

ADC 2015
The 8th Asia-Pacific Drying Conference
Cititel Mid Valley, Kuala Lumpur
10-12 August 2015

10 August 2015 (Monday)

5:00 pm – 8:00 pm **Venue: Citi Café, Lobby Level**
Pre-Registration & Reception

11 August 2015 (Tuesday)

Venue: Matahari 3 & 4, Level 5

8:00 am – 9:00 am Registration

9:00 am – 9:30 am Opening

9:30 am – 10:30 am **Plenary 1 (Matahari 3 & 4, Level 5)**
Food And Bio-Particle Engineering Based On Spray Drying Platforms
Professor Xiao Dong Chen (Soochow University, China)

10:30 am – 11:00 am Break

11:00 am – 11:30 am **Keynote 1 (Matahari 3, Level 5)**
Innovation In Drying - Needs, Challenges And Selected Examples
Dr Sachin V. Jangam (National University of Singapore)

Keynote 2 (Matahari 4, Level 5)
Drying: Agriculture And Sustainability
Professor Bhaskar N. Thorat (Institute of Chemical Technology, India)

11:30 am – 12.45 pm **Oral Session 1 (Matahari 3, Level 5):** Innovative Drying & Dehydration Techniques
Oral Session 2 (Matahari 4, Level 5): Fundamentals/Theories & Drying Strategy

12:45 pm – 2:00 pm Lunch (Citi Café, Lobby Level)

2:00 pm – 2:30 pm **Keynote 3 (Matahari 3, Level 5)**
The Development Of An Innovative Dryer With Air Dehumidification System For Sustainable Food Drying
Associate Professor Dr Mohamad Djaeni (Diponegoro University, Indonesia)

Keynote 4 (Matahari 4, Level 5)
Timber Drying In Peninsular Malaysia
Dr Gan Kee Seng (Forest Research Institute Malaysia)

2:30 pm – 3:30 pm **Oral Session 3 (Matahari 3, Level 5):** Drying Of Food & Agricultural Products (I)
Oral Session 4 (Matahari 4, Level 5): Mathematical Modelling & Simulations (I)

3:30 pm – 4:30 pm **Poster Session 1 & Break**

4:30 pm – 6:00 pm **Oral Session 5 (Matahari 3, Level 5):** Drying Of Food & Agricultural Products (II)
Oral Session 6 (Matahari 4, Level 5): Mathematical Modelling & Simulations (II)

Gala Dinner

Venue: Bintang Ballroom, Level 5
7:30 pm – 8:00 pm Arrival Of Guests
8:00 pm – 11:00 pm Dinner & Award Ceremony
*Dress Code: Casual Smart

12 August 2015 (Wednesday)

9:00 am – 10:00 am	<p>Plenary 2 (Matahari 3 & 4, Level 5) Importance Of Understanding The Structural Relaxation Of Rice During Drying, Tempering And Storage <i>Professor Bhesh Bhandari (University of Queensland, Australia)</i></p>
10:00 am – 11:00 am	<p>Poster Session 2 & Break</p>
11:00 am – 11:30 am	<p>Keynote 5 (Matahari 3, level 5) Innovative Drying For Upgrading Of Low-Rank Biomass <i>Professor Yoshinori Itaya (Gifu University, Japan)</i></p> <p>Keynote 6 (Matahari 4, level 5) High Quality And Efficient Food Drying With Microwave And Its Combination <i>Professor Min Zhang (Jiangnan University, China)</i></p>
11:30 pm – 12:45 pm	<p>Oral Session 7 (Matahari 3, level 5): Quality Of Dehydrated/Dried Products (I) Oral Session 8 (Matahari 4, level 5): Antioxidant Properties & Bioactive Compounds</p>
12:45 pm – 2:00 pm	<p>Lunch (Citi Café, Lobby Level)</p>
2:00 pm – 3:30 pm	<p>Oral Session 9 (Matahari 3, level 5): Quality Of Dehydrated/Dried Products (II) Oral Session 10 (Matahari 4, level 5): Quality Of Dehydrated/Dried Products (III)</p>
3:30 pm – 4:00 pm	<p>Break</p>
4:00 pm – 5:00 pm	<p>Closing and award ceremony</p>

