to be presented at the press conference in Bangkok on March 2nd. I will follow up with relevant CUTC personnel and have each university send information directly to you by air parcel. I believe this will more efficient than having the information sent first to me.

With regard to the next two groups of SUT visitors coming to Canada, Dr. Boctor has developed the attached institutional attachment schedule, and it has been approved by all four CUTC partner universities. Please confirm that the itineraries appear appropriate to SUT personnel involved and fax your agreement back to me next week. The only way that we can accommodate the second group after April is to shorten their stay to three weeks, as the first week of May is very busy for faculty with marking and promotion meetings, and June-August are prime vacation months, and the faculty are often out of the office at this time. I hope that this shorter schedule will not create any inconvenience.

Please confirm the dates for the first group, and we will proceed with air and hotel reservations.

Looking forward to seeing you soon.

Sincerely yours,

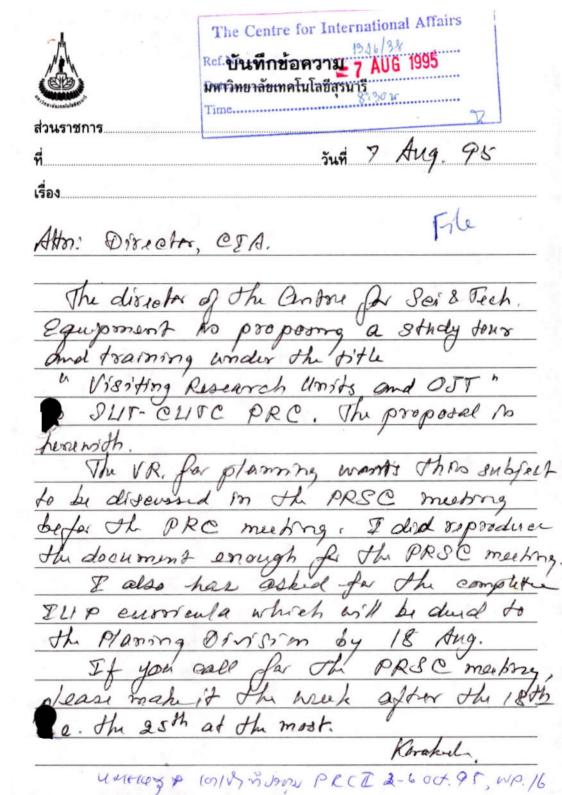
Jennifer Sherwood

Project Officer

## Proposed Schedule for SUT Visitors: March/April/May 1995

	Date		March			April		May			7
		13	,14, 17	20	27	3	10	8	15	22	
	University	W	Waterloo	T: TUNS	G: Guelph	R: Ryerson					]
1)	Dr. Kasem, Dean Resource Technology	R	W	Т	Т						
2)	Dr. Chaiyot, Ch.E.	R	W	Т	T						1
3)	Dr. Rubin, CIA	R	W	T	G	R	Ottawa/ Montreal				
4)	Dr. Weerapun, VP Planning							W	T	R	
5)	Dr. Thai (Registrar/Admissions)		,					W	<b>1</b>		
6)	Staff, CIA	-						R	T	g	1
7)	Dr. Weerapong, CCS							W	T	G	9.1
8)	Dr. Sarawut, ER					-c i no con	10 *	w /	W/R	R	81
9)	Senior Leuturer, MB				1.242	10 355		W	WIR	R	1
10)	Director, Co-op				11 - 1	F 21 202		W	Cr.	G	
11)	Mr. Suriya, Dean	_			valte.	nje or i ni vren		W	G	R	17-
12)	Dr. Ougkan, Lib	_			112	·4·3go	-	W	G	R	

Waterloo: 12 weeks, TUNS: 10 weeks, Guelph: 7 weeks, Ryerson: 8 weeks





## บันทึกข้อความ

## มหาวิทยาลัยเทคโนโลยีสุรนารี



หน่วยงาน ศูนย์เครื่องมือวิทยาศาสตร์และเทคโนโลยี	
ที่ ทม. 5132 / <i>642</i>	วันที่ 👫 กรกฎาคม พ.ศ. 2538
เรื่อง ส่งข้อเสนอโครงการ <b>"ทัศนศึกษาและฝึกอบรมทางวิชาการ"</b>	

## 🗓 เรียน รองอธิการบดีฝ่ายวางแผนและพัฒนา

ด้วยศูนย์เครื่องมือวิทยาศาสตร์และเทคโนโลยี ได้รับทราบว่ามีความเป็นไปได้ที่ความร่วมมือระ หว่างสถาบันในประเทศแคนาดาและมหาวิทยาลัยเทคโนโลยีสุรนารี ตามโครงการ SUT-CUTC นั้น จะจัดให้มี ความร่วมมือในเชิงการฝึกอบรมด้านเครื่องมือเพื่อการวิเคราะห์ วิจัยขั้นสูงรวมทั้งการไปทัศนศึกษาในส่วนที่จะเป็น ประโยชน์ต่อการจัดตั้งงานบริการวิชาการ การวิจัยและการจัดตั้งเทคโนธานี ศูนย์เครื่องมือฯตระหนักถึงคุณ ประโยชน์ที่จะได้จากกิจกรรมดังกล่าว จึงได้นำเสนอโครงการ "ทัศนศึกษาและฝึกอบรมทางวิชาการ" ภายใต้ชื่อ โครงการภาษาอังกฤษว่า "Visiting Research Units and OJT" ดังมีข้อเสนอโครงการตามที่แนบ

