

CSU-DOST2

Food Innovation Center

ROMEO R. QUILANG, PHD
UNIVERSITY PRESIDENT/PROJECT CONSULTANT

CSU-DOST2 Food Innovation Center

- established in April 2013
- one of the three FICs in the Philippines (Davao City, Tuguegarao City, Tacloban City)
- vision: a leading center for innovations and technical support for the food industry in Cagayan Valley Region



Legal Basis

Memorandum of Agreement signed between the Department of Science and Technology and CSU in April 2013 to

- help boost the government's mandate to spur socio-economic development in the countryside
- support the present administration's Package for the Improvement of Nutrition of Young Children Program (PNOY Program)
- fulfill the university's mission to provide advanced and quality instruction in Science and Technology



Legal Basis



DOST & CSU Counterparts

- DOST provides technical support including additional equipment
- DOST supervises and monitors all activities of the center
- CSU continues to improve and expand the center and maintain equipment
- CSU takes charge of the full operation (product development, product testing, product packaging, promotion, and MSMEs adoption)
- CSU allows students and researchers to use the facility for their research and development activities



Products Developed

- Number of Products: **52**
- Number of Intellectual Property Rights (trademark): **8**

Products Developed



Used to deep-fry food under reduced pressure and temperature

VACUUM FRYER

Products Developed



PRODUCTS

Crispy Mix Veggies

Vacuum Fried Sweet
Potato Mix

Crispy Okra

Crispy Talong

Vacuum Fried Sili

Vacuum Fried Sweet
Potatoes (white/ violet/
orange)

Crispy Ampalaya

Crispy Squash

Crispy String Beans



VACUUM FRYER

VACUUM FRYER



VACUUM FRYER



Products Developed



PRODUCTS

Chevon Papaitan

Used to sterilize

food products

Round Scad Spanish Style Sardines

packed in

retort pouches

Adobo Rice

Sisig

Picadillo

Biko

Mutton Kaldereta

Mutton Taosi

Nata de Coco



WATER RETORT

WATER RETORT



WATER RETORT



Products Developed



Used to
convert liquids
into powder

SPRAY DRYER

Products D

PRODUCTS

Volteaz 5 (guyabano, moringa saluyot, pandan, carrots)

Ginisa mix

Tamarind Powder

Pomelo Powder

Calamansi Powder

Kangkong Powder

Carrot Powder

Tomato Powder

Camote Powder

Pechay Powder

Ampalaya Powder

Arroz de Café

Saluyot Powder

Pineapple Powder



SPRAY DRYER

SPRAY DRYER





VACUUM SEALER

Used to vacuum-seal food products in flexible pouches to prolong shelf-life



PRODUCTS

Pickled Arius

Dried Fish

Dried Pusit

Onion

Garlic

Peanut

Malunggay Leaves

Smoked Fish

Pickled Santol

Seaweed

Pickled Ampalaya

Choco Blocks



VACUUM SEALER

VACUUM PACKAGING MACHINE



Other Products Developed



Complementary Feeding Program under PINOY



Development of Nutricurls (rice-mongo curls with malunggay) as a complementary food which will be presented this year to DepED.

Other Products Developed



Complementary Feeding Program under PINOY



Production of Nutriblend (rice-sesame-mongo blend), developed by DOST-FNRI for children between 6 months to 3 years of age, for roll-out to identified barangays in the region with high prevalence of malnutrition.



Other Equipment Available

- **Band Sealer** – used in continuous heat-sealing pouches
- **Deep Fryer** – used in deep-fat frying of snacks such as crackers, chips, fries and kropecks
- **Dough Mixer** – used in mixing preparation using changeable stirrers: bat, bud and hook
- **Grain Grinder** – used in grinding grains such as corn, rice, mungo and oil seeds such as sesame and nuts
- **Impulse Sealer** – used in manual sealing of pouches

Other Equipment Available

- **Noodle Maker** – used in flattening dough and in shredding into desirable thickness
- **Oil Presser** – used in separating oil from ground oil seeds
- **Oven** – used in drying food material and in baking
- **Single-screw Extruder** – used in converting grains into curls
- **Vertical fill form seal machine** - used in packaging of solid (dried, ground or powdered) food and a wide variety of other products

Seminars/Trainings Conducted

- Number of trainings conducted: **6**



Trainings Conducted

Training	Date	Venue	Participants
UP ISSI Seminar Tour in the FIC	Aug 20, 2014	CSU Carig, Tuguegarao City	MSMEs
Seminar on GMP and Food Safety in Fish Processing	Nov 20, 2014	Sanchez Mira, Cagayan	Fishermen
Soya Processing	Nov 2014	Cauayan, Isabela	Teachers
Hands-on-Training on Fish Processing (Bangus deboning, Sardines, fishball and Smoked Fish)	Dec 2014	Sanchez Mira, Cagayan	Fishermen
Sustaining Development of the Food Sector thru FIC	Mar 25, 2015	CSU Carig, Tuguegarao City	MSMEs
Improving Entrepreneurial Skills Through Livelihood Training	May 8, 2015	Brgy. Gadu, Solana, Cagayan	Housewives/ Barangay Officials



