

Curriculum vitae

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1 Academic Background

Master's Degree in Civil Engineering

Year: 1992

Specialty: Foundations and Structures

PhD Construcción Engineering

Doctoral Thesis: *Heuristic economic optimization of prestressed slab bridge decks* defended on January 20, 2010 in the Universitat Politècnica de Valencia.

Directed by Dr. Fernando González Vidoso and Dr. Víctor Yepes Piqueras

Thesis Committee:

- Ángel Carlos Aparicio Bengoechea (President)
- José Luis Bonet Senach (Secretary)
- Santiago Hernández Ibáñez (Member)
- Fermín Luis Navarrina Martínez (Member)
- Josep Ferri Rabasa (Member)

Qualification: SOBRESALIENTE CUM LAUDE

2 Professional Experience

2.1 Working for others

Between 1992 and 2002, collaborations with AMINSA (*Agrupación Mediterránea de Ingeniería S.A.*) in the drafting of the following projects:

- CREVILLENTE-TORREVIEJA ROAD IMPROVEMENT (1991). ALICANTE. COPUT of the Generalitat Valenciana¹. Design of eight (8) bridges and one viaduct over the Segura river channelling.
- ROJALES-GUARDAMAR DEL SEGURA NEW ROAD (1993). ALICANTE. COPUT of the Generalitat Valenciana. Design of soil consolidation and improvement treatments in the foundations of high embankments. Design and structural analysis of nine (9) bridges and one viaduct over the Segura river channelling.
- GUADIATO RIVER NEW DAM IN THE MUNICIPALITY OF ALMODOVAR DEL RÍO (1993). CORDOBA. Dirección General de Obras Hidráulicas. M.O.P.T.² Design and structural analysis of a slab on the crowning spillways. Design and structural analysis of a flyover on the damping bowl. Design and structural analysis of a viaduct on the reservoir tail. Prey body stability calculations.
- L'ALCUDIA ALCIRA HIGHWAY C-3322 (1994). VALENCIA. COPUT of the Generalitat Valenciana. Design of five overpasses and four precast girder bridges.
- CASTELLON - POBLA TORNESA HIGHWAY. SECTION: CASTELLON BY-PASS - BORRIOL (SOUTH) (1994). CASTELLON. COPUT of the Generalitat Valenciana. Design and structural analysis of a precast girder bridge.
- ALICANTE - ALCOY HIGHWAY. SECTION: ALICANTE - RAMBUCHAR RIVERBED (1994). CASTELLON. COPUT of the Generalitat Valenciana. Several structures design and structural analysis.
- IMPROVEMENT OF C-238. ACCESS TO CASTELLON AND JAUME I UNIVERSITY (1995). CASTELLON. COPUT of the Generalitat Valenciana. Structures design and structural analysis.
- SOUTH BY-PASS OF ALMORADI (ALICANTE) IN THE A-304 AND C-3321 ROADS (1995). ALICANTE. COPUT of the Generalitat Valenciana. Design and structural analysis of structures and special foundations.
- ALICANTE - ALCOY HIGHWAY. SECTION: IBI BY-PASS - CASTALLA (1995). ALICANTE. COPUT of the Generalitat Valenciana. Design and structural analysis.
- ALICANTE - ALCOY HIGHWAY. SECTION RAMBUCHAR RIVERBED - CASTALLA (1995). ALICANTE. COPUT of the Generalitat Valenciana. Geotechnical study of the trace. Structure Design and structural analysis.
- SUPPRESSION OF INTERSECTIONS IN BORRIOL - BECHI NEW ROAD AND WEST ACCESS TO CASTELLON (1996). CASTELLON. COPUT of the Generalitat Valenciana. Design and structural analysis.
- NÁQUERA BY-PASS (FIRST PHASE) IN VP-6044 (1996). VALENCIA. Diputació Provincial de València³. Design and structural analysis.
- CASTELLON-BENICASIM NEW ROAD (1996). CASTELLON. COPUT of the Generalitat Valenciana. Design and structural analysis.
- REMODELLING THE CONNECTION BETWEEN THE MEDITERRANEAN HIGHWAY A-7 AND CV-80 (1996). ALICANTE. COPUT of the Generalitat Valenciana. Design and structural analysis.

and the technical assistance to the site management of:

- IMPROVEMENT OF THE C-3322 LOCAL ROAD BETWEEN K.P. 79.9 AND K.P. 96.4. SECTION CHESTE - LIRIA (1993). VALENCIA. COPUT of the Generalitat Valenciana. Checking and calculating of structures.
- BORRIOL - BECHI NEW ROAD AND WEST ACCESS TO CASTELLON (1993). COPUT of the Generalitat Valenciana. Checking and analysis of structures.
- BY-PASS OF BECHI IN ALMENARA - LA JANA ROAD. SECTION BECHI (1994). CASTELLON. COPUT of the Generalitat Valenciana. Checking and analysis of structures.
- SPLITTING OF ACCESS TO ALICANTE BY A-213 ROAD. SECTION ALICANTE - RAMBUCHAR RIVERBED. ALICANTE (1995). COPUT of the Generalitat Valenciana. Checking and calculating of structures.
- CONVERSION INTO A HIGHWAY AND LAYOUT IMPROVEMENT. CN-225 FROM TERUEL TO THE GRAO OF CASTELLON, KP 0,0 TO 23,4. SECTION: EL JUNCAR - MONCÓFAR. PROVINCES OF VALENCIA AND CASTELLON (1998). Ministerio de Fomento. Dirección General de Carreteras. Head of the Technical Assistance Unit and Health and Safety Coordinator.