ศูนย์เครื่องมือฯหฺวังเป็นอย่างยิ่งว่าจะได้รับการพิจารณาจากท่านนำเข้าร่วมหารือใน SUT-CUTC PRC ซึ่งกำลังจะมีการประชุมที่มหาวิทยาลัยเทคโนโลยีสุรนารีในเร็วๆนี้ ทั้งนี้เพื่อจะได้เป็นการพัฒนาความรู้ความ สามารถของบุคลากรมหาวิทยาลัยให้เขาเหล่านั้นได้ปฏิบัติภารกิจของมหาวิทยาลัยให้เกิดประโยชน์สูงสุดต่อไปใน อนาคต

จึงเรียนมาเพื่อพิจารณาดำเนินการให้ต่อไปด้วย จักเป็นพระคุณยิ่ง

Jan 2. 2.000

(รองศาสตราจารย์ วิรุฬห์ มังคละวิรัช ) ผู้อำนวยการศูนย์เครื่องมือวิทยาศาสตร์และเทคโนโลยี

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## **Visiting Research Units and OJT**

### A Proposal for Submission to SUT - CUTC PRC

25 July 1995

Assoc. Prof. Virul Mangclaviraj, Director The Center for Scientific and Technological Equipment Suranaree University of Technology Nakhon Ratchasima, Thailand

### Proposal format:

- 1. Project Title
- 2. Brief Description
- 3. Rationale
- 4. Objectives
- 5. Needs

Attachments: Resumes of Visitors and Trainees

### Visiting Research Units and OJT

#### 1. Project Title

" Visiting Research Units and On-the-Job Training "

#### 2. Brief Description

The Center for Scientific and Technological Equipment (CSTE) is responsible for the provision of training equipment for study programs and research equipment for the university. Also, it will be involved in the establishment of equipment and relevant services for the SUT technopolis, ie research park or science park. Therefore, the CSTE is seeking for useful information and training to support such activities. This can be classified into two categories which are study tour and on-the-job training (OJT). The detail is described in the item 5.

#### 3. Rationale

Suranaree University of Technology (SUT) commenced its teaching duty in 1993 with about 700 undergraduate students. At present, the university handles about 3,000 undergraduate ones. The figure will grow to 4,500 approximately in a year to come. The university is now running only undergraduate programs in engineering and technology. These programs are such as agricultural engineering, chemical engineering, civil engineering, electrical engineering, industrial engineering, mechanical engineering, animal breeding technology, plant breeding technology, and transportation technology. Establishment and management of the undergraduate laboratories is the responsibility of the CSTE in collaboration with relevant institutes, ie faculties. The university also commits its duty to provide postgraduate programs in science and engineering in the next few years. Thus, the other task of the CSTE is to provide common sophisticated equipment for research purposes, eg electron microscope, material testing instrument, elemental analysis and compound characterisation equipment, etc. The staffs of the CSTE will have to conduct appropriate tests upon requests.

According to Thailand's 8th University Development Plan, SUT will have to establish its Technopolis by 1996. In this, the CSTE will have to bear responsibility for the preparation of space arrangement as well as the provision of equipment. Such equipment will be vital for the development of some pilot projects and the dissemination of knowledge to industrial sections, and even an ambitious aim of technology transmission. These reflect the needs for human resource development to support the functions of the CSTE.

### 4. Objectives

#### 4.1 General Objectives

- 1. To acquire some information on technological advancement useful for establishing research and training units.
- 2. Provide specific training for staff working on some sophisticated equipment.

#### 4.2 Specific Objectives

- 1. To visit "Phytotron" and relevant research units in Canada.
- 2. To visit Science or Research Parks in Canada.
- 3. To provide on-the-job training for CSTE staffs on Electron Microscopy and Spectrometry.

#### 5. Needs

#### 5.1 Study Tour

A group of 3 persons will visit Canadian research units concerning with phytotron, plant science research and radiation processing. This is to assess useful information on establishing and managing the units. The same party will also visit Canadian research parks for the similar purposes. The party consist is:

- 1. Assoc. Prof. Virul Mangclaviraj, Director, The Center for Scientific and Technological Equipment, SUT,
- 2. Dr. Yuvadee Manakasem, Lecturer and Researcher in Plant Science, Institute of Agricultural Technology, SUT, and
- 3. Mr. Arwuth Intharachun, Chief, Division of Instructional Laboratory, The Center for Scientific and Technological Equipment, SUT. (Resume of the individual is attached.)