Trainings Conducted



MSMEs Assisted

- Number of MSMEs assisted: **22**
- Number of LGUs assisted: **6**

MSMEs Assisted

Clients/ MSMEs	Name of Product	Type of Assistance
Dr. Perlita C. Tiburcio and NVSU	Tilapia Cream Soup *SUC	Product Quality Improvement: Packaging and Label Improvement
Quirino State University	1. Ready-to-eat Chevon in pouch: satay and curry 2. Ready-to-eat Banana blossom sisig *PDTC/SUC	Process Improvement: Processing ready-to-eat food using water retort
Cagayan State University – Gonzaga Campus	Vacuum Fried Root crops: tugi, camote, taro, yam *PDTC/SUC	Product Development: Development of snacks using vacuum fryer
Elmer P. Mallillin (Municipal Health Office of Solana, Cagayan)	Nutriblend (rice-mongo-sesame blend) *LGU	Product Development: Complementary feeding assistance

MSMEs Assisted

Clients/ MSMEs	Name of Product	Type of Assistance
<p>Hon. Diego Comillas (Brgy Caggay, Tuguegarao City, Cagayan)</p>	<p>Nutriblend (rice-mongo-sesame blend) *LGU</p>	<p>Product Development: Complementary feeding assistance</p>
<p>Hon. Perpetua Narag (Carig Sur, Tuguegarao City, Cagayan)</p>	<p>Nutriblend (rice-mongo-sesame blend) *LGU</p>	<p>Product Development: Complementary feeding assistance</p>
<p>Hon. Juan Perciano (Carig Norte, Tuguegarao City, Cagayan)</p>	<p>Nutriblend (rice-mongo-sesame blend) *LGU</p>	<p>Product Development: Complementary feeding assistance</p>
<p>National Nutrition Council Government NNC R02</p>	<p>Vacuum packed dried fish *government agency</p>	<p>Packaging Improvement</p>

MSMEs Assisted

Clients/ MSMEs	Name of Product	Type of Assistance
BS Chemical Engineering Students of CSU-Carig	Powdered tomato juice *Students	Research Assistance: Spray dried juice using spray dryer
Marita R. Nicolas, Rural Improvement Club of Caroon	Dried fish products: espada, dadali, hasahasa, tuwel, sapsap, ginisang alamang, seaweeds, squid, dilis, alamang Bagoong/isda	Packaging and Labeling Assistance
Dominga O. Alluad, Demie's Native Cakes	Royal bibingka, Cassava bibingka, Cassava cakes	Packaging and Labeling Assistance
Myrna R. Cataluna, Kamavavaksan Nu Ivana	Meat products: tapa, tocino, longanisa, ham, lunis	Packaging and Labeling Assistance

MSMEs Assisted

Clients/ MSMEs	Name of Product	Type of Assistance
R&E Livelihood Project	Chips: sweet potato, garlic, banana, taro	Packaging and Labeling Assistance
Elisa T. Binasoy, Lemu Sur RIC	Peanut chocolate balls, Pastillas de Mani	Packaging and Labeling Assistance
Xina V. Vinalay	Peanut bars	Packaging and Labeling Assistance
Tessie Cuntapay, Magalang West RIC	Peanut butter	Packaging and Labeling Assistance
Arturo B. Tabbu, Lighthouse Cooperative *	Banana chips, peanut candy bar, sugar coated peanut, oven-baked peanut, carabao chicharon, rice cassava crackers	Packaging and Labeling Assistance

MSMEs Assisted

Clients/ MSMEs	Name of Product	Type of Assistance
Cynthia C. Bangloy, D'Bigfat Bakers	Cakes and pastries	Packaging and Labeling Assistance
Noel B. Pascua, Nutri grain foods	Petta mammon	Packaging and Labeling Assistance
Rogelio T. Tamayo, CSU Lallo	Cacao tart, buko tart, pineapple vinegar, cacao wine, lubeg wine, bignay wine, buko mini pie, cacao vinegar, coco shoot pickles, chocolate bibingka	Packaging and Labeling Assistance
Edna H. Bautista, Gadu Rural Improvement Cooperative	Papaya atchara, ampalaya atchara	Packaging and Labeling Assistance
Dominador Sp. Miguel, D.SP Miguel Ricemill *	Brown rice	Packaging and Labeling Assistance
Rogelio Yapit, R.T. Yapit Enterprises *	YapYap Orange Juice	Labeling Assistance