¹Regional administration

²Spanish national administration

³Local administration

2.2 Selfemployed worker

From 2002 until now, he participates in the following Projects:

- IMPROVEMENT OF PETRER ACCESS (2003). VALENCIA. IVA-LEYING / Dip. Valencia. Expansion of the structure of the access bridge to Petres over the Palancia river.
- CIUDAD DE LA LUZ OF ALICANTE (2003). INCEC/Ciudad Luz. Pedestrian walkway set area film production.
- ACCESS TO THE RIODEL INDUSTRIAL ESTATE IN MUTXAMEL (2003). ALICANTE. ELECNOR. Overpass with precast deck.
- FONTANALS BY-PASS ROAD (2003). GERONA. ROVER-ALCISA/M.Fomento. Bridge over railway.
- SPLITTING OF CV-10 ROAD. SECTION BECHI-BORRIOL (2003). CASTELLON. UTE (joint venture) BORRIOL-BECHI/COPUT. Overpasses E-4 and E-6.
- REMODELING OF THE ACCESSES TO VILLAREAL (2003). CASTELLON. FERROVIAL-AGROMAN/COPUT. Culvert ampliation over dry riverbed.



Figure 1: Flyover and retaining walls in Sangueta station, Alicante metropolitan railway.

- CONEXION BETWEEN SOUTH DISTRIBUTION HIGHWAY AND A-7 HIGHWAY (2003). VALENCIA. UTE (joint venture) FCC-PAVASAL /COPUT. Continuous prestressed concrete decks overpasses OF 1.1, OF 1.9, OF 2.9, OF 4.5, OF 4.8/4.9 and OF 4.6.
- HIGH SPEED RAILWAY MADRID-LEVANTE, SECTION CAUDETE DE LAS FUENTES. VALENCIA. INGENIERÍA VALENCIANA /GIF. 5 overpasses.
- HIGHWAY CAMINO DE CASTILLA (MONFORTE DEL CID-CREVILLENTE) (2003). ALICANTE. FERROVIAL-AGROMAN/M.Fomento. Structures numbers E-1, E-2, E-3, E-5, E-6, E-8, E-9.
- SOUTH ACCES TO THE PORT OF CASTELLON (2003). Dragados-FCC /M.Fomento. Continuous prestressed decks structures P-3 and KP 5+000.
- ALMAZORA - CASTELLON PORT HIGHWAY (2004). SEDESA/COPUT. Prestressed structure.
- LEVEL CROSSING SUPPRESSION IN SIGÜENZA (2004). GUADALAJARA. ROVER/M.Fomento. Fly-over structure.
- MUDEJAR HIGHWAY A-23. SECTION CALAMOCHA - ROMANOS (2003). TERUEL. UTE (joint venture) CALAMOCHA /M.Fomento. Prestressed viaducts of successive spans E-10 and E-13.
- UNDERGROUND STATION IN TORRENTE (2003). VALENCIA. COPUT/Ferrovial. Two station cover slabs.
- BAILÉN STREET UNDERGROUND NEW STATION IN VALENCIA (2004). COPUT/Ferrovial. Eight (8) station cover slabs, and special columns over screen walls.
- VÍA PARQUE ELCHE (2004). ALICANTE. FCC CONSTRUCCION/COPUT. Prestressed structures in IFA link (Co-authors Fernando González Vidoso and C. Perea).
- MUDEJAR HIGHWAY A-23 SECTION REGAJO - VIVER (2005). CASTELLON. VIVER UTE (joint venture)/M. Fomento. Regajo and Magallán viaducts (Co-authors Fernando González Vidoso, F. Martínez and C. Perea).
- ALICANTE'S TRAM NETWORK (2005). FCC/COPUT. Successive spans railway bridge *Salto carnero*.

- MEDITERRANEAN HIGHWAY A-7 SECTION COCENTAINA - PUERTO DE ALBAIDA (2005). ALICANTE. OFITECO/MOPU. Overpass KP. 13+570, Viaduct 1, Viaduct 2, Albaida river roundabout bridges.
- N-332 ONDARA AND VERGEL BY-PASS (ALICANTE) (2005). VIAS Y CONSTRUCCIONES/COPUT. Structures E-3, E-13 and E-15.
- TORRE LA SAL URBANIZATION (2006). CASTELLON. ASURINSA/MOPU. Structures over Valencia-Barcelona railway and over N-221 Highway in Torre la Sal (Valencia).
- CV-370 ROAD FROM QUART TO PEDRALBA. SECTION RIBARROJA BY-PASS (2006). VALENCIA. CHM/COPUT. Bridge over Porxinos riverbed.
- GOLF MAR URBANIZATION ACCES IN PUZOL (2006). VALENCIA. IVALEYING/COPUT. Girders deck overpass and prestressed deck bridge over railway (Co-authors Fernando González Vidosa and C. Perea).
- XÁTIVA NORTH BY-PASS (2006). MARE NOSTRUM/COPUT. Bridge over railway and bridge over L'Angeliu dry riverbed.
- HIGH SPEED RAILWAY MADRID-LEVANTE SECTION MONFORTE DEL CID-NOVELDA (ALICANTE) (2006). ALDESA CONSTRUCCIONES/ADIF. Viaduct V-1 (Madrid-Elche) and V-2 (Elche-Madrid) (Co-authors Fernando González Vidosa, F. Martínez and J.M. Vilaplana). (Figure 2)