#### 5.2 On-the-Job Training

The CSTE strongly needs well-trained staffs to operate sophisticated instruments that are electron microscopy and compound characterisation equipment. OJTs needed are as follows:

- 1. Eight week training on "biological electron microscopy",
- Trainee: Ms. Warawan Ratanachai, Chief, Biology Laboratory, The Center for Scientific and Technological Equipment, SUT,
  - 2. Eight week training on "material science electron microscopy",
- Trainee: Ms. Anik Janyooyen, Chief, Physics Laboratory, The Center for Scientific and Technological Equipment, SUT,
  - 3. Eight week training on "nuclear magnetic resonance spectrometry",
- Trainee: Ms. Boontharica Muangkratoke, Scientist, Division of Instrumental Analysis, The Center for Scientific and Technological Equipment, SUT, and
  - 4. Eight week training on "GC/Mass spectrometry",
- Trainee: Ms. Anchalee Peerapattanapong, Scientist, Division of Instrumental Analysis, The Center for Scientific and Technological Equipment, SUT.

### (Resume of the individual is attached.)

#### Attachments

- Resume : Assoc. Prof. Virul Mangclaviraj.
- Resume : Dr. Yuvadee Manakasem.
- Resume : Mr. Arwuth Intharachun.
- Resume : Ms. Warawan Ratanachai.
- Resume : Ms. Anik Janyooyen.
- Resume : Ms. Boontharica Muangkratoke.
- Resume : Ms. Anchalee Peerapattanapong.

#### Curriculum Vitae

### 1. Biographical Data

1.1 Name

Mr. Virul Mangclaviraj

1.2 Birth Place + Date :

Bangkok, Thailand

24 October 1933

1.3 Marital Status

Married with two children

### 2. Educational Attainement

2.1 1953 - 1957

B.Sc. in E.E (First Class Honours)

Faculty of Engineering, Chulalongkorn

University, Thailand

1959 - 1962

Diplom-Ingenieur ( Sehr Gut )

Elektrotechnik, Technical University of

Stuttgart, Germany

1962 - 1963

Microwave Research Training, Institut für

Höchstfrequenztechnik, Technical

University of Stuttgart, Germany

1967 - 1968

Research Training in Electron Spin

Resonance in Solids, Department of

Physics, Hebrew University of Jerusalem,

Israel

3. Specialty Fields

Electromagnetic Fields and Waves,

Nuclear Instrumentation and Instrumental

Analysis

### 4. Present Employer and Position in Suranaree University of Technology (SUT)

4.1 Present Employer

Associate Professor in Electrical

Engineering, Institute of Industrial

Technology, Suranaree University of

Technology (SUT)

4.2 Other Position in SUT

1992 - Present

Director, The Center for Scientific and

Technological Equipment.

1993 - Present

Member of the Academic Senate

1993 - Present

Member of the University Council

### 5. Employment Record and Assignments

5.1 Academic Positions in Chulalongkorn University

1963 - 1964

Lecturer in Electromagnetic Theory and

Advanced Electronics at the Department

of Electrical Engineering, Faculty of

Engineering

1977 - 1979

Senior Lecturer in Nuclear Instrumentation

and Appiled Mathematics in Nuclear

Technology, Department of Nuclear

Technology, Faculty of Engineering

1979 - 1982

Assistant Professor in Nuclear Technology,

Department of Nuclear Technology, Faculty

of Engineering

1982 - 1994 (retired).

Associate Professor in Nuclear

Technology, Department of Nuclear

Technology, Faculty of Engineering,

5.2 Other Positions in

Chulalongkorn University:

1978 - 1983

Member of the Board of Faculty of

Engineering

1979 - 1983

Chairman of the Committee for Energy

Saving, Faculty of Engineering

1981 - 1986

Member of the Committee for Planning

and Development, Faculty of Engineering

1980 - 1981

Member of the Committee on the

Utilization of Major Scientific Equipment

1981 - 1983

Project Leader on the Establishment of

Scientific and Technological Research

Equipment Centre in Chulalongkorn

University

1984 - 1988

Member of the Committee for planning

and Development, Chulalongkorn University

1983 - 1991

Director of Scientific and Technological

Research Equipment Centre, Chulalongkorn

University

#### 5.3 Positions in Other Government

Institutions:

1957-1958

Second Lieutenant, Maintenance of

Measuring Instruments in Aircrafts,

Directorate of Air Engineering, Royal Thai

Air Force

1964 - 1976

Electronic Engineer, Electronics

Instrumentation Division, Office of Atomic

Energy for Peace

1976 - 1977

Director, Electronics Instrumentation

Division,Office of Atomic Energy for peace

### 6 Academic Experience

Please see 5.1

### 7. Administrative Experience

Please see 5.2 and 5.3

#### 8. Professional and Technical Associations

8.1 Member of the IEEE (Institute of Electrical and Electronics Engineers, Inc.)

8.2 Senior Member of the Engineering Institute of Thailand

8.3 Member and founder of the Electron Microscopy Society of Thailand

#### 9. Professional Training Seminars and Meetings

4 - 15 October 1965

\*Advanced Training Seminar on

Radioactive Waste Management\*

Japan Atomic Research Institute

10 August - 18 September 1970

\*Study Tour on Industrial Applications of

Radioisotopes and Radiation Technology

in USA and Canada

28 September - 2 October 1970 \*Panel Meeting on Radiation Processing Techniques of Special Interest to Developing Countries\* Seoul, Korea 16 July - 5 August 1973 \*Study Tour at the Institute of Nuclear Science, Tsing - Hua University and Nuclear Energy Research Institute, Taipei, Republic of China 3 - 18 December 1973 \*Regional Survey and Briefing Course on the Technical and Economic Aspects of Nuclear Power Development, Bangkok, Thailand 16 - 27 February 1976 Training Course on the Technical and Economic Aspects of Nuclear Power\* Manila, Philipines 1 April - 30 June 1977 \*Study of the Development of Arc Plasma in Research and Metal Industry\* Institute of Materials Science, Technical University