***Small Enterprise Technology Upgrading Program (SETUP) Beneficiaries**



Assistance extended to Students/Faculty/Firm

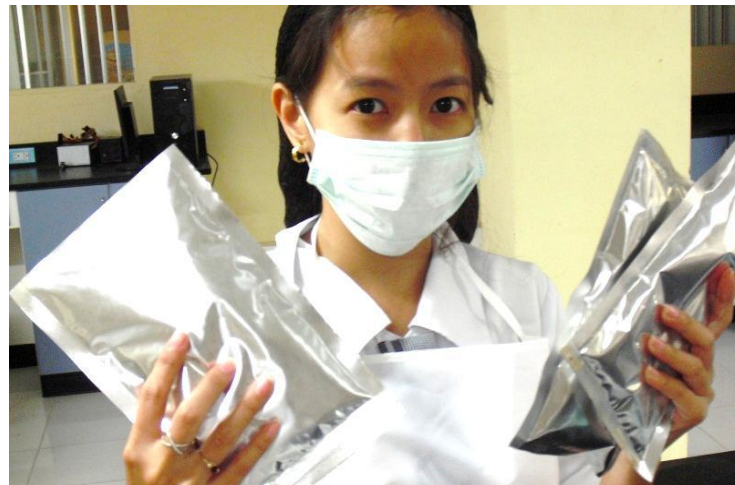
- **4** student researchers assisted
- **491** elementary and high school students visited and viewed the center with their **28** science teachers/chaperons
- **6** high school science teachers came to observe



Assistance extended to Students/Faculty/Firm

- BS Chemical Engineering, BS Food Technology and BS Chemistry students and faculty members use the center as laboratory for their research activities
- BS Electrical Engineering and BS Electronics Engineering classes are assisting in the maintenance of control systems
- **25** local firms assisted





Research assistance given to chemical engineering students in their study on spray dried tomato juice



Visit of students and teachers to the center

Firms Assisted

Customers/ MSMEs	Name of Product
Dr. Perlita C. Tiburcio and NVSU *SUC	Tilapia Cream Soup
Quirino State University *PDTC/SUC	<ol style="list-style-type: none"> 1. Chevron in pouch: satay & curry 2. Banana blossom sisig
Cagayan State University – Gonzaga Campus *PDTC/SUC	Vacuum Fried Root crops: tugi, camote, taro, yam
Elmer P. Mallillin (Municipal Health Office of Solana, Cagayan) *LGU	Nutriblend
Hon. Diego Comillas (Brgy Caggay, Tuguegarao City, Cagayan) *LGU	Nutriblend
Hon. Perpetua Narag (Carig Sur, Tuguegarao City, Cagayan) *LGU	Nutriblend
Hon. Juan Perciano (Carig Norte, Tuguegarao City, Cagayan) *LGU	Nutriblend
National Nutrition Council Government NNC Roz *government agency	Vacuum packed dried fish
BS Chemical Engg Students of CSU-Carig *Students	Powdered tomato juice



Firms Assisted

Customers/ MSMEs

Name of Product

Marita R. Nicolas, Rural Improvement Club of Caroon

Dried fish products: espada, dadali, hasahasa, tuwel, sapsap, ginisang alamang, seaweeds, squid, dilis, alamang Bagoong/isda

Dominga O. Alluad, Demie's Native Cakes

Royal bibingka, Cassava bibingka, Cassava cakes

Myrna R. Cataluna, Kamavavaksan Nu Ivana

Meat products: tapa, tocino, longanisa, ham, lunis

R&E Livelihood Project

Chips: sweet potato, garlic, banana, taro

Elisa T. Binasoy, Lemu Sur RIC

Peanut chocolate balls, Pastillas de Mani

Xina V. Vinalay

Peanut bars

Tessie Cuntapay, Magalang West RIC

Peanut butter

Delia C. Binasoy, Lemu Sur RIC

Papaya pickles, skinless adobo mani, sugar coated peanut, peanut polvoron



Firms Assisted

Customers/ MSMEs

Name of Product

Isabel P. Simangan, Divisoria RIC

Native longganisa

Arturo B. Tabbu, Lighthouse
Cooperative

Banana chips, peanut candy bar, sugar coated
peanut, oven-baked peanut, carabao chicharon,
rice cassava crackers

Cynthia C. Bangloy, D'Bigfat Bakers

Cakes and pastries

Noel B. Pascua, Nutri grain foods

Petta mamon

Rogelio T. Tamayo, CSU Lallo

Cacao tart, buko tart, pineapple vinegar, cacao
wine, lubeg wine, bignay wine, buko mini pie,
cacao vinegar, coco shoot pickles, chocolate
bibingka

Edna H. Bautista, Gadu Rural
Improvement Cooperative

Papaya atchara, ampalaya atchara

Dominador Sp. Miguel, D.SP Miguel
Ricemill

Brown rice

Rogelio Yapit, R.T. Yapit Enterprises

YapYap Orange Juice



Firms Assisted



QSU's second availment of water retort utilization for their chevon in pouch



NNC Director's availment of vacuum packaging for her vacuum sealed dried fish

Firms Assisted



CSU-Gonzaga, through PADTC Coordinator Quirino Jara, availed FIC service for the vacuum frying of their root crops (taro, yam, sweet potatoes: white & violet, and tugi) on November 17 and 18, 2014.