Figure 2: Viaducts Madrid-Levante high speed railway in Novelda

- ALICANTE'S TRAM NETWORK (2007). UTE (joint venture) INITEC-INTRAESA/COPUT. Bridge over Goteta dry riverbed.
- SPLITTING MEDITERRANEAN HIGHWAY, BY-PASS OF VALENCIA (2007). ASURINSA /M. Fomento. 10 precast girders decks extensions, structures: 2, 5, 6, 10, 11, 14, 16, 18, 19 and 22 (Co-authors Fernando González Vidosa and J.M. Vilaplana).
- A-70 HIGHWAY BY-PASS OF ALICANTE (2007). ASURINSA/M. Fomento. Two parallel viaducts over dry riverbed (Co-author J.M. Vilaplana).
- MEDITERRANEAN HIGHWAY A-7 SECTION BY-PASS OF COCENTAINA (2008). ALICANTE. VIAS-CORSAN/M. FOMENTO. Successive spans viaducto E-20 and precast girders viaducts E-10 and E-18. (Co-authors Fernando González Vidosa, F.J. Martínez and J.M. Vilaplana).
- VILLARREAL (CASTELLON) URBANIZATION (2008). ASURINSA/M. Fomento. Bridge over N-340 road, Bridge over *Río Seco* river, and bridge over railway (Co-authors Fernando González Vidosa, F.J. Martínez and J.M. Vilaplana).
- A-58 HIGHWAY SANTA MARTA DE MAGASCA-CACERES (2008). CACERES. SANDO/M. Fomento. Precast girder decks E-7 and E-8 and prestressed overpasses.
- VACA RIVER CHANNELING STRUSTURES (2008). VALENCIA. AMINSA/AQUAMED/CONFEDERACIÓN HIDROGRÁFICA DEL JUCAR. 12 precast girders structures (Co-authors, FJ Martínez and JM Vilaplana).
- MEDITERRANEAN HIGHWAY A-7 SECTION BY-PASS OF COCENTAINA (2009). ALICANTE. VIAS-

- CORSAN/MINISTERIO DE FOMENTO. Viaducts E-12 and E-15 os successive spans (Co-authors F.J. Martínez and J.M. Vilaplana).
- PLANA HIGHWAY (2009). CASTELLON. UTE (joint venture) TORREBLANCA/COPUT. Prestressed overpass in new airport access and viaduct of precast girder deck (Co-author JM Vilaplana)
 - SPLITTING OF ALMAZORA BY-PASS IN THE CV-18 ROAD (2009). CASTELLON. FERROVIAL/COPUT. Bridge over Mijares River (Co-authors JM Vilaplana and FJ Martínez).
 - PONT DE FUSTA NEW BRIDGE IN VALENCIA (2009). IVALEYING/CITY COUNCIL OF VALENCIA. Bridge over old Turia river basin (Co-authors JM Vilaplana and FJ Martínez).
 - RAILWAY PALENCIA - LA CORUÑA (2010). LEON. ROVER/ADIF. Overpass in level crossing suppression in Astorga (Leon) and viaduct Magaz over railway (Co-author JM Vilaplana).
 - SOUTH ACCES TO ANNABA (ARGELIA) (2010). LIC/MINISTERE DES TRAVAUX PUBLICS DE ARGELIA. Box section, successive spans viaduct and North and South pergola bridges (Co-authors FJ Martínez and JV Vilaplana).
 - HIGH SPEED RAILWAY TRACKS EXPANSION BETWEEN MADRID (ATOCHA) AND TORREJÓN DE VELASCO. SECTION PINTO - TORREJON DE VELASCO (2011). MADRID. UTE (joint venture) ROVER-ALCISA IBEROVIA/ADIF. Pergola bridge and access viaducts 305,3.
 - NEW HIGH SPEED RAILWAY NETWORK OF THE BASQUE COUNTRY. SECTION LEGORRETA (2011). GUIPUZCOA. UTE (joint venture) ACCIONA VDA DE SAINZ/ADIF. Viaduct over Lasarte river and Ugarán stream (Co-author FJ Martínez).
 - CONSOLIDATION OF LANDFILLS ON THE FGV⁴ ALICANTE - DENIA LINE BETWEEN LA OLLA DE ALTEA AND CALPE (2011). ALICANTE, VIALOBRA/GTP. Two (2) special slab viaducts with inserted foundation into the landfill.
 - SAN BERNARDO AND VALDELUNA VIADUCTS, IN THE N-232 ROAD IMPROVEMENT, SECTION CASTELLON PROVINCIAL BORDER - LOCAL ROAD TO RAFALES CONNECTION, IN MONROYO (2012). TERUEL. ROVER ALCISA. Two precast girder viaducts.
 - MODIFIED OF THE PLATFORM CONSTRUCTION PROJECT: NEW HIGH SPEED RAILWAY NETWORK OF THE BASQUE COUNTRY. SECTION: *EZKIO ITSASO - BEASAIN*. UTE (joint venture) EZKIO (MURIAS, ORTIZ, VDA. DE SAINZ). RC vaults for cut-and-cover tunnel.
 - NORTH-NORTHEAST CORRIDOR OF THE HIGH SPEED RAILWAY. HIGH SPEED RAILWAY LINE MADRID-GALICIA, OLMEDO-ZAMORA. SECTION: ZAMORA STATION, PLATAFORM (2012). ZAMORA. ROVER ALCISA. Design of abutments of a precast deck over the railway tracks. Design of an underpass in the platforms pedestrian conection.
 - MULTIPURPOSE TERMINAL FOR HANDLING OF BULK AND PACKAGED PRODUCTS FOR QUIMGRE S.A., IN THE PORT OF CADIZ. G-Tres. Cantilever retaining RC walls in the perimeter of the storage tank.
 - PROJECT FOR THE REPAIR AND REINFORCEMENT OF THE BRIDGE OVER THE JUCAR-TURIA CHANNEL, LOCATED AT THE KP 15+200, IN THE MUNICIPALITY OF ALDAIA (2013). VALENCIA. Jucar Hydrographic Confederation. Drafting of the construction project.
 - CONSTRUCTION, CONSERVATION AND OPERATION OF THE N-636 ROAD, SECTION *GEREDIAGALORRIO* (2014). VIZCAYA. TRANSITIA-ACCIONA-EXBASA-TIIC-VIUDA DE SAINZ. Feet slope retaining structures, and cut-and-cover tunnel slabs and containment screens. RC vaults in second cut-and-cover tunnel.
 - A-33 HIGHWAY PROJECT CIEZA - *LA FONT DE LA FIGUERA*. SECTION A-31/A-35 (2014). VALENCIA/ALICANTE. ACCIONA INFRAESTRUCTURAS. Adaptation of five bridges and two subways to the current road load regulations.
 - MODIFIED PROJECT TO THE CONSTRUCTION PROJECT CEIP (Infant and Primary School) N°103 (2014), VALENCIA. Consellería d'Infraestructures, Territori i Medi Ambient / CIEGSA. Adaptation of the building foundations to the presence of contaminated soil.
 - RÉALISATION DE LA PÉNÉTRANTE AUTOROUTIÈRE RELIANT MASCARA À L'AUTOROUTE EST-OUEST SUR 43KM EN 2X3 VOIES TRONÇON 2: ÉCHANGEUR RN17 (HACINE) - ÉCHANGEUR RN17A (TIZI) SUR 18 KM. UTE (joint venture) Mascara, LIC - CHM) (2015). Two RC box culvert underpasses and two box section viaducts: Viaduct 03A, with 490,0 m length, and Viaduct 03b, with 1996,0 m length, and 40-50 m spans. (Figure 6)
 - MODIFIED PROJECT N°1 FOR THE CONSTRUCTION OF THE SOUTH ROUNDABOUT OF BADAJOZ. SECTION III (2019). Rover Alcisa SA, Placonsa, Excavaciones Mivic SL UTE. Design and structural analysis of abutments, piers and foundations of new bridge over Guadiana river, and new bridge over BA-21 road.