ORAL SESSIONS

Oral Session 1: Innovative Drying & Dehydration Techniques		
11:30 am – 11:45 am	A1008	Grain Drying In A Multiple Draft Tube Spouted Bed - A Preliminary Study
11:45 am – 12:00 pm	A1035	Pilot Testing Of Pulse Combustion Spray Drying In Foods
12:00 pm – 12:15 pm	A1097	Shrinking The Spray Dryer Into A Tube
12:15 pm - 12:30 pm	A1082	Effect Of Char Addition On Sludge Drying Behavior In Bio-Drying Process
12:30 pm – 12:45 pm	A1074	Vacuum Assisted Radio Frequency Based Drying Of Food And Agricultural Products
Oral Session 2: Fundamentals/Theories & Drying Strategy		
11:30 am – 11:45 am	A1029	Drying Of Non-Aqueous System: Modeling By The Reaction Engineering Approach (REA)
11:45 am – 12:00 pm	A1098	Capturing The Formation Of Core-Shell Structure Of RS/Silica Composite Droplets During Convective Drying - A Single Droplet Drying Analysis
12:00 pm – 12:15 pm	A1044	Energy-Efficient Thermal Drying Using Impinging Jet - Effect Of Intermittency And Flipping Of The Substrate
12:15 pm - 12:30 pm	A1114	Moisture Sorption Characteristics And Isothermic Heat Of Sorption Of Dried Cassava (<i>Manihot esculenta</i> Crantz) Grates
Oral Session 3: Drying Of Food & Agricultural Products (I)		
2:30 pm – 2:45 pm	A1065	Comparative Study Of Drying Methods On Chemical Constituents Of Malaysia Red Seaweed
2:45 pm – 3:00 pm	A1047	Drying Of White Radish Under Low-Pressure Superheated Steam
3:00 pm – 3:15 pm	A1056	Beta -Carotene Contents From Fruit Peels In Thailand Using UV-Visible Analysis Technique
3:15 pm – 3:30 pm	A1021	Freeze-Drying Of Persimmon Fruit To Extend The Shelf Life Of Wheat Grass Juice Inoculated With Probiotics
Oral Session 4: Mathematical Modelling & Simulations (I)		
2:30 pm – 2:45 pm	A1002	Testing, Nonlinear Modelling And The Efficiency As Heavy Metal Removal In <i>Kappaphycus alvarazii</i> Variety Tambalang Using Solar Dryer In Malaysia
2:45 pm – 3:00 pm	A1010	Multi-Scale And Multi-Layer Structural Modeling And Simulation Of Heat And Mass Transfer Processes For Drying Of Grain Packing Porous Media
3:00 pm – 3:15 pm	A1015	The Effect Of Superficial Velocity On The Residence Time Distribution Of Particles In Continuous Fluidized Beds With And Without Immersed Tubes
3:15 pm – 3:30 pm	A1018	Computer Simulation Of Convective Hot Air Drying Kinetics Of Pumpkin (<i>Cucurbita moschata</i>)

Oral Session 5: Drying Of Food & Agricultural Products (II)

4:30 pm – 4:45 pm	A1001	Implications Of Drying Temperature And Humidity On The Drying Kinetics Of Seaweed
4:45 pm – 5:00 pm	A1072	Effects Of Feed Compositions And Drying Temperature On Spray-Dried Coconut Milk Powder
5:00 pm – 5:15 pm	A1075	Comparison Drying Characteristics Of Pumpkin Using Tray Dyer And Jet Impingement Dryer
5:15 pm – 5:30 pm	A1083	Production Of Spray-Dried Honey Jackfruit (<i>Artocarpus heterophyllus</i>) Powder From Enzyme Liquefied Puree
5:30 pm – 5:45 pm	A1086	Effect Of Sodium Caseinate On The Convective Drying Kinetics Of Single Droplets Of Aqueous Glucose

Oral Session 6: Mathematical Modelling & Simulations (II)