Firms Assisted



CSU-Gonzaga, through PDTC Coordinator Quirino Jara, availed FIC service for the spray drying of pineapple juice extract on June 3, 201

Physical Improvements



Physical Improvements







Facility/Equipment Visit



DOJ Sec. Leila De Lima and DOST Sec. Mario Montejo visit the processing area during the Science Nation R02 in March 2015



Facility/Equipment Visit



Product Display



Product Tasting



Products Developed



Complementary Feeding Program under PINOY



Republic of the Philippines
Cagayan State University
Carig Campus
Carig, Tuguegarao City, Cagayan



Department of Science and Technology R02
Carig, Tuguegarao City

MEMORANDUM OF AGREEMENT

KNOW ALL MEN BY THESE PRESENTS:

This Memorandum of Agreement made and entered into by and b

The CSU-DOST Innovation Center with principal address at Carig Si
City, Cagayan represented herein by the Campus Executive Office
Manager, **DR. ARTHUR G. IBANEZ** hereinafter referred to as
Innovation Center;



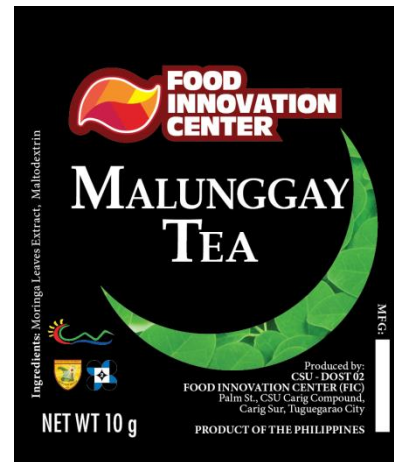
Networking & Linkaging



The Center will be presenting this month to **DSWD** some of the products, which were developed using the HITS Equipment, considered as emergency/disaster food packs.



Packaging & Labeling Designs



Packaging & Labeling Designs

BAKED



Peanut

NET WT 150 g

Ingredients: Native Peanut, Iodized Salt

Best before: 2014 2015 2016

Lot no:

Assisted by: 

Produced by: **RURAL IMPROVEMENT CLUB**
Pallua Norte, Tuguegarao City, Cagayan

PRODUCT OF THE PHILIPPINES

PICKLED



Santol

NET WT 130 g

Ingredients: Santol Fruit, Vinegar, Sugar, Salt

Best before: 2014 2015 2016

Lot no:

Assisted by: 

Produced by: **GRANNY'S FOOD PRODUCTS**
San Gerónimo, Bagabag, Nueva Vizcaya

PRODUCT OF THE PHILIPPINES



CACAO

Blocks

INGREDIENTS: CACAO

Best before: 2014 2015 2016

Lot no:

Net Wt. 100 g

Manufactured by: **CSU LAL-LO**
Lal-lo, Cagayan

PRODUCT OF THE PHILIPPINES

EXPORT QUALITY



DRIED FISH

Net Wt. ■ 100g ■ 250g ■ 500g ■ 1kg

- Dilis - Boneless (Anchovies)
- Dilis (Anchovies)
- Espada (Hairtail)
- Danggit
- Aber (Tungsoy)
- Besugo
- Banak
- Pusit (Squid)
- Alamang (Spider Shrimp)

Lot No.:

Best Before: 2014 2015 2016

Distributed by: **CRISELDA'S FOOD PRODUCTS**
Rizal St. Centro, Aparri, Cagayan
☎ (078) 888-2902; (078) 822-8324

PRODUCT OF THE PHILIPPINES

GADU

All Natural Ampalaya Atchara

(Pickled Bitter Gourd)

Net wt. 100 g

Nutrition Facts
Serving Size 300g

	% Daily Values *
Total Fat	0.05%
Total Carbohydrate	34.62%
Protein	0.79%

*Percent Daily Values are based on a 2,000 calorie diet.

Manufactured by: **Gadu RIC Multi-Purpose Cooperative**
Gadu, Solana, Cagayan
Mobile nos. (+63) 9178664640
(+63) 9059415617

Best before: 2014 2015 2016 2017

Lot no:

PRODUCT OF THE PHILIPPINES

Ingredients: Ampalaya, Vinegar, Sugar, Salt

MILAGROSA MPC

Day old Dibang

(Flying Fish)

Net wt. g

Produced by: **MILAGROSA MULTI-PURPOSE COOP. CMMPC**, Itbud, Uyugan, Batanes

INGREDIENTS: FLYING FISH, SALT, GARLIC, PEPPER, VINEGAR

PRODUCT OF THE PHILIPPINES

MILAGROSA MPC

Smoked Fish


(Flying Fish)

Net wt. g

Produced by: **MILAGROSA MULTI-PURPOSE COOP. CMMPC**, Itbud, Uyugan, Batanes

INGREDIENTS: FLYING FISH, SALT, GARLIC, PEPPER, VINEGAR

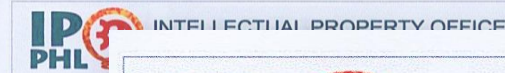
PRODUCT OF THE PHILIPPINES



Resource Generated

Sources	Amount
Equipment Utilization Fee	
Vacuum Fryer	3,118
Water Retort	5,462.25
Spray Dryer	1,857.50
Vacuum Packaging Machine	141
Complementary food production	1,200
Packaging and Labeling	63,216
Lakbay-Aral	1,800
Programs	
PINOY	910,058
CVIERDEC	350,000
TOTAL	1,336,853