⁴Regional railway administration



Figure 3: Viaduct 03B during construction (Mascara, Algeria).

2.3 Technical reports from UPV

- MODIFIED PROJECT FOR THE IMPLEMENTATION OF STANDARD WIDTH IN THE MEDITERRANEAN CORRIDOR. SUBSECTION: FONT DE SANT LLUÍS-ALMUSSAFES (2014). VALENCIA. Hormigones Martinez SA - Mantenimiento de Estaciones SA UTE. Design of the existing track side containment system, and pass under existing track.
- CONSTRUCTION PROJECT FOR THE VALENCIA - SANT ISIDRE AND VALENCIA CONNECTION - LA FONT DE SALT LLUIS (2014). VALENCIA. VILOR SL. Design and structural analysis of a railway subway, retaining walls, connecting pedestrian subway between station platforms, and metal canopy for protection of the gate area.
- PROJECT FOR THE CONSTRUCTION OF ACCESSES TO A NEW TERTIARY AREA IN XIRIVELLA (VALENCIA), 2014, David Llorca Ingnierno. Four (4) structures, precast girder deck, frame box, and precast retaining walls in access to the underground shopping centre car park, and the overpass exit on branches of the link between the V-30 and the A-3.
- PEDESTRIAN SUBWAY IN THE KP 1+130 OF THEN 3 LINE OF VALENCIA METRO. LA POBLA DE FARNALS STATION (2014). VALENCIA. Vialobra SA. Structures for stairs, ramps and lifts at the access to the subway under the tracks.
- EXPANSION OF THE FGV (REGIONAL RAILWAYS) MACHADO WORKSHOPS IN VALENCIA (2014). AMINSA. Expansion of the metallic warehouse, with foundations overlapping the existing one, and reinforcements under the support of jacks for hoisting the wagons.
- MARPOL WASTE STORAGE TANKS FOUNDATION IN THE PORT OF ALICANTE (2014) INVERCREA. Design and structural analysis of a slab on soils improved with lime columns for the foundations of eight silos.
- REPAIR OF THE ALMAZORA BRIDGE ON THE N-340 (2015). CASTELLON. MINISTERIO DE FOMENTO. Design of the repair of the deck of the bridge on N-340 after the vehicle impact.
- PRICE SALMAN ST WITH KING FAHD RD BRIDGE, DAMMAM, SAUDI ARABIA (2015) OFITECO. Main inspection of metallic bridge of more than 34 spans of steel girders with collaborating concrete slab.
- PARADOR NACIONAL (LUXURY HOTEL) DE LA GRANJA IN SEGOVIA (2015) TECNOMEDITERRÁNEA S.L. Design and structural analysis of slab with micropiles to control seating in the Hotel's outdoor pool.
- REFORM END IMPROVEMENT OT THE WASTEWATER TREATMENT PLANT OF SA COMA (2015). BALEARIC ISLANDS. PANTECNIA S.L. Design and structural analysis of the structures: pretreatment building and blower room, biological distributor, biological reactor No. 3, supply box to tertiary, outlet / overflow box to infiltration well, pumping of sludge No. 1 and pumping of drains.

- *FOIETES PARK CONSTRUCTION PROJECT* (2016). BENIDORM (ALICANTE). UTE (joint venture) BARRANCO-FOYETES (OHL-LOS SERRANOS) Design and structural analysis of two retaining walls with an upper platform.
- *VEHICLES STORAGE BUILDING IN EXTENSION OF THE EAST DOCK, IN THE PORT OF VALENCIA* (2016). INVERCREA S.L. Design and structural analysis of the foundation of the building. (Figure 4)



Figure 4: Storage cars building in the port of Valencia.

