

Schedule for the Annual International Training Course (AITC) 2023

“The application of a parabolic greenhouse solar dryer together with raw material preparation techniques to extend shelf-life and enhance quality of agricultural products”

24 April –5 May 2023

Date/Period/Topic	Time (Thailand time)	Content	Speaker	Note
Day 1 :				
Mon. April 24, 2023	12.00 – 12.30	Online registration		
	12.30 – 13.00	Opening ceremony and welcome address Moderator: Assoc. Prof. Dr.Sopark Sonwai	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Dr.Arun Sri Leejeerajumnean (Dean of Faculty of Engineering and Industrial Technology, Silpakorn University) ● <i>Moderator</i> ● Lt. Sorawud Preededilok Minister attached to Thailand International Cooperation Agency (TICA) ● <i>Moderator</i> ● Prof. Dr.Tanasait Ngawhirunpat (President of Silpakorn University) ● <i>Moderator</i> 	
	13.00 – 14.00	Lecture 1: Postharvest losses and deteriorations of fresh agricultural produces related to their shelf-life (Part 1)	<ul style="list-style-type: none"> ● Asst. Prof. Dr. Busarakorn Mahayothee 	

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	14.00 – 14.15	Take a break		
	14.15 – 15.15	Lecture 1: Postharvest losses and deteriorations of fresh agricultural produces related to their shelf-life (Part 2 – Microbial deterioration)	<ul style="list-style-type: none"> ● Asst. Prof. Dr.Pornsri Charoenpanich 	
	15.15 – 16.45	Lecture 2: Drying methods for food and agricultural products in Thailand and impact of raw materials and processing on shelf-life of dried and other food products	<ul style="list-style-type: none"> ● Asst. Prof. Dr.Busarakorn Mahayothee 	
Day 2 :				
Tue. April 25, 2023	12.00 – 13.30	Lecture 3: Principle of drying of agricultural products	<ul style="list-style-type: none"> ● Moderator ● Dr.Sarawut Phupaichitkun 	
	13.30 – 13.45	Take a break	<ul style="list-style-type: none"> ● Moderator 	
	13.45 – 15.15	Lecture 4: Solar drying, with an emphasis on a parabolic greenhouse solar dryer: Principle, construction, maintenance and its applications	<ul style="list-style-type: none"> ● Prof. Dr.Serm Janjai 	
	15.15 – 16.45	Lecture 5: Drying of tomato using a parabolic greenhouse solar dryer	<ul style="list-style-type: none"> ● Moderator ● Dr.Parika Rungpichayapichet 	
Day 3 :				
Wed. April 26, 2023	12.00 – 14.00	Lecture 6: Drying of tropical fruits using a solar dryer	<ul style="list-style-type: none"> ● Moderator 	

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			<ul style="list-style-type: none"> ● Asst. Prof. Dr.Busarakorn Mahayothee 	
	14.00 – 14.15	Take a break	<ul style="list-style-type: none"> ● <i>Moderator</i> 	
	14.15 – 15.15	Lecture 6 (Cont.): Drying of tropical fruits using a solar dryer (Cont.)	<ul style="list-style-type: none"> ● Asst. Prof. Dr.Busarakorn Mahayothee 	
	15.15 – 16.45	Demonstration 1: How to measure the quality of dried products	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Dr.Parika Rungpichayapichet ● Mr.Chatchai Watthanaphairoj 	
Day 4 :				
Thu. April 27, 2023	12.00 – 13.00	Lecture 7: Production of osmotic dehydrated fruits using a solar dryer and a tray dryer	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Dr.Busarakorn Mahayothee 	
	13.00 – 14.00	Lecture 8: The sensory quality of dried and other food products	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Prinya Wongsu (School of Agro-Industry, Mae Fah Luang University) 	
	14.00 – 14.15	Take a break	<ul style="list-style-type: none"> ● <i>Moderator</i> 	
	14.15 – 16.45	Demonstration 2: Production of osmotic dehydrated fruits using a solar dryer and a tray dryer and impact of raw materials and processing on their shelf-life	<ul style="list-style-type: none"> ● Asst. Prof. Dr.Busarakorn Mahayothee ● Miss Orawan Pumeeako 	

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Day 5 :				
Fri. April 28, 2023	12.00 – 13.30	Lecture 9: Health-promoting bioactive compounds in dried food products	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Assoc. Prof. Dr.Pramote Khuwijitjaru 	
	13.30 – 13.45	Take a break	<ul style="list-style-type: none"> ● <i>Moderator</i> 	
	13.45 – 14.45	Lecture 10: Extraction and analysis of bioactive compounds from fresh and dried food products	<ul style="list-style-type: none"> ● Assoc. Prof. Dr.Pramote Khuwijitjaru 	
	14.45 – 15.45	Demonstration 3: Analysis of bioactive compounds in fresh and dried food products using destructive methods	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Assoc. Prof. Dr.Pramote Khuwijitjaru ● Dr.Khwanjai Klinchongkon 	
	15.45 -16.45	Demonstration 4: Analysis of bioactive compounds in fresh and dried food products using non-destructive methods	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Dr.Parika Rungpichayapichet ● Dr.Khwanjai Klinchongkon 	
Day 6 :				
Mon. May 1, 2023	12.00 – 14.00	Lecture 11: Drying of vegetables, herbs and medicinal plants using a parabolic greenhouse solar dryer	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Dr.Busarakorn Mahayothee 	
	14.00 – 14.15	Take a break	<ul style="list-style-type: none"> ● <i>Moderator</i> 	