IPR Applications



STATEMENT

Applicant : CSU-D
INNOVATION CE

R.C.	Natu
535	Filing
536	Claim
537	Legal

Total Amount Du



INTELLECTUAL PROPERTY OFFICE
OF THE PHILIPPINES

STATEMENT OF ACCOUNT

SoA No. : 0004720150165255
BPI Ref. No. : IPPHL 47150165250146
Date: 5/19/2015

Applicant
Title of the Mark
Type of Mark

Agent Name
Goods & Serv

Applicant : CSU-DOST 02 - FOOD
INNOVATION CENTER

Color Claim
Claim for Priority

R.C.	Nature of Collection	Amount
N/A	N/A	N/A

Translation or
Transliteration

: N/A

Disclaimer

: THE TERM 'CAGAYAN' IS DISCLAIMED APART FROM ITS USE ON
THE MARK SHOWN.

Specific Description of
Mark

: WORD MARK

Filing of IPR applications (5 trademark applications) on May 19, 2015

Pampasingo Ginisa Mix	SoA No. : 0004720150165248
Cagayan Blend	0004720150165255
Kamasimix	0004720150165222
Hearty Fry	0004720150165230
Valley Green	0004720150165263



IPR Applications

Three (3) registered trademarks of 2014



NUTRICURLS®

Rice-mongo-malunggay curls

SoA No. : 0004720140100792



S-TART®

Soybean-seaweed tart

0004720140100800



NUTRON®

Peanut polvoron with malunggay

0004720140100818

IPR Applications

Utility Model application for Vacuum Fried (Crispy) Pinakbet is on process.



A number of entrepreneurs are interested on this innovated ethnic food and are willing to enter through MOA and or contract research with the Center.



Competency Building



Staff attended the “Training on the Operation and Maintenance of DOST-Developed Food Processing Equipment” in May 4-15, 2015

Competency Building



FIC personnel attended Training on 5S on February 10, 2015 as a distant preparation for the Center's ISO certification.

Competency Building

Food Processing/Preservation and Operations of DOST Developed Food Processing Equipment in the Regions

CSU-DOST02 FIC, CSU Carig Campus, Carig Sur, Tuguegarao City, Cagayan, October 8-13, 2014

Training of FIC Personnel on the Operation of DOST Fabricated Processing Equipment

Food Processing Innovation Center (FPIC), PWC of Davao, Matina, Davao City, September 8-16, 2014

Training Course on “Overview of Food Preservation and Packaging Methods for Product Development”

National Food Authority – Food Development Center, FTI Complex, Taguig, August 20 to 22, 2014

Trainer’s Training on Food Processing/ Preservation and Operations of DOST Developed Food Processing Equipment in the Regions

Food Processing Division, ITDI DOST, DOST compound, Bicutan, July 22 to 24, 2014

Consultative Meeting for the Food Innovation Center Project

Candida Room, Pulsar Hotel, July 9 & 10, 2014



Competency Building

Workshop on Food Technology Innovation “Managing It Our Way” By Technology Research Institute (TRC)

CICS Conference Hall, CSU-Carig, July 7 to 9, 2014

Seminar-Workshop on “The Requirements for GMP Certification thru Sanitation Standard Operating Procedures (SSOP)”

CICS Conference Hall, CSU-Carig, June 11 & 12, 2014

Training on 5S and Communications Management

CICS Conference Hall, CSU-Carig, May 28, 2014

Sensory Evaluation Techniques

DOST RO2 , February 19 & 20, 2014

Consultative Meeting with Researches of the Cagayan State University System

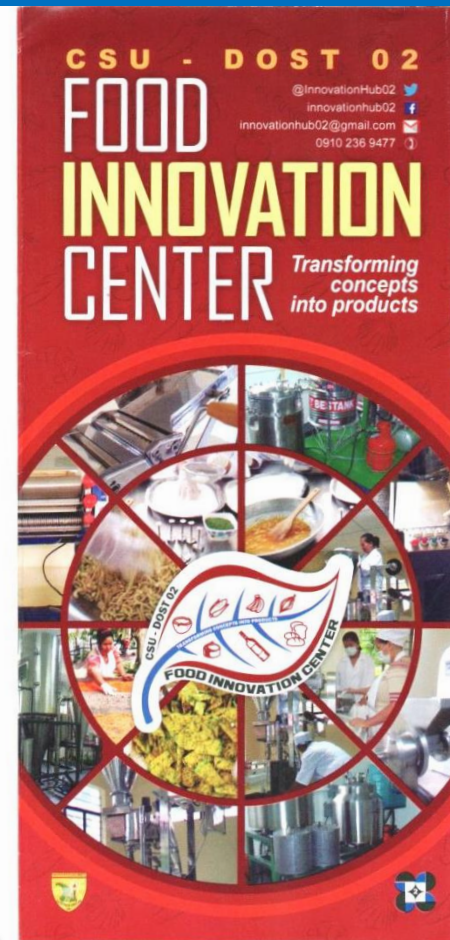
CICS Conference Hall, CSU-Carig, February 11, 2014

Innovation Center Strategic Planning

El Cielito Hotel, July 25, 2013



Promotions Conducted



@InnovationHub02



Food-Innovation-Center



Promotions Conducted

Addan Instant Pinakbet

NI MARIO ADELMO B. CABREROS

Iti apagkirem, addan sidam a pinakbet. Madika pay?