- *ANILLO VERDE METROPOLITANO DE VALENCIA* (Valencia metropolitan cycle lane) (2016). OFITECO. Design of crossings over ditches, an underpass under the CV-400 highway, remodeling of the ramps of an existing footbridge, design of a new 420 m long footbridge over V-21 highway, and footbridge over railway tracks.
- *KING FAHD ROAD, DAMMAM - ARABIA SAUDI*. OFITECO (2016) Reported state of carbon fiber reinforcement of the lowered beams in the underpass.
- *NEW COKE WAREHOUSE AT THE BP PLANT IN CASTELLON* (2016). BECSA. Pathology study due to cracks in the warehouse walls.
- *INVENTORY AND INSPECTION OF THE STEEL AND CONCRETE BUILDINGS STRUCTURES OF THE CEMENT PLANTS OF PUERTO DE SAGUNTO, AND VILLALUENGA DE LA SAGRA* (2017). TOLEDO AND VALENCIA. LAFARGE-HOLCIM.
- *REPAIR OF THE BRIDGE OF THE A-7 HIGHWAY SAGUNTO NORTH LINK* (2017). VALENCIA. ABERTIS. Design of the bridge repair operations after the loss of elastomeric bearing in one of the piers.
- *EXPANSION OF THE MURCIA BY-PASS, HIGHWAY DEL REGUERÓN* (2016). MURCIA. INFRAESTRUCTURAS MARÍTIMAS Y TERRESTRES. Review of precast underpass projects.
- *PEDESTAL AND RAMPS OF THE DSS-53 AND DSS-56 ANTENNAS OF THE DEEP SPACE COMMUNICATION COMPLEX OF MADRID* (2016). ROVER ALCISA. Study of waiting rebars and construction joints in the support base of the antennas of the station.
- *HIGHWAY AP-7* (2018). CASTELLON Y ALICANTE. ABERTIS. Stability and functionality inspections of the foundations of the Barbiguera (Vinaroz), Seco river (Benicarló), Gorgos river (Gata de Gorgos) and Algar river (Altea) viaducts.
- *HOTEL RH VINAROS PLAYA*. RESTHOTEL S.A. (2018). Report on the corrosion of the building roof reinforcement girder beams.
- *BASIC DRAFT OF WINTER ROAD BASE IN VILAFRANCA DEL CID* (2018). CASTELLON. CHM Obras e Infraestructuras SA OCIDE Construcción SA UTE (joint venture) Conservación Castellon. Project of a steel warehouse of 45 m².
- *STUDY ON THE PLACEMENT OF A VEHICLE IN THE VELES E VENTS BUILDING FLOOR* (2017). VALENCIA. PRODEIN S.L. Study of the floors of the *Veles e Vents* building of the *Marina Real Juan Carlos I* of Valencia during the placement of a car at the end of the cantilever.
- *GLORIETA IN SANTIAGO APOSTOL STREET CROSSING WITH GM-3* (2018). CANARY ISLANDS. Mapa Ingeniería S.L. Design of gravity walls.
- *EXPANSION OF ACCESS TO THE OLD HOSPITAL SAN SEBASTIAN DE LA GOMERA*. BALUARTE (2018). CANARY ISLANDS. Mapa Ingeniería S.L. Design of gravity walls in containment of the road next to a ravine.
- *RESTAURATION OF THE FERRANDET BRIDGE IN THE CALPE-TEULADA SECTION OF THE ALICANTE-DENIA REGIONAL RAILWAY LINE* (2018). ALICANTE. UTE (joint venture) FGV LINEA 9 CALPE TEU-

- LADA. Design and structural analysis of the underpinning of the abutments.
- NEW BUILDING FOR THE FACULTY OF NURSING AND PODIATRIC OF THE UNIVERSITY OF VALENCIA (2018). ROVER-ALCISA. Design and structural analysis of the perimeter retaining sheet pile walls, and access slab for emergency vehicles.
- PEDESTRIAN AND CYCLING BRIDGE OVER THE TEULADA RIVERBED, PARALLEL TO THE CV-50 ROAD (MUNICIPALITY OF VILAMARXANT, VALENCIA) (2018). Drafting of the Construction Project, and Direction of Works.(Figure 5)



Figure 5: Pedestrian bridge in *Villamarchante* (Valencia).

- INSTALLATION OF EFFLUENT DISINFECTION SYSTEMS TO THE *TITAGUAS, RAFELGUARAF, TORRES TORRES, VALLADA, CASTIELFABIB, FAVARA, TUEJAR* AND *VENTA DEL MORO* WWTP (2019). VALENCIA. AQUADUCTA S.L. Design of the RC cuvette for containment of the hypochlorite storage tank.
- RÉALISATION DE LA LIAISON AUTOROUTIÈRE RELIANT LO PORT D'ORAN À L'AUTOROUTE EST OUEST SUR 26KM PREMIÈRE TRANCHE SUR 08KM (2019/2020). ORAN (ALGERIA). CPS Ingenieros S.L. Review of the project and assistance to the Facultative Directorate in the construction works of the viaduct in Oran.
- PEDESTRIAN AND CYCLIST BRIDGE IN THE MONTU RIVERBED IN CHELVA (2019). VALENCIA. Xuquer Arquitectura e Ingeniería S.L.P. (2019). Design and calculation of a metal walkway with a span of 56.20 m over the Montú ravine.
- ON THE PROPOSAL FOR TESTING OVERLAP WELDS OF STEEL REAR BARS FOR CONCRETE (2019). SENDIN SPAIN EXPORT SL. Finite elements study of the behavior of welds to validate the accreditation tests of the operators.
- CULVERT EXTENSION IN CV-14 ROAD (2019). CASTELLON. CHM Obras e Infraestructuras SA OCIDE Construcción SA UTE (joint venture) Conservación. Studies for the expansion of a masonry drainage work, and revision of the calculations of precast frames and walls.
- EMERGENCY WORKS FOR FLOOD MITIGATION ON THE V-31 HIGHWAY SECTION 2+300 TO 3+000. (2019). ALICANTE. CHM Obras e Infraestructuras SA. Load test project on existing structure; design of the screed in piers and abutments; verification of the foundation massif of the temporary falsework towers.
- POOL COVERED IN UTIEL (2019). VALENCIA. CHM Obras e Infraestructuras SA (2019). Pool vessel burst expert report.
- BUILDING PACKAGED AMMONIUM NITRATE IN *PUERTO DE SAGUNTO* (2019). VALENCIA. FERT-IBERIA S.A. Study of pathologies in the building structure.
- REPOSITION OF THE SIDE CONTAINMENT ON THE CV-125 ROAD IN MORELLA (2019). CASTELLON. CHM Obras e Infraestructuras SA OCIDE Construcción SA UTE (joint venture) Conservación. Dry stone wall and breakwater to repair the containment of the road platform affected by the action of an individual.
- EMERGENCY WORKS (LOT 3) TO REPAIR DAMAGE CAUSED BY THE TORRENTIAL RAINS ON SEPTEMBER

