
General Information

Name: Suárez
First Name: Lola
Date of birth: 12/06/1981
Place of birth: Cordoba, Spain

Organization: Remote Sensing Laboratories. University of Zurich- Irchel
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Position:

- Marie Curie Experienced Researcher
- Participating member at the Hyperspectral Imaging Network (HIPER-I-NET), which is a FP6 Marie Curie research training network

Research topics

Remote Sensing of vegetation using multi/hyperspectral data and radiative transfer modelling for water and nutrient deficits detection.

Keywords: Remote Sensing, vegetation stress, Radiative transfer modelling, fluorescence, photosynthesis.

Educational Background

Name	University	Date
Agronomy Engineering	Cordoba University (Spain)	September 2006
MSc. Geo-Information Sciences and Remote Sensing	Wageningen University (The Netherlands)	October 2006
European Doctorate "Remote Sensing of water stress using the Photochemical Reflectance Index"	University of Cordoba (Spain)	November 2009

Languages

(R = intermediate, B = advanced, C = proficiency)

Language	Speaking	Reading	Writing
Spanish	C	C	C
English	C	C	C

Participation in Projects

Title: A Surveillance System for Assessing and Monitoring of Desertification (DeSurvey)

Financing entity: European Union– 6th Framework program

Participating entities: LU, UTRIER, RISK, IRD, CIPDU, UCR, ENEA, CSIC, ULEEDS, UCL

From: 2005 till: 2010 Budget: 207.980 €

Project leader: Juan Puigdefábregas

Number of participants: 40

Title: Programa Integral de Ahorro y Mejora Productiva del Agua de Riego en la Horticultura Española

Financing entity: MEC

Participating entities: IAS- CSIC (Córdoba), IRTA (Lérida), CEBAS (Murcia), IVIA (Valencia), SIA-DGA-CSIC (Zaragoza)

From: 20/10/2006 till: 19/10/2010 Budget: 4.960.000 €

Project leader: Elías Fereres

Number of participants: 22

Title: Evaluation of total leaf tissue water potencial and total pigments by optical properties and color space index for major tropical trees

Financing entity: AECI

Participating entities: IAS- CSIC (Córdoba), National Authority for remote sensing and space sciences (NARSS)

From: 09/01/2009 Till: 09/01/2010 Budget: 13500 €

Project leader: P.J. Zarco-Tejada

Number of participants: 7

Scientific publications

2010. L. Suárez, P.J. Zarco-Tejada, V. González-Dugo, J.A.J. Berni, R. Sagardoy, F. Morales, E. Fereres
Detecting water stress effects on fruit quality in orchards with time-series PRI airborne imagery
Remote Sensing of Environment, 114 (2), 286-298

2009. L. Suárez, P.J. Zarco-Tejada, J.A.J. Berni, V. González-Dugo, E. Fereres
Modelling PRI for Water Stress Detection using Radiative Transfer Models
Remote Sensing of Environment, 113, 730-744

2009. P.J. Zarco-Tejada, J.A.J. Berni, L. Suárez, G. Sepulcre-Cantó, F. Morales, J.R. Miller
Imaging Chlorophyll Fluorescence from an Airborne Narrow-Band Multispectral Camera for Vegetation Stress Detection
Remote Sensing of Environment, 113, 1262-1275

2009. J.A.J. Berni, P.J. Zarco-Tejada, L. Suarez, E. Fereres
Thermal and narrow-band multispectral remote sensing for vegetation monitoring from an Unmanned Aerial Vehicle

IEEE Transactions on Geoscience and Remote Sensing, 47, 722-738

2008. L. Suárez, P.J. Zarco-Tejada, G. Sepulcre-Cantò, O. Pérez-Priego, J.R. Miller, J.C. Jiménez-Muñoz y J. Sobrino
Assessing canopy PRI for water stress detection with diurnal airborne imagery
Remote Sensing of Environment, 112, 560- 575

2008. P.J. Zarco-Tejada, J.A.J. Berni, L. Suárez, E. Fereres
A new era in remote sensing of crops with unmanned robots
DOI: 10.1117/2.1200812.1438

Conference proceedings

Suárez, L., Zarco-Tejada, P.J., González-Dugo, V., Berni, J.A.J., Fereres, E.
Detección de estrés hídrico y calidad de fruto en cultivos mediante el índice PRI a partir de imágenes de alta resolución espacial
XIII Congreso de la Asociación Española de Teledetección. Calatayud 23-26 September, 2009, ISBN: 978-84-613-4257-0, pp 29-32.