NAKARAMANKAYON ti instant pinakbet a mabalin pay a nasarangsang a masaramsam?

Ala, asidegen a mailako ken magatang kadagiti tiendaan, grocery store ken mall daytoy naimas ken pagaayat a lutotayo nga Ilokano.

Iti panagpasiar ni Department of Science and Technology (DoST) Secretary Mario Montejo idliay Food Innovation Center ti Cagayan State University-Carig campus, kas paset ti Science Nation tour iti Region 2 (Cagayan, Isabela ken Nueva Vizcaya) idi Marso 22-26, impakita da Dr. Urduja Tejada, Regional Director ti DoST-Region 2 ken Dr. Romeo Quilang, presidente ti CSU, dagiti kabaruana a makina a kas iti water retort, spray dryer, pulverizer/grinder ken vacuum deep fryer/dryer a mangproseso kadagiti produkto dagiti mannalon ken mangngalap, kas iti nasao a pinakbet.

Kinuna ni Dr. Tejada a babaen iti vacuum dryer, mapagango wenno maikakat danum ngem agtalinaed dagiti nutrients ken porma dagiti kangrunaan a nateng (okra, karabasa, tarong, paria ken utong). Babaen met ti spray dryer, mapulbos dagiti dadduma pay a ramen a kas iti bugguong, lasona, bawang, laya ken napagango a karne ti baboy (mabalin a satsaron wenno bagnet).

"Ikkan laeng iti napudot a danum sa ilaok dagiti napulbos a ramen," inlawlawag ni Dr. Urduja. "Kalpasan ti sumagmamano a minuto, mabalinen ti mangisakmol iti innapuy kakuyog daytoy naimas nga instant pinakbet," innayonna.

"No saan a pinakbet, mabalin met a saramsamen lattan," innayon ni Dr. Archimedes Articulo, executive director ti nasao a campus. Kinunana a nabangon daytoy FIC babaen ti Small Enterprise Technology Upgrading Program wenno SETUP ti DoST.

Impakaammona a mabalin ti umutang wenno bumulod iti SETUP dagiti babassit nga industria ken LGU tapno makagatang iti kabaruana a makina para iti naparpardas ken ad-adu a produksion kasta metten a mabalin a maipagpannakel iti sangalubongan wenno world class dagitoy. Awan interes wenno ti laeng gatad ti binulod ti bayadan, kinuna pay Dr. Articulo.

Impakaammo met ni Engr. Denis Policar, mangimaton iti Industry Assistant Unit ti FIC, nga adun dagiti negosiante ti nagkuna nga interesadoda nga i-commercialize daytoy instant pinakbet.

Kinuna pay Policar a babaen ti moderno a makina wenno ramit iti FIC, mabalin a maaramid ti kamote chips, noodles a karabasa, kalamansi juice, napulbos a marunggay, saluyot, carrot ken dadduma pay a nateng, ken bungbunga a kas iti arius a makita laeng idliay Batanes, lames ken karne.

"Mangproseso dagitoy tapno napintas ti kalidad ti produkto wenno world class ken tapno agbayag ti biagda iti pannaka'idulinda," innayonna.

TI FIC ket agserserbi a kas research ken training center para kadagiti estudiante ti nasao a campus kasta metten kadagiti mayat nga agnegosio. Malaksid iti panagproseso kadagiti nadumaduma a produkto, maisuro pay ditoy dagiti nasken wenno kangrunaan nga addang iti panagnegosio a kas iti packaging ken labeling.

Insayangkat ti DoST daytoy Ramdam Na Agham Science Nation tour tapno maipaganget ti panagaramat iti siensia ken teknolohia; iti kasta, dumakkel ti produksion a maipagpannakel iti sangalubongan, maaddaan iti trabaho ket rumang-ay ti biag dagiti agindeg iti komunidad kasta metten a rumang-ay ti lokal ken nasional nga ekonomia.

TI FIC ket CSU ti maikadua iti paglilian. Immuna ti FIC idliay Davao City.—O



Mayo 18, 2015

Bannawag

Kangrunaan a Magasin Dagiti Ilokano

SALUDSODEM KEN NI APO HUES

TI SINALDANA A DAGA, ADDA PAY SABALI A NAKAISALDAANNA

AMMUEM DAYTOY

ITI LUBONG TI PLASTIK

AGRIKULTURA

KAYATMO A PAAMIRIS TI DAGAM?