- BER 12, 13, 14 and 15, 2019 ON THE STATE'S ROAD NETWORK. PROVINCE OF ALICANTE (2020). Levantina de Ingeniería and Construcción SL. Design and structural analysis of a new drainage work to increase the capacity of the existing work in the passage of the N-340 road on the *Abanilla* and *Salada* riverbeds.
- NEW ROAD LAYOUT DEPARTURES AT ALICANTE AIRPORT. TECNOFIRMES SA (2021). Design and calculation of the extension of an underpass, and the retaining walls in the extended access branch to the airport departures terminal.
 - REMODELING PROJECT OF THE RAILROAD RAILWAY AT THE INTERSECTION WITH GRECO STREET IN PALMA. UTE CIOPU - PANTECNIA II (2021). Calculation of the structures in the remodeling of the existing underpass under the railway tracks of FIB (Ferrocarrils de les Illes Balears) for the extension of gauges in calle del Greco in Palma de Mallorca.
 - CV-15 EXTENSION OF THE BICYCLE LANE IN LA POBLA TORNESA. CHM Obras e Infraestructuras SA OCIDE Construcción SA UTE Conservacion Castellón (2022). Hollow-core slab walkway on metal pier and reinforced concrete abutments with foundations using micropiles.
 - REPAIR OF DOCKS IN MARINA DEPORTIVA DE ALICANTE (2022). Project for the removal and replacement of deteriorated alveolar slabs in the floors of the Marina pontoons.
 - WALKWAY CONNECTING THE COASTAL ROUTE OVER THE AIGUADOLIVA RAVINE BETWEEN THE MUNICIPALITIES OF VINARÒS AND BENICARLÓ (CASTELLÓN) (2022). Assistance in the design and calculation of a 54 m span metal pedestrian bridge.
 - REMODELING OF THE FISHERMEN FACILITIES IN THE PORT OF PEÑÍSCOLA (2022). Design and calculation of booths for fishermen, and structural evaluation for the installation of photovoltaic solar panels in existing buildings.
 - WIDENING THE BRIDGE OVER THE ALGÁS RIVER IN LLÉDO, TERUEL (2022). TURIVING S.A. Design of a slab on the current bridge for the extension of the platform.
 - PASS UNDER TRAM TRACKS ON BENIARDÁ AVENUE IN BENIDORM, ALICANTE (2022). Levantina de Ingeniería y Construcción SL. Design and calculation of a deck of prestressed beams to be pre-fabricated on site for the passage of railways and vehicles.
 - WIDENING THE PONTOON OF PK 32+960 ON THE CV-345, T.M. OF LA YESA (VALENCIA). SERVEO Services SA AND OCIDE Construction SA UTE. Design of a system of precast elements for the expansion of the highway platform.



Figure 6: Losa parcialmente prefabricada en CV-10 La Yesa (Valencia).

- WIDENING THE BRIDGE AT PK 11+500 OF THE CV-12 BETWEEN ARES DEL MAESTRE AND MORELLA, CASTELLÓN (2022). OCIDE Works and Services SL. Design and calculation of the abutments in extension to the current ones for the expansion of a deck of precast beams.
- NEW WALKWAY OVER THE L'OMET RAVINE IN PICASSENT, VALENCIA (2023). Levantina de Ingeniería y Construcción SL - Pantecnia SL. Calculation of foundations, piers and abutments.
- NEW PHOTOVOLTAIC PLANT "ERESMA SOLAR" IN VALVERDE DEL MAJANO IN SEGOVIA. Elecnor

- S.A. Design and calculation of the foundations for the power units.
- CONSTRUCTION PROJECT FOR THE URBANIZATION WORKS OF THE SAGUNTO LOGISTICS AREA 13 (VALENCIA) ELEVATOR PASSAGE 2 - AXIS 17 AND 1 - AXIS 16(2023). Grupo Rover S.A. Calculation of piers, abutments and foundations.

3 Teaching

3.1 Position Held

CATEGORY	INITIAL DATE	FINAL DATE
ASSOCIATE PROFESSOR	03/12/2021	–
LECTURER (DOCTOR)	10/10/2011	02/12/2021
LECTURER	05/06/2007	09/10/2011
TUTOR	08/02/2005	04/06/2007
ASSOCIATE LECTURER (6 HOURS/WEEK)	01/10/2001	07/02/2005
ASSOCIATE LECTURER (3 HOURS/WEEK)	09/03/2001	30/09/2001

3.2 Courses Taught

- Bachelor's Degree in Civil Engineering
 1. Construction Procedures I
 2. Construction Procedures II
 3. Infrastructure Maintenance Management
- Bachelor's Degree in Public Works Engineering
 4. Civil Engineering Typologies and Construction Procedures (I)
 5. Civil Engineering Typologies and Construction Procedures (II)
 6. Installation, Organization And Quality Assurance In Construction
- Bachelor's Degree in Aerospace Engineering
 7. Airports Construction
- Bachelor's Degree in Transportation and Logistics Management
 8. Sustainability, quality and safety
- Master's Degree in Civil Engineering
 9. Business Management
- Master's Degree in Planning and Management in Civil Engineering
 10. Quality, Innovation, and Sustainability in the Construction Industry
 11. Quality, Innovation, and Sustainability in the Construction Industry
 12. Strategic Management of Quality and Sustainability in Construction
 13. Quality Management in Construction
 14. Quality Guarantee
 15. Project Scheduling Techniques
 16. Project Management
- Master's Degree in Concrete Engineering
 17. Predictive and Optimisation Models for Concrete Structures
 18. Heuristic Optimization of Concrete Structures
 19. Execution and Control of Concrete Structures
 20. Execution of Concrete Structures and Bridges
- Master's Degree in Civil Engineering (1997 Plan)
 21. Construction Procedures
 22. Quality Guarantee
 23. Drawing
 24. Descriptive and Metric Geometry
- Public Works Engineering Degree (1997 Plan)
 25. Construction Procedures
 26. Quality Guarantee
 27. Drawing
 28. Descriptive and Metric Geometry

3.3 Teaching Publications

Técnicas de voladuras y excavación en túneles. [Blasting and tunnel excavation techniques.] Martí Albiñana, José Vicente; Yepes Piqueras, Víctor; González Vidosa, Fernando; Alcalá González, Julián; Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos | Valencia : Editorial UPV, D.L. 2012. Ref.: 530, 165 pp.