Suárez, L., Zarco-Tejada, P.J., González-Dugo, V., Berni, J.A.J., Fereres, E.
The Photochemical Reflectance Index (PRI) as a water stress indicator in peach orchards from remote sensing imagery
7th International Peach Symposium. Lleida (Spain), 8-11 June, 2009. Acta Horticulturae (In press)

Berni, J.A.J., Suárez, L., Guillén, M., González-Dugo, V., Zarco-Tejada, P., Fereres, E.
Remote Sensing in Peach Orchards: Monitoring from Unmanned Aerial Vehicles (UAVs)
7th International Peach Symposium. Lleida (Spain), 8-11 June, 2009. Acta Horticulturae (In press)

R. Hernández-Clemente, R. Navarro-Cerrill, J.E. Frieyro de Lara, P.J. Zarco-Tejada, L. Suárez, A. Hayas-Lopez, G. Sepulcre-Cantó
Evaluating Image-Based Estimates of Biophysical Parameters in Mediterranean Conifer Forest in Decline Using Airborne Imagery
6th EARSeL SIG IS workshop IMAGING SPECTROSCOPY: *Innovative tool for scientific and commercial environmental applications*. Tel-Aviv (Israel), 16-19 March, 2009.

L. Suárez, P.J. Zarco-Tejada, V. González-Dugo, J.A.J. Berni, E. Fereres
Detecting Water Stress in Orchard Crops Using PRI from Airborne Imagery
6th EARSeL SIG IS workshop IMAGING SPECTROSCOPY: *Innovative tool for scientific and commercial environmental applications*. Tel-Aviv (Israel), 16-19 March, 2009.

J.A. Jimenez Berni, P.J. Zarco-Tejada, L. Suárez, V. González-Dugo, E. Fereres
Remote sensing of vegetation from UAV platforms using lightweight multispectral and thermal imaging sensors.
ISPRS Hannover Workshop 2009.

González-Dugo, V., Ruz, C., Berni, J.A.J., Suárez, L., Guillén-Climent, M.L., Zarco-Tejada, P.J., Soriano, M.A., Fereres, E.
Regulated deficit irrigation in peach and nectarine at the farm level
X Congress of the European Society of Agronomy
Proceedings of the X Congress of the European Society of Agronomy. Ed: P.R. Pisa. Pp:651-652. Bolonia (Italia), 2008

Zarco-Tejada, P.J., Suárez, L., Pérez-Priego, O., Sepulcre-Cantó, G., Miller, J.R
Diurnal relationships between PRI, canopy temperature and O2-A fluorescence in filling for Water and Nutrient Stress detection using airborne imagery

3rd International Workshop on Remote Sensing of Vegetation Fluorescence. CNR. Florence, Italy, 7-9 February 2007

Lola Suárez, Lammert Kooistra, Michael Schaepman

Use of imaging spectroscopy to map vegetation hydraulic resistance in river floodplains

EARSel Workshop on Imaging Spectroscopy

Proceedings 5th EARSel SIG IS workshop "IMAGING SPECTROSCOPY: innovation in environmental research". - Brugge : EARSel, 2007 - p. 10.

L. Kooistra, M.D. Suárez Barranco, H. van Dobben, M.E. Schaepman

Monitoring vegetation biomass in river floodplains using imaging spectroscopy

ISPRS mid-term symposium 2006 remote sensing: from pixels to processes, 8-11 May 2006, Enschede, the Netherlands. -

Enschede : ISPRS, 2006 - p. 5

Lammert Kooistra, María Dolores Suárez Barranco, Han van Dobben, Michael Schaepman

Regional scale monitoring of vegetation biomass in river floodplains using imaging spectroscopy and ecological modeling

IGARSS 2006 10.1109/IGARSS.2006.37

Patents and Utility models

P.J. Zarco, J.A.J. Berni, L. Suárez, E. Fereres (Participation: 25%)

Title: MÉTODO DE CARACTERIZACIÓN DE VEGETACIÓN (Methodology for the characterization of vegetation)

Application number: ES 1641.219

Priority country: Spain

Date: 12 / 1 / 2009

Contractor: CSIC

(In process)

P.J. Zarco Tejada, E. Fereres Castiel, J.A.J. Berni, V. González Dugo, L. Suárez (Participation: 20%)

Title: METODO DE SEGMENTACION DE PARCELAS DE CULTIVO (Methodology for crop field segmentation)

Application number: ES1641.613 CSIC

Priority country: Spain

Contractor: CSIC

(In process)