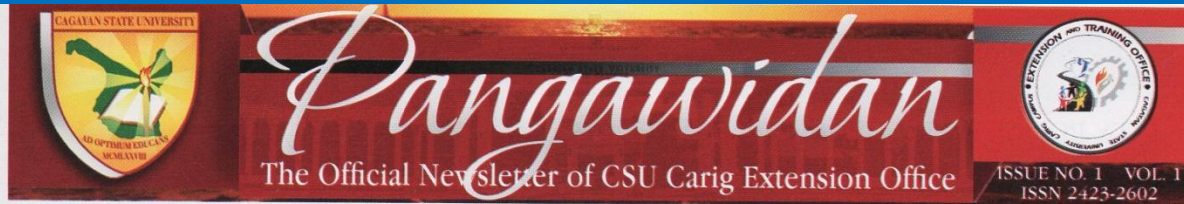
Julia BARRETTO

No agsapsapulka iti trabaho wenno adda kayatmo a gatangen, basaem ti Manila Bulletin Advertisements & Classified Ads.

On the May 18, 2015 issue of the Bannawag, Vacuum Fried (Crispy) Pinakbet was featured.



Promotions Conducted



CSU CARIG, DOST MANAGE FOOD INNOVATION CENTER

With the mandate of the Department of Science and Technology "to provide programs and projects that will enhance productivity or the country thereby improving the quality of life of the people it serves", DOST Region 2 forged an agreement with Cagayan State University in the creation of the Regional Food Innovation Center in April 2013 at CSU Carig Campus.

Dubbed as Cagayan State University and Department of Science and Technology Regional Office 02 Food Innovation Center, FIC provides an avenue for faculty and students to showcase their products particularly in food technology. Food products like Nutriblend, a food supplement for young children, had been put on sale. Other products like tart, rice curls and beverages have been studied and some have received trademarks recently.

FIC also provides a common service facility to Food Technology faculty members and students of CSU-Carig Campus in terms of food innovation, micro toll processing, packaging, consultancy and advisory services so that they will conform to international standards. Moreover, it organizes trainings and seminars on food processing and



seminars and workshops regarding food innovation and production such as "Workshop on Food Technology Innovation" "Managing

Region 02", "Trainer's Training on Food Processing/ Preservation and Operations of DOST Developed Food Processing Equipment in the

DOST and CSU function together in order to reach the optimum operation of FIC. DOST provides fund support for the

Through the official newsletter of CSU Carig Extension Office, the FIC as a common service facility is being promoted especially to faculty researchers.



Promotions Conducted



Tour of SETUP Beneficiaries after the presentation “Sustaining Development of the Food Sector Thru FIC” on March 25, 2015

Promotions Conducted



“Lakbay Aral” of post-graduate students of Dir. Urdujah A. Tejada on January 24, 2015 which includes FIC services promotion, hands-on workshop on food processing, and GMP seminar and consultation

Promotions Conducted



“Lakbay-Aral” of 6 HS teachers and 491 students on March 23-24, 2015 wherein equipment, products/processes, and services were presented



Promotions Conducted



Hosted by FNRI on February 5, 2015 at GSO of Provincial Capitol, FIC services were promoted to representatives of different LGUs in Cagayan.



Certifications Applied

1 GENERAL INFORMATION		PROCEED
1.1 Product Center:	Drug	
1.2 Authorization:	License to Operate	
1.3 Type:	Renewal	
1.4 Primary Activity:	Retailer	
1.5 Current License		

APPLICATION FORM STATUS	
GENERAL INFORMATION:	PROCEED
ESTABLISHMENT INFORMATION:	PROCEED
PRODUCT INFORMATION:	PROCEED
SUPPORTING INFORMATION:	PROCEED
SOURCES & CLIENTS:	PROCEED
APPLICANT INFORMATION:	PROCEED

ORDER OF PAYMENT	
Amount Due:	Php 3,030.00
Fee :	Php 3,000.00
Legal Research Fee :	Php 30.00
Surcharge :	Php -
OR Number :	
Date Paid:	
Computation Valid Until:	26 May, 2015
This form was last edited on 12 March 2015, 9:53 AM.	



The Center started filing last month to FDA for a license to operate (LTO); preparations of necessary documents for GMP, HACCP, and ISO certifications will follow.



Record Keeping

Operation log sheets personalized for every HITS equipment.



Additionally, costing of products developed, material balance, and product process flow are presently being conducted.

CSU-DOST 02
FOOD INNOVATION CENTER
Palm St., CSU Carig Compound
Carig Sur, Tuguegarao City,
Cagayan 3500

WATER RETORT LOG

Product name
Manu
Proce
Packa
Pou
bott
Net w
Temp
Come
LPG us
Electri
Proce
Coolin

SPRAY DRYING PROCESS FORM

CSU - DOST 02
FOOD INNOVATION CENTER
Palm St., CSU Carig Compound,
Carig Sur, Tuguegarao City,
Cagayan 3500

Vacuum Frying Log

Final Product Name and Formulation

Customer _____ Date (mm/dd/yy) _____

Equipment's initial observation:
LPG content monitoring: initial mass: _____ final mass: _____
Equipment Sterilization: water volume: _____ temperature: _____

Raw Material	Mass		Pre-treatment(s)			
	Qty	Unit	Blanching		Freezing	
			Time (min)	Temp (°C)	Time (min)	Temp (°C)

Oil Loading
Type of oil: _____
Volume of oil (in liters): _____
Usage: new recycled/ times used: _____
Physical observation: _____