4:30 pm – 4:45 pm	A1022	Development Of A Dynamic Heat Pump Dryer Test Bench To Demonstrate Energetical Optimization Possibilities Replicating Real Life Drying Processes
4:45 pm – 5:00 pm	A1115	Three-Dimensional CFD Modeling And Simulation On The Performance Of Steam Ejector Heat Pump For Dryer Section Of The Paper Machine
5:00 pm – 5:15 pm	A1057	Thin Layer Drying Characteristics Of Palm Kernel
5:15 pm – 5:30 pm	A1070	Effect Of Jet-To-Confinement Wall Distance On Heat Transfer Characteristics Of Impinging Jet Array
5:30 pm – 5:45 pm	A1019	Case Study Of Heat Pump Integration In A Blood Dryer
5:45 pm – 6:00 pm	A1073	Drying Kinetics Of Treated And Untreated Seaweed In A Naturally Ventilated Solar Dryer

Oral Session 7: Quality Of Dehydrated/Dried Products (I)

11:30 am – 11:45 am	A1009	Effects Of Drying Condition On Color And Texture Of Palm Date Fruits
11:45 am – 12:00 pm	A1025	Effects Of Fluidized Bed Drying Temperature, Tempering Time And Storage Period Of Paddy On Parboiled Rice Quality
12:00 pm – 12:15 pm	A1031	Effect Of Drying Rate On Amylose Content Of Rice Dried In A Laterally Aerated Moving Bed (Lamb) Dryer
12:15 pm - 12:30 pm	A1100	Pretreatment Optimization In Chili Dehydration
12:30 pm – 12:45 pm	A1113	Determination Of Influence Of Drying Parameters On Microbial Content, Curcumin Content And Colour Of <i>Curcuma longa</i> L. (Waigaon Variety)

Oral Session 8: Antioxidant Properties & Bioactive Compounds

11:30 am – 11:45 am	A1023	Effects Of Postharvest Treatments On Bioactives Compounds In Arabica Coffee
11:45 am – 12:00 pm	A1043	Mass Transfer And Antioxidant Activities Of Osmotic Dehydrated Terung Asam (<i>Solanum lasiocarpum</i> Dunal)
12:00 pm – 12:15 pm	A1052	Hot Air Drying Of Germinated Yellow Corn And Purple Corn On Total Phenolics, Total Flavonoids And Antioxidant Activity
12:15 pm - 12:30 pm	A1060	The Redox (Pro-Oxidant/Antioxidant) Balance In The Spray Drying Of Orange Peel Extracts
12:30 pm – 12:45 pm	A1081	Some Bioactivities Of Spices And The Effects Of Different Cooking Methods

Oral Session 9: Quality Of Dehydrated/Dried Products (II)

2:00 pm – 2:15 pm	A1053	Effect Of Oven Drying Temperature On Nutrients Concentration And Color Quality Of Banana Slices
2:15 pm – 2:30 pm	A1059	The Effects Of Two-Stage Drying Of Cocoa Beans/Nibs On Selected Quality Parameters
2:30 pm – 2:45 pm	A1092	Content Enhancement Of Polymethoxy Flavones (PMFS) Of Citrus Depressa Hayata By Superheated Steam Treatment
2:45 pm – 3:00 pm	A1067	Flavor Characterisation Of Tomato Using A Heat Pump Drying System
3:00 pm – 3:15 pm	A1041	Ultrasound & Microwave Hybrid Drying Device For Colored Fruit Preservation - Product Quality And Energy Efficiency
3:15 pm – 3:30 pm	A1091	Mechanical Property Of Paddy Kernels As Affected By Grain Initial Moisture Content, Drying Temperature And Tempering Step After Drying

Oral Session 10: Quality Of Dehydrated/Dried Products (III)

2:00 pm – 2:15 pm	A1030	Effect Of Oil-Droplet Size On The Stability Of Squalene Oil In Spray-Dried Powder
2:15 pm – 2:30 pm	A1096	Proximate Analysis And Sensory Evaluation Of Instant Mashed Potato Incorporated With Jackfruit Seed Powder
2:30 pm – 2:45 pm	A1068	The Effects Of Carrier Composition On The Sub-Cellular Injuries Of Lactic Acid Bacteria During Convective Droplet Drying
2:45 pm – 3:00 pm	A1076	Effects Of Microwave-Vacuum Drying Technique On Drying Kinetics And Quality Of <i>Orthosiphon aristatus</i> Leaves
3:00 pm – 3:15 pm	A1004	The Effectiveness Of Sauna Technique On The Drying Period And Quality Of Seaweed <i>Kappaphycus alvarezii</i> Using V-Green Hybrid Solar Drier
3:15 pm – 3:30 pm	A1024	Research Of Dielectric Properties Of Jiangnan Rice Cakes Based On Microwave Drying