#### 10. Research Experiences

### 10.1 Nuclear and Thermal Plasma Instrumentation Development

1962 - 1963 "Development of Portable Scaler" Nuclear Instrument Development Programme, THAI AEC (Thai Atomic Energy Commission, Office of Atomic Energy for Peace) 1963 - 1964 \*Development of High Voltage Power Supply Nuclear Instrument Development Programme, THAI AEC 1970 BF<sub>3</sub> Cable Driver\* Nuclear Instrument Development Porgramme, THAI AEC 1971 - 1972 \*Portable Scaler Model 1204\*Nuclear Instrument Development Programme, THAI AEC

of Hannover, Germany

1975 - 1976	*Argon, Nitrogen Arc Plasma Development*
	Project on Nuclear Materials Development
	THAI AEC
1979 - 1980	*Nuclear Pulsers* supported by
	Department of Nuclear Technology, Faculty
	of Engineering, Chulalongkorn University
1979 - 1981	*Density and Moisture Measurement
	using Nuclear Techniques* Supported by
	Thai Government Research Fund
1980 - 1981	"Arc Plasma Development" Supported by
	Faculty of Engineering, Chulalongkorn
	The second secon

#### 11 Publications

11.1 V. Mangclaviraj and P. Nuannin "Analytical X-Rays I" Thailand Engineering Journal, Vol 38(5), October 1985 pages 53-60

University

- 11.2 V. Mangclaviraj and P. Nuannin \*Analytical X-Rays II\* Thailand Engineering Journal, Vol 39(5) October 1986 pages 113-118
- 11.3 V.Mangclaviraj, W.Banchorndhevakul, V.Tanratnakul and S.Vetchagarun \*Electron Microscopy in Analysis Service\* Proceedings, 4th Asia-Pacific Conference and Workshop on Electron Microscopy, Bangkok, 1988, pages 47-52
- 11.4 V.Mangclaviraj and W.Banchorndhevakul "Case Studies on the Analysis of Fractures and Properties of Materials I" Metals, Materials and Minerals Bulletin Vol 1(2), June 1989 pages 8-16 Metallurgy and Materials Research Institute, Chulalongkorn University
- 11.5 W. Banchorndhevakul and V. Mangclaviraj \* Case Studies on the Analysis of Fractures and Porperties of Materials II\* Engineering Journal Vol 7(1), July 1989 Faculty of Engineering, Chulalongkorn University
- 11.6 V. Mangclaviraj and S. Punnachaiya "Principle and Generation of Arc Plasma" Proceedings of the Regional College on Plasma Applications, Hatyai, Songkhla, January 1990, pages 57-79
- 11.7 V. Mangclaviraj, S. Punnachaiya and F. Erdmann Jesnitzer \*Some Applications of Thermal Plasma in Metallurgy\* Proceedings of the Regional College on Plasma Applications, Hatyai, Songkhla, January 1990, pages 81-99

#### CURRICULUM VITAE

NAME

: MISS YUVADEE MANAKASEM

DATE AND PLACE OF BIRTH

: March 2, 1951, Bangkok, Thailand

NATIONALITY

: Thai

MARITAL STATUS

: Single

**EDUCATION** 

: High School at Satree Pratuengwit School

Bangkok in 1970.

: Bachelor of Science (Agriculture).

'Major Plant Science.

Khon Kaen University 1975.

: Master of Science.

Major in Crop Physiology.

University of the Philippines at Los Banos

(UPLB) 1984.

: Doctor of Philosophy (Ph.D. in Horticulture)

The University of Sydney N.S.W. Australia 1991.

English ability:

: Very Good

Address (Home)

: Dr. Yuvadee Manakasem

907 Soi Kingpetch

Petchburi Road, Bangkok 10400. THAILAND

Tel: 216-6392 (Sat & Sun)

(Office)

: Dr. Yuvadee Manakasem

Institute of Agricultural Technology
Suranaree University of Technology

Nakhon Ratchasima 30000 THAILAND

Tel: (044) 216191-8 Ext 2275

Fax: (044) 216102

E-mail: yuvadee@sura1.sut.ac.th

#### RESEARCH EXPERIENCE:

1976 - 1980

Research on the diseases and their control both of silk worm and mulberry tree, concentrated on the fungi diseases (Aspergillus sp.) of silk worm, also the research on egg production of a Japanese variety of silk worm. This is to support the land settlement, under USA government joint project with Sericulture Institute of Department of Agriculture.

1980 - 1987

Research work on plant tissue culture, the nutrition and hormonal factors of plant growth and also the effect of environment such as light and temperature in the laboratory by using meristems of *Chrysanthemum morifolium* as the test plant.