Oil Pre-heating
Time start: _____
Temperature (set value): _____
Pressure: _____
Time end: _____

Actual Operation

Check Point (20 mins interval)	Time (minutes)	Temperature (°C)	Pressure (cmHg)	Humidity (% RH)
Start	0		70 vacuum	-
				-
				-
				-
				-
				-
De-oiling			70 vacuum	-
Stirring			70 vacuum	-
Unloading			76	-

Post-operation Monitoring

Process	Time (minutes)	Temperature (°C)	Pressure (cmHg)	Humidity (% RH)
Cooling			76	
Weighing			76	

Oil Temperature Cooling

Checkpoint	Time/Date	Temperature (°C)
Cool down start		
Cool down end		

Problems Encountered

Final Product

Final Mass		Product Remarks	
Qty	Unit	Mass Reduced	% Moisture loss

Product Remarks

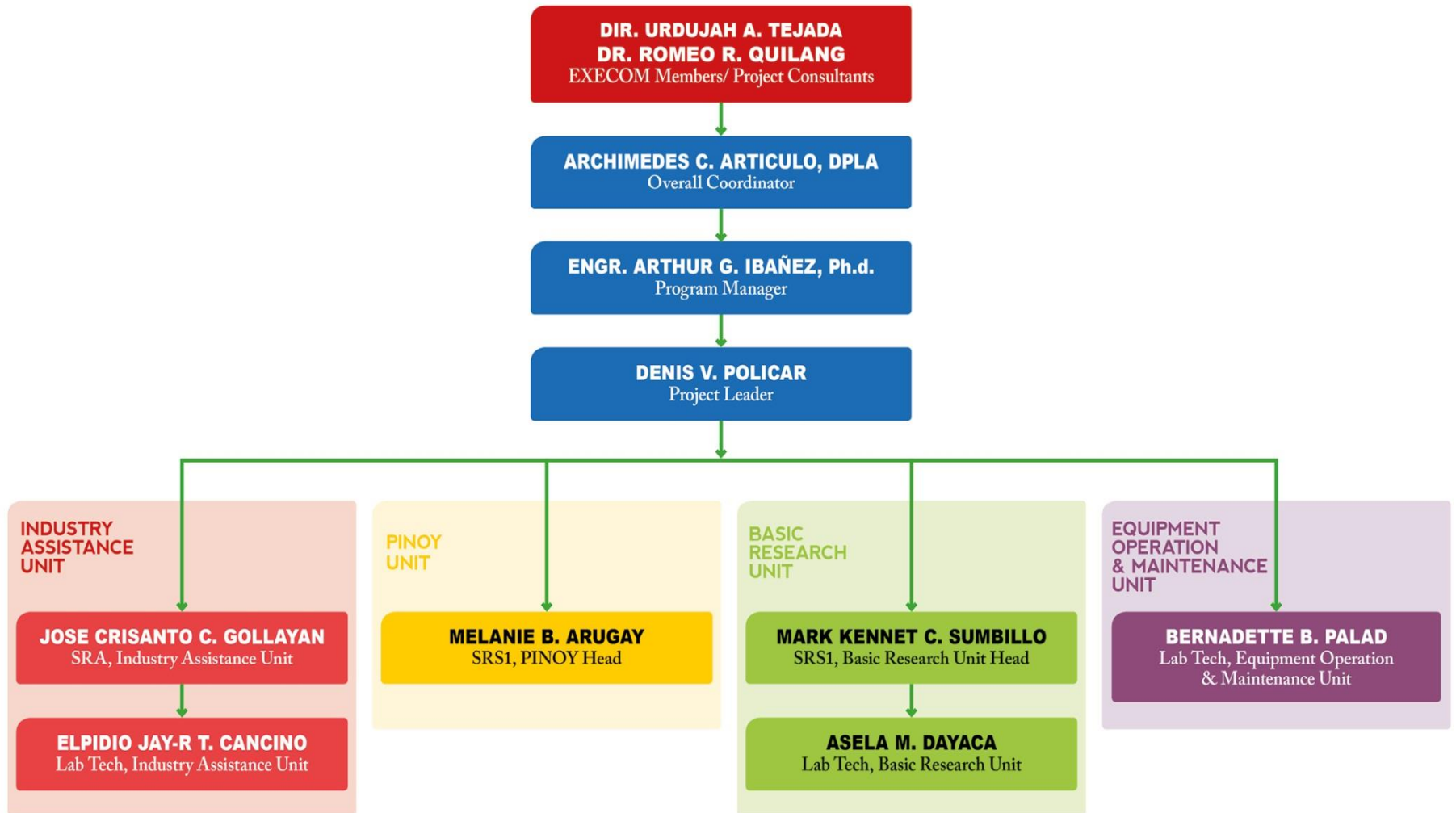
Operated by: _____

Checked by: _____

CSU-DOST 02
FOOD INNOVATION CENTER
Palm St., CSU Carig Compound,
Carig Sur, Tuguegarao City,
Cagayan 3500



ORGANIZATIONAL STRUCTURE





MABBALO!



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