Técnicas de Planificación y Control de Obras. [Techniques for scheduling and control of construction works.] Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; González Vidosa, Fernando; Alcalá

González, Julián; Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos | Valencia : Editorial UPV, D.L. 2012, 2015. Ref. 189, 94 pp.

Maquinaria Auxiliar y Equipos de Elevación. [Auxiliary machinery and lifting equipment.] Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; González Vidosa, Fernando; Alcalá González, Julián; Escuela Técnica Superior de Ingenieros de Caminos, Canales y Puertos | Valencia: Editorial UPV, D.L. 2012. Ref.: 814, 202 pp.

Temas de Procedimientos de Construcción: Técnicas para la Mejora de Terrenos. [Construction procedure topics: Ground improvement techniques.] González Vidosa, Fernando; Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; Alcalá González, Julián; Universidad Politécnica de Valencia. Departamento de Ingeniería de la Construcción y de Proyectos de Ingeniería Civil | Valencia : Universidad Politécnica de Valencia, 2011. Ref.: 753, 60 pp.

Temas de Procedimientos de Construcción. Cables y Maquinaria de Elevación. [Construction procedures topics. Cables and lifting machinery.] González Vidosa, Fernando; Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; Alcalá González, Julián; Universidad Politécnica de Valencia. Departamento de Ingeniería de la Construcción y de Proyectos de Ingeniería Civil | Valencia : Editorial UPV, 2004, 2007, 2010. Ref.: 522, 61 pp.

Procedimientos de Construcción. Fabricación, Transporte y Colocación de Hormigones. [Construction procedures. Manufacture, transport and placement of concrete.] González Vidosa, Fernando; Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; Alcalá González, Julián; Universidad Politécnica de Valencia. Departamento de Ingeniería de la Construcción y de Proyectos de Ingeniería Civil | Valencia : Editorial UPV, 2007. Ref.: 613, 68 pp.

Equipos de Dragado. Temas de Procedimientos de Construcción. [Dredging Equipment. Construction procedure topics.] González Vidosa, Fernando; Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; Alcalá González, Julián; Clemente Tirado, Juan José; Universidad Politécnica de Valencia. Departamento de Ingeniería de la Construcción y de Proyectos de Ingeniería Civil | Valencia : Editorial UPV, 2006. Ref.: 438, 74 pp.

Temas de Procedimientos de Construcción. Equipos de Movimiento y Transporte de Tierras. [Construction procedure topics. Earth movement and transportation equipment.] González Vidosa, Fernando; Yepes Piqueras, Víctor; Martí Albiñana, José Vicente; Alcalá González, Julián; Universidad Politécnica de Valencia. Departamento de Ingeniería de la Construcción y de Proyectos de Ingeniería Civil | Valencia : Universidad Politécnica de Valencia, 2008. Ref.: 738, 119 pp.

3.4 Participation in Teaching Conferences

1. GARRIDO DE LA TORRE, E.; PÉREZ ZURIAGA, A.M.; CAMACHO TORREGROSA, F.J.; ANDRÉS DOMENECH, I.; ROMERO GIL, I.; ALCALÁ GONZÁLEZ, J.; ALBENTOSA HERNÁNDEZ, E., COLL, H. (2016) **Multidisciplinary Final Degree Thesis in the area of Civil Engineering.** Conference State Network of University Teaching (RED-U), pp. 189-195. UNED Madrid, November 10-11, 2016. (*in spanish*)
2. CAMACHO TORREGROSA, F.J.; PÉREZ ZURIAGA, A.M.; COLL CARRILLO, H.; ALCALÁ GONZÁLEZ, J.; ROMERO GIL, I.; GARRIDO DE LA TORRE, E. (2015). **Development of a Multidisciplinary Final Degree Project in Civil Engineering to prepare the student for professional career.** National Congress of Educational Innovation and Online Teaching IN-RED), pp. 249-1263. Valencia, June 30 and July 1, 2015. D.o.i.: <http://dx.doi.org/10.4995/INRED2015.2015.1635>. (*in spanish*)
3. GIMÉNEZ, E.; SANZ, A.; LOZANO, A.; MARTÍ-VARGAS, J.R.; ALCALÁ, J.; CATALÁ, J.; CORTÉS, R.; LOZANO, J.F. (2014) **The introduction of the professional responsibility in the studies of Degree in Engineering in Civil Engineering.** Conference on Educational Innovation and Online Teaching (IN-RED), pp. 1166-1175. Valencia, July 15-16, 2014. (*in spanish*)
4. YEPES PIQUERAS, V.; ALCALÁ GONZÁLEZ, J.; MARTÍ ALBIÑANA, J.V.; GONZÁLEZ VIDOSA, F. (2013) **How to pre-dimension optimal walls without a calculator using artificial intelligence.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE), pp. 119-134. Valencia, July 18-19, 2013. (*in spanish*)
5. BARCENA SAIZ, A.; YEPES PIQUERAS, V.; ALCALÁ GONZÁLEZ, J.; MARTÍ ALBIÑANA, J.V. (2013) **Automatic design of ribbed sheet floors optimized with criteria of economy and sustainability.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE), pp. 159-172. Valencia, July 18-19, 2013. (*in spanish*)
6. MARTÍ ALBIÑANA, J.V.; YEPES PIQUERAS, V.; ALCALÁ GONZÁLEZ, J.; GARCÍA SEGURA, T. (2013) **Design of concrete U-beams with fibers using the SA heuristic with economic criteria.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE), pp. 299-309. Valencia, July 18-19, 2013. (*in spanish*)
7. YEPES PIQUERAS, V.; MARTÍ ALBIÑANA, J.V.; ALCALÁ GONZÁLEZ, J.; GARCÍA SEGURA, T. (2013)