Research on screening varieties of some promising lines and cultivars of mulberry plant by using plant tissue culture technique.

Study on screening varieties of some economic plants such as soybean for each environmental constraints as drought, saline and acid sulfate soils for rainfed areas by using tissue culture technique (Soybean Tissue Culture for Acid Tolerance).

Jointing the UNDP/FAO project, because of getting the UNDP/FAO scholarship from the project on Integrated Rainfed Farming Research and Development in 1982 - 1984, studying Crop Physiology at the University of the Philippines at Los Banos [My master thesis is "Microclimate of Corn] (Zea mays L.) + Mungbean (Vigna radiata (L.) Wilczek) Intercrop at Three Planting Densities of Corn, by helping the project on the aspects of microclimate in the project sites and also in editing the publications of the rainfed project's materials.

1987 - 1991

Research on physiology of flowering and fruit set in strawberry. Particularly how to control growth, flowering and fruit set by environmental means. I am more keen on the effect of temperature on growth, flowering and fruit set in strawberry, than the effect of day length, nutrition stress and water stress on growth, flowering

and fruit set in strawberry. My Ph.D. thesis is "Temperature and strawberry (*Fragaria ananassa* Duch.) Production".

#### CURRENT RESEARCH:

Started research on Mangosteen (Garcinia mangostana L.) and Rumbutan (Nephelium lappaseum L.) with the aspect of how the environment such as maximum and minimum temperatures, day length and probably rain fall effect flowering process of those two crops. Furthermore, I would like to see the morphological changes in their apices started from vegetative phase to reproductive phase-induction, initiation and development of flower). The phenology of these crops will also be studied both at apices level and vegetation level. Finally, the kind and amount of hormone that effect flowering of the mentioned crops will be analysed from induced apices.

#### **PUBLICATIONS**

- ISARANGKUL, L. and Y. MANAKASEM. 1977 Study on Aspergillus Disease of Silk Worm. Research Report of Department of Agriculture. (in Thai)
- MANAKASEM, Y. and P. KAMMUENG. 1981 Procedure for farm Trials. Booklet P 19, Funny Press. (in Thai)
- PANTASTICO, E. B. and Y. MANAKASEM 1982. Rainfed Crop Production Research and Development. Proc., DOA Ann. Conf.
- MANAKASEM, Y., 1982 Study on Growth of Chrysanthemum morifolium Meristems by Tissue Culture Technique. Annual Report of Botany and Weedd Science Division, DOA. (in Thai)
- MANAKASEM, Y., 1984 Microclimate of Corn (Zea mays L. + Mungbean (Vigna radiata (L.) Wilczek) Intercrop at Three Planting Densities of Corn. MS Thesis, UPLB, College, Laguna, Philippines. 129 p.
- MANAKASEM, Y., 1985 Tissue Culture of Mulberrry for Rapid Propagation.
   Annual Report of Botany and Weed Science Division, DOA. (in Thai)
- PANTASTICO, E. B., MANAKASEM, Y., and P. CHOTIKUNTA. 1985 Women in Agriculture: Issues and Research Questions in Thailand Proceedings. Farming System Research Institute. DOA. 13 p.
- PANTASTICO, E. B., CHANDRAPANYA, D., MANAKASEM, Y., and P. CHOTIKUNIA. 1985. Farming Systems Development in Thailand. Proceedings FAO Seminar, RAPA, BANGKOK. 20 p.

- MANAKASEM, Y., et. at., 1985. Mungbean-Rice System. Extension Leaflet.
   Fainfed Farming Research and Development Project. Farming System
   Research Institute. DOA. (in Thai)
- MANAKASEM, Y., et. at., 1985. Direct Seeded Rice. Extension Leaflet. Rainfed Farming Research and Development Project. Farming System Research Institute DOA. (in Thai)
- 11. MANAKASEM, Y. 1991. Temperature and Strawberry (*Fragaria ananassa* Duch) Production. Ph. D. Thesis. The University of Sydney. N.S.W. Australia.
- MANAKASEM, Y., et. at. 1995. Changes in Apices and Effect of Microclimate on Floral Initiation of Mangosteen (Garcinia mangostana L.). Suranaree J. Sci Technol. 2: 15-20
- MANAKASEM, Y., et. at. 1995. Changes in Apices and Effect of Microclimate on Floral Initiation of Rambutan (Nephelium lappaceam L.) Suranaree J. Sci Technol. 2: (in press)

#### REFEREES

- 1. Dr. John M. Shciller. LAO IRRI Project. P.O. BOX 4195 Vientiane, LAO PDR.
- Dr. P.B. Goodwin. Reader in horticulture, The School of Crop Sciences. The University of Sydney. N.S.W. 2006. Australia.
- Dr. Rod King. Division of Plant Industry, CSIRO. GPO BOX 1600, Canberra ACT 2601. Australia.
- Dr. Ray Ison. The School of Crop Sciences. The University of Sydney N.S.W. 2006. Australia.
- Dr. Ann. Eyland, the principal. The Womens College The University of Sydney.
   N.S.W. 2006. Australia.
- 6. Dr. R.P. Robles. Department of Agronomy. The University of the Philippines at Los Banos (UPLB). Languna, the Philippines.