POSTER SESSIONS

Poster Session 1

- A1011 Retention Of Sialic Acid Content In Edible Bird's Nest By Heat Pump Drying
- A1012 Colour Changes, Nitrite Content And Rehydration Capacity Of Edible Bird's Nest By Advanced Drying Method
- A1020 Drying Rates And Desorption Isotherms Of Amorphous Sugar Solutions Containing Crystalline Materials: Sugar-Citric Acid System
- A1027 Sorption & Thermodynamics Characteristics Of Shrikhand (Indian Fermented Milk Sweet)
- A1037 Pigment Degradation In Foodstuffs And Future Drying Trend
- A1038 Heat And Moisture Transport: A Technical Review
- A1048 Microstructures Study Of Different Drying Methods Of Rice Noodles At Soaking Variation
- A1049 Study On Drying Behavior And Uniformity Of Dried Paddy Using Industrial Inclined Bed Dryer
- A1050 Improvement Of Drying Performance For Natural Rubber Slab With Microwave Assisted Hot Air Drying
- A1062 Effect Of Inlet Air Temperature And Maltodextrin Concentration On Qualities Spray Dried Dragon Fruit Juice
Effect Of Spray Drying Conditions And Maltodextrin Concentration On The Functional And Physicochemical Properties Of
- A1064 Pink Guava Puree Powder
- A1071 Optimization Of Spray Drying Process On *Sargassum muticum* Colour Extract
- A1077 Heat Transfer Rate And Uniformity Of Swirling Impinging Jets
- A1085 Optimal Design Of A Hydrocyclone Used For On-Line Oil Purification In Fluid Power Systems
- A1088 Thin Layer Hot Air Drying Characteristics And Latent Heat Of Vaporization Of Cooked Milled Rice
- A1093 Drying Fruits And Vegetables With Solar Assisted Hydrocarbon Gas Heat Pump Dryer
- A1099 Effect Of Inlet Temperature Of *Ananas comosus* Spray Drying Process Towards Moisture Content And Particle Size
- A1111 A Comparative Study On Single Bed Desiccants For Air Dehumidification In Drying Process

Poster Session 2

- A1013 Improving Edible Bird's Nest Quality And Energy Efficiency By Intermittent Heat Pump Drying
- A1026 Effect Of Microwave-Vacuum Drying On The Quality Of Concoct Shrimp
- A1028 Effects Of Water Blanching On Total Polyphenol Contents Of Cocoa Beans
- A1034 Quality Research On Vacuum Far-Infrared Radiation Drying Lemon Slices
- A1039 Rubber Drying: Understanding The Mechanism And Recent Developments
- A1045 Numerical Design Of Microwave-Assisted Spouted Bed For Performance Optimization
- A1051 Effect Of Drying On Microstructure Change In Bio-Origin Product
- A1055 A Mini Review: Drying Of Ionic Liquids
- A1063 Effect Of Oven-Drying On The Colour Of Pomelo Fruit Waste (*Citrus grandis*)
- A1078 Influence Of Drying Technique On Retention Of Phytochemicals In Mas Cotek (*Ficus deltoidea*)
- A1079 Textural And Colour Changes Of Dried Rice Noodles At Drying And Soaking Variation
- A1087 Drying Processes For Microalgal Biomass – A Mini Review
- A1089 Technological Aspects Of Drying In Green Polymer Biosynthesis
- A1090 Physical Properties And Microstructure Changes In Guava (*Psidium guajava* L.) During Hot Air Drying
- A1094 Effect Of Buckwheat Addition On Quality Of Dry-Cured Pork Sausage During Dry-Curing Process
- A1095 Enhancement Of Physicochemical And Sensory Properties Of Dry-Cured Loin By Using Whey Protein Fed Pigs
- A1112 Alternative Approaches In Strawberry Drying With Optimised Modified Atmosphere Drying For Product Quality