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	14.15 - 15.15	Demonstration 5: Production of vegetables powder using a parabolic greenhouse solar dryer	<ul style="list-style-type: none"> ● Dr.Parika Rungpichayapichet ● Miss Kanokporn Ponmana 	
	15.15 - 16.45	Demonstration 6: Drying of herbs and medicinal plants for herbal tea production	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Dr.Busarakorn Mahayothee ● Mr.Chatchai Watthanaphairoj 	
Day 7 :				
Tue. May 2, 2023	12.00 – 13.30	Lecture 12: Packaging for dried products	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Assoc. Prof. Dr.Nathdanai Harnkarnsujarit Faculty of Agro-Industry, Kasetsart University 	
	13.30 – 13.45	Take a break	<ul style="list-style-type: none"> ● <i>Moderator</i> 	
	13.45 – 15.15	Lecture 13: Impact of raw materials and processing on flavor of dried and other food products	<ul style="list-style-type: none"> ● Asst. Prof. Dr.Suched Samuhasaneetoo 	
	15.15 – 16.45	Demonstration 7: Flavor of dried products	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Dr.Suched Samuhasaneetoo ● Miss Piyachat Chai-uea 	
Day 8 :				

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Wed. May 3, 2023	12.00 – 13.00	Lecture 14: Supply and value chain of solar dried products in Thailand	<ul style="list-style-type: none"> ● Moderator ● Asst. Prof. Dr.Kanokwan Kingphadung 	
	13.00 – 13.15	Take a break	<ul style="list-style-type: none"> ● Moderator 	
	13.15 – 14.45	Lecture 15: Shelf-life of food products	<ul style="list-style-type: none"> ● Asst. Prof. Dr.Prasong Siriwongwilaichat 	
	14.45 – 16.45	Virtual field trip 1: Local enterprise using a parabolic greenhouse solar dryer	<ul style="list-style-type: none"> ● Moderator ● Asst. Prof. Dr.Busarakorn Mahayothee ● Dr.Sarawut Phupaichitkun 	
Day 9 :				
Thu. May 4, 2023	12.00 – 13.30	Lecture 16: Reinventing value chain to boost farmers' revenue share	<ul style="list-style-type: none"> ● Moderator ● Miss Naruemon Taksaudom (Chao Thai Phu Kao Coffee Learning Space_Hillkoff, Chiang Mai) 	
	13.30 – 13.45	Take a break	<ul style="list-style-type: none"> ● Moderator 	
	13.45 – 14.45	Lecture 17: Innovative drying methods	<ul style="list-style-type: none"> ● Assoc. Prof. Dr.Touchpong 	
	14.45 – 15.00	Take a break	<ul style="list-style-type: none"> ● Moderator 	
	15.00 – 15.30	Lecture 18: Advancing sustainable local business operation with the sufficiency economy philosophy	<ul style="list-style-type: none"> ● Dr.Sukit Kanjina (Chiangma University) 	

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		Part I: The sufficiency economy philosophy		
	15.30 – 15.45	Open discussion	● Asst. Prof. Dr.Busarakorn Mahayothee	
	15.45 – 16.45	Lecture 19: Key successes for local business	● Asst. Prof. Dr.Busarakorn Mahayothee	
Day 10 :				
Fri. May 5, 2023	12.00 – 13.00	Lecture 17: Key successes for local business (Case study in meat drying using a parabolic solar dryer)	● Mr. Wiwat Kulwjitrat (Taladkling Co. Ltd.)	
	13.00 – 14.30	Demonstration 8 : Part II: Virtual roundtable discussion on “Advancing sustainable local business operation with the sufficiency economy philosophy: Business planning and accounting	● <i>Moderator</i> ● Asst. Prof. Dr.Busarakorn Mahayothee (Moderator) ● Dr.Sukit Kanjina Chiangmai University ● Miss Naruemon Taksaudom (Chao Thai Phu Kao Coffee Learning Space, Hillkoff, Chiang Mai) Mr. Wirach Maneekhao (Ministry of Energy)	
	14.30 -14.45	Take a break	● <i>Moderator</i>	
	14.45 -15.45	Lecture 17: Key successes for local business (Cont.)	● Assoc. Prof. Dr.Sopark Sonwai	

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	15.45 -16.30	Lecture 20: Summary	<ul style="list-style-type: none"> ● Assoc. Prof. Dr.Sopark Sonwai ● Asst. Prof. Dr.Busarakorn Mahayothee 	
	16.30 – 16.45	Closing ceremony	<ul style="list-style-type: none"> ● <i>Moderator</i> ● Asst. Prof. Dr.Arun Sri Leejeerajumnean (Dean of Faculty of Engineering and Industrial Technology, Silpakorn University) 	