## RESUME.

1. l	Personal	Information	
	1.1	Name	Mr. Arwuth Intharachun.
	1.2	Present Address	268 Moo 6 Tumbol JoHo, Muang District
			Nakhon Ratchasima, Thailand.
	1.3	Birth Place & Date	Phitsanulok, Thailand
		1	25 June 1962
	1.4	Race & Nationality	Thai+Thai
	1.5	Religion	Buddhism
	1.6	Weight & Height	50 Kgs, 168 Cms.
	1.7	Marital status	Married with one child
	1.8	Office	The Center for Scientific and Technological
			Equipment
			Suranaree University of Technology
			111 University Avenue, Tumbol Suranaree
			Muang District, Nakhon Ratchasima,
			Thailand. 30000
			Tel. (044) 216123 Ext. 3137
2.	Educatio	onal Background.	
	2.1	1982 - 1984	Diploma in Machine Tool Technology
			Institute of Technology and Vocational
			Education-Nakhon Ratchasima Campus,
			Thailand.
	2.2	1984 - 1986	B.Eng, in Industrial Engineering. (MHT).
			Faculty of Engineering
			King Mongkut's Institute of Technology
		5-6	North Bangkok Campus (KMIT-NBK),
			Thailand.
3.	Experie	nce	
٥.	3.1	1986 - 1990	Plant Engineer, Division of Production and
	0.1	1550 - 1550	Development, Kiternit Fibre Cement Co.,Ltd.
			and Oranvanich Co.,Ltd.
	3.2	1990 - 1991	Maintenance Engineer, Division of
	0.2	1000 - 1001	Maintenance, CP. Food Products Co.,Ltd.
	3.3	1991 - 1993	
	3.3	1991 - 1995	Project Engineer, Division of Project,
			Laemthong Corporation Group.

### 4. Present Employment and Position in Suranaree University of Technology.

4.1 1993 - Present Engineer 6, The Center for Scientific and

Technological Equipment.

1994 - Present Chief Basic Engineering Technology

Laboratory, The Center for Scientific and

Technological Equipment.

1995 - Present Acting Chief-Division of Instructional

Laboratory, The Center for Scientific and

Technological Equipment.

#### 5. Training & Seminars Experience.

9 - 13 November 1987 "German Technology Symposium in Thailand"

Indra Regent Hotel, Bangkok, Thailand.

20 - 23 November 1990 "Total Productive Maiatenance."

Technological Promotion Association (Thai-

Japan).

11 - 15 November 1991 "Energy Saving in Factory"

Mahidol University, Thailand.

7 - 11 March 1994 "Automation Control 1 (Pneumatic System)",

Ubon Ratchathani University, Ubon Ratchatani,

Thailand.

### Resume

#### 1. Personal Information

1.1 Name Miss Warawan Ratanachai

1.2 Present Address Sukaniwart Dormitory, Rm # 3059

111 University Avenue

Tumbol Suranaree, Muang District

Nakhonratchasima, 30000, Thailand.

1.3 Birth Place & Date Pattani

2 November 1969

1.4 Nationality Thai

1.5 Religion Buddhism

1.6 Weight & Height 64 kgs, 162 cms

1.7 Marital Status Single

1.8 Office The Center for Scientific and

Technological Equipment.

Suranaree University of Technology.

111 University Avenue, Tumbol Suranaree

Muang District, Nakhonratchasima, 30000

Thailand.

Tel. (044) 216191-8 Ext. 3200

FAX. (044) 216123

### 2. Educational Background

Degree	Field	Institut	Year of graduation
B.Sc.	Biology	Srinakharinwirote	1991
		University, Songkhla, Thailand	

### 3. Employment

1992- Present

Chief Biology Laboratory. The Center for

Scientific and Technological Equipment,

Suranaree

1991 - Present

Scientist 4, The Center for Scientific and

Technological Equipment, Suranaree

#### 4. Awards

Certificate for Outstanding Academic

Achievement in Biology (Thailand Institut of

Scientific and Technological Research, 1988)

### 5. Scholarship

Undergraduate Scholarship the from Ministry

of University Affairs (1991)

### Senior Project.

Agar Quality of Gracilaria sp. in Pattani Harbour.

### RESUME

#### 1. Personal Information

1.1 Name

1.2 Present Address

Miss Anik Janyooyen

Sukaniwart Domitory, Rm # 3124

111/1 Moo. 6, University Avenue,

Tumbol Suranaree, Muang District, Nakhon Ratchasima, 30000, Thailand.

Tel: (044) 216191-8 Ext. 6529

1.3 Birth Place

Date of Birth

Nationality

Religion

1.4 Office

Marital Status

27 Match 1967

Thai

Buddhism

Bangkok

Single

The Center for Scientific and Technological

Equipment.

Suranaree University of Technology.

111 University Avenue, Tumbol Suranaree, Muang District, Nakhonratchasima, 30000 Thailand. Tel: (044) 216191-8 Ext. 3200

Fax: (044) 216-123

2. Educational Background.

1993

B.Sc. (Physics), Ramkomchang University,

Bangkok, Thailand.

3. Employment

1993-Present

Scientist, The Center of Scientific and

Technological Equipment, Suranaree

University of Technology.

4. Professional Memberships

Member, The Astronomy Association of

Thailand.

## **RESUME**

#### 1. Personal Information

1.1 Name Miss Boontharica Muangkratoke 1.2 Present Address 269 Moo 7 Tumbol Ta Yium, Aumphur Choke Chai Nakhon Ratchasima, 30190 Thailand 1.3 Birth Place & Date Nakhon Ratchasima, Thailand 5 February 1971. Race & Nationality 1.4 Thai + Thai 1.5 Religion Buddhism Weight & Height 1.6 55 kgs. 155 cms Marital Status 1.7 Single Office 1.8 The Center for Scientific and Technological Equipment. Suranaree University of Technology. 111 University Avenue, Tumbol Suranaree, Muang district, Nakhon Ratchasima 30000 Thailand. Tel: (044) 216191-8 Ext. 3410 Fax: (044) 612-123

### 2. Education Background

2.1	1989 - 1991	Associate Degree in Science
	1.000	Major Analytical Chemistry
		Ubon Teachers College, Ubon Ratchatani,
		Thailand.
2.2	1991 - 1993	Bachelor of Science Major Chemistry
		Ubon Teachers College, Ubon Ratchatani,
		Thailand.

### 3. Present Employment and Position in Suranaree University of Technology.

3.1 1993 - Present Scientist 4, The Center for Scientific and
Technological Equipment.

3.2 1993 - 1994 Scientist, Chemistry laboratory, The Center for
Scientific and Technological Equipment.

3.3 1994 - Present Scientist, Environmental Engineering Laboratory,
The Center for Scientific and Technological
Equipment.

### 4. Training & Seminars Experience

4.1 18 - 20 September 1993. "GC, HPLC"

Landmark Hotel, Bangkok, Thailand.

4.2 24 - 25 January 1995 "Tecator Composition Analysis Seminar

Support Meterial"

Sithiporn associates Co. Ltd.

Bangkok, Thailand.

### RESUME

#### 1. Personal Information

1.1 Name

1.2 Present Address

1.3 Birth Place & Date

1.4 Race & Nationality

1.5 Religion

1.6 Weight & Height

1.7 Marital status

1.8 Office

Miss Anchalee Peerapattanapong.

752/10-11 Moo 11 Tumbol Sungneon,

Sungneon Distsict, Nakhon Ratchasima,

Thailand.

Nakhon Ratchasima, Thailand.

23 March 1970

Thai & Thai

Buddhism

55 Kgs., 168 Cms.

Single

The Center for Scientific and Technological

Equipment.

Suranaree University of Technology

111 University Avenue, Tumbol Suranaree

Muang District, Nakhon Ratchasima,

Thailand. 30000.

Tel. (044) 216191-8 Ext. 3129 or 3140

#### 2. Educational Background.

2.1 1987 - 1991

B.Sc., in Analytical and Applied Chemistry.

Faculty of Science

Prince of Songkla University, Hatyai,

Songkhla, Thailand.

#### 3. Experience.

3.1 1991 - 1993

3.2 1993 - 1994

3.3 1994 - 1995

Chief of Quality Control and Reserch

& Development, Mahaphant Concrete

Roof Tile Co., Ltd.

Chief of Center Testing Laboratory,

Strongpack Public Co.,Ltd.

Chief of Reserch and Development,

Tipco Asphalt Public Co.,Ltd.

### 4. Present Employment and Position in Suranaree University of Technology.

1995 - Present

Scientist, Analytical Equipment Section,

The Center for Scientific and Technological

Equipment.

### 5. Training & Seminars Experience.

April - May 1990

Training "Analytical Product of Petroleum",

Petroleum Authorization of Thailand,

Bangkok, Thailand.

7 - 11 November 1993

"ISO 9000"

Strongpack Public Co.,Ltd.

8-10 August 1994

"Calibration"

Technological Promotion Association

(Thai-Japan).

1 - 3 June 1995

"Application of Statistic in Process"

Tipco Asphalt Public Co.,Ltd.

### 6. Senior Project.

"Analytical Pesticide in Water by

Microextraction Gas Chromatrography"



## **บันทึกข้อความ** มหาวิทยาลัยเทคโนโลยีสุรนารี

ส่วนราชการ	
ที่	řuň 8 Aug. 95
เรื่อง	Agrument between >49 a other
8	UT/QUIC partnuss
AHn:	CIA director,
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# บันทึกข้อความ

ล่วนราชการ Acad Senate SUT

กี วันที่ 31 JUCY

เรื่อง Notification of Resolution of Academic Senate

12/2838 The meeting on 6 July considered "The Draft agreement of SUT + GUELPH, CANADA which is one of the four Counterpart Cheversely under the croperation project between The Canadian U. of Tech. Consolium & SUT on CUTE-SUT, The meet agreed that the Academia + Agri Teek. evorderate for improvement of delails or drafted amended agreement and add for advantage of SUT, and that e 1A considered the speak IUP should proceed on Letter of Agreement for all 4 University or not Kindly be informed to proceed.



## บันทึกข้อความ Date.....

Ref.No. 1898 138
Date 1 AUG 1995

The Centre for International Affairs

มหาวิทยาลัยเทคโนโลยีสุรินารี

A. 10/8 12

หน่วยงาน

สภาวิชาการ มหาวิทยาลัยเทคโนโลยีสุรนารี

ที่ ทม 5106/ 🛂

วันที่ 🏄 กรกฎาคม 2538

เรื่อง

แจ้งมติที่ประชุมสภาวิชาการ ครั้งที่ 12/2538

เรียน ผู้อำนวยการศูนย์กิจการนานาชาติ

ด้วยในคราวประชุมสภาวิชาการครั้งที่ 12/2538 เมื่อวันที่ 6 กรกฎาคม 2538 ที่ประชุมได้พิจารณาวาระที่ 5.1 เรื่อง ร่างข้อตกลงระหว่างมหาวทยาลัยเทคโนโลยีสุรนารีและมหาวิทยาลัยเกลวฟ์ ประเทศแคนาดา ซึ่งเป็น 1 ใน 4 ของ มหาวิทยาลัย Counterpart ภายใต้โครงการความร่วมมือระหว่าง The Canadian Universities of Technology Consortium and Suranaree University of Technology หรือ CUTC-SUT ที่ประชุมฯ พิจารณาและมีมติเห็นชอบโดยมอบ หมายให้ฝ่ายวิชาการ และสำนักวิชาเทคโนโลยีการเกษตรประสานเพื่อปรับปรุงรายละเอียดในร่างข้อตกลงแก้ไข และเพิ่มเติมสิ่งที่ จะเป็นประโยชน์ต่อมหาวิทยาลัยเทคโนโลยีสุรนารี และให้ศูนย์กิจการนานาชาติพิจารณาว่าโครงการเปิดสอนหลักสูตรนานาชาติ ระดับปริญญาตรีควรจะดำเนินการทำ Letter of Agreement ไปพร้อมกันทั้ง 4 แห่งไม่

Riso

จึงเรียนมาเพื่อโปรดทราบและพิจารณาดำเนินการต่อไป

(รองศาสตราจารย์ ดร. ประสาท สืบค้า) รักษาการแทนรองอธิการบดีฝ่ายวิชาการ เลขานุการสภาวิชาการ



## **บันทึกข้อความ** มหาวิทยาลัยเทคโนโลยีสุรนารี

Cente	for International Affairs
No	1832138 Ja orl 918
Date.	12,00
Time	71
File .	••••••

หน่วยง	าน	The Cent	er for	Scientific	and	Technolog	ical Equip	ment.	Tel	. 6123,	3133		
ที่	Ref.No	5132/ 10	10					້ຳ	นที่	21	Novem	ber	1995
เรื่อง	Traini	ng Period	d										

Dear Prof. Dr. Umaly.

The training period in Canada for Ms. Warawan Ratanachai in Biological Electron Microscopy and Ms. Boontharica Muangkratoke in Nuclear Magnetic Resonance Spectrometry will be from 9 to 28 April 1996. Please arrange accordingly.

Thank you for your kind attention.

Virul Mangclaviraj)

Director

Center for Scientific and Technological Equipment.





# SURANAREE UNIVERSITY OF TECHNOLOGY CENTRE FOR INTERNATIONAL AFFAIRS

111 University Avenue, Muang District, Nakhon Ratchasima, Thailand

Tel. (66.44) 216191-8 Ext. 1156, 1159

Fax: (66.44) 216122 Email: cenintaf@sura 1. sut. ac. th

Ref. No. 5136/890

5 December, 1995

Ms. Jennifer Sherwood Ryerson Polytechnic University 350 Victoria street Ontario, Canada M5 B 2K 2 Fax (416) 979-5352

RE: Prof. Frank Jurankais Consultancy Work

Dear Ms. Sherwood,

We apologise for the delay of the draft contact for Prof. Frank Suranka's consultancy work at SUT because of the WORLDTECH'95. Most of SUT staff and students are working at the site including all administrators. However, the WORLDTECH will be over tomorrow, December 16, 1995. Right after that all personnels and students will return back to their routine. The contact for Prof. Juranka's work will be processed and we will inform you as soon as possible.

With best regards

K. Indryoichate

Dr. Korakod Indrapichate

Assistant Rector for Planning and Development

for The Director, International Affairs

15 December, 1995

Ref. No. 5136/890

Ms. Jennifer Sherwood Ryerson Polytechnic University 350 Victoria street Ontario, Canada M5 B 2K 2 Fax (416) 979-5352

#### RE: Prof. Frank Jurankais Consultancy Work

Dear Ms. Sherwood,

We apologise for the delay of the draft contact for Prof. Frank Suranka's consultancy work at SUT because of the WORLDTECH'95. Most of SUT staff and students are working at the site including all administrators. However, the WORLDTECH will be over tomorrow, December 16, 1995. Right after that all personnels and students will return back to their routine. The contact for Prof. Juranka's work will be processed and we will inform you as soon as possible.

With best regards

K. Indryscho La

Dr. Korakod Indrapichate

Assistant Recter for Planning and Development

for The Directer, International Affairs