- Methods used in the HORSOST Project on sustainable design with unconventional concrete.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE), pp. 259-272. Valencia, July 18-19, 2013. *(in spanish)*
8. RODRIGUEZ-CALDERITA FACUNDI, A.M.; ALCALÁ GONZÁLEZ, J.; YEPES PIQUERAS, V.; MARTÍ ALBIÑANA, J.V. (2013) **Heuristic optimization applied to the automatic design of post slab floors.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE), pp. 63-75. Valencia, July 18-19, 2013. *(in spanish)*
 9. MARTÍ ALBIÑANA, J.V.; YEPES PIQUERAS, V.; ALCALÁ GONZÁLEZ, J.; GARCÍA SEGURA, T. (2013) **Memetic optimization of precast tundish beams with sustainable criteria for concrete with fibers.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE), pp. 91-104. Valencia, July 18-19, 2013. *(in spanish)*
 10. GARCÍA SEGURA, T.; YEPES PIQUERAS, V.; ALCALÁ GONZÁLEZ, J.; MARTÍ ALBIÑANA, J.V. **Multi-objective optimization of reinforced concrete I-beam with sustainable criteria.** 2nd National Congress on the Teaching of Mathematics in Building Engineering (EMIE). pp. 135-148. Valencia, July 18-19, 2013. *(in spanish)*
 11. YEPES, V.; GONZÁLEZ-VIDOSA, F.; MARTÍ, J.V.; ALCALÁ, J. (2011) **A short postgraduate course on heuristic design of prestressed concrete road bridge deks.** 5th International Technology, Education and Development Conference. ISBN: 978-84-614-7423-3; ISSN: 2340-1079. pp. 5132-5141. Editor: IATED. 7-9 March, Valencia, Spain.
 12. TORRES-MACHÍ, C.; YEPES, V.; ALCALÁ, J.; PELLICER, E. (2012). **Heuristic optimization of high-resistance reinforced concrete structures.** III Conference on Mathematical Modeling, July 7-8, 2012, Gandia (Spain). *(in spanish)*
 13. GONZÁLEZ-VIDOSA, F.; YEPES, V.; ALCALÁ, J.; PEREA, C.; MARTÍNEZ, F. (2007). **A postgraduate course on heuristic design of reinforced concrete structures.** International Technology, Education and Development Conference INTED 2007. Abstracts Book pp. 314. ISBN: 978-84-611-4516-4. Proceedings CD, 12 pp., ISBN: 978-84-611-4517-1. Editor: IATED. March, Valencia, Spain.

3.5 Supervised Thesis Work

3.5.1 Master's Thesis Work

55. Barohu el Bakli, Ghizlan. Basic Project for a 400 kV electric line between the Villamayor electrical substation and the Barbadillo traction electrical substation, in the province of Salamanca. 29/02/24
54. Bautista Moya, María del Carmen. Structural design of the walkway in the expansion works of the 12 de Octubre hospital in Madrid. 28/09/23
53. Chacón Moreno, Jesús Nicolás. Structural design of the walkway over the AP-7 between the T.M. of Riba-Roja de Turia and Manises (Valencia). 09/27/23
52. Yepes Bellver, Víctor José. Study for the location and structural design of a high-rise park and ride in the metropolitan area of ??Valencia. 09/27/23
51. Laalam, Amina. Construction scheduling of the underground pedestrian connection between the Alicante and Xátiva Metro stations, in Valencia. 19/09/23
50. Muñoz López, Judit. Structural design of watch tower in Cullera (Valencia). 19/09/23
49. Pujante Saura, Edgar. Study for the replacement of asbestos roof by rock wool panel in anticipation of future installation of photovoltaic solar panels in an industrial warehouse in Canet d'En Berenguer (Valencia). 07/27/23
48. Pascual Vanaclocha, Emilio. Structural Design of the Cyclopedestrian Footbridge Over the Aiguaviva Ravine, Between the Municipalities of Benicarló and Vinaroz (Castellón). 27/09/22
47. Ruiz Vélez, Andrés. Economic heuristic optimization of precast reinforced concrete frames. 26/09/22
46. Ferrero Montes, Alejandro. Structural design of an overpass, pergola type, of the high speed railway line Madrid-Levante, in the municipal district of Parla (Madrid). 19/09/22
45. Cózar Mañez, Andrés. Study for the conditioning and improvement of accessibility to the Cala el Xarco, in Villajoyosa (Alicante). 28/07/22
44. de Fuenmayor Ricardo, Miguel Arturo. Design of a cycle-pedestrian walkway over the Agres river, in the municipal district of Muro de Alcoy (Alicante). Study of solutions. 28/07/22
43. García Cárcel, Alberto. Design of a cycle-pedestrian walkway over the Agres river, in the municipal district of Muro de Alcoy (Alicante). Structural design. 28/07/22
42. Ruiz López, Francisco José. Analysis on the implementation of the Lean management model in construction and metal companies. 28/09/21
41. Peris Fernández, Raúl. Structural design of a cyclo-pedestrian walkway for the improving of the CV-35 crossing road in Chelva (Valencia). 27/07/21

40. Brun Izquierdo, Alejandro. Energetic Optimization of prestressed slab bridge decks using Kriging models. 10/12/20
39. Yepes Bellver, Lorena. CO2 emisiones optimum design of prestressed voided slab bridge decks using meta-models. 10/12/20
38. Pérez Costero, Miguel. Structural design of E-9 overpass deck in the A-32 highway, South by-pass of de Albacete. 10/12/20
37. Pérez-Almazán Piwowarsky, Cristian. Basic project of new stands structure for the new football field of the municipal sports center in Villamarchante (Valencia). 04/12/20
36. Emilio Pascual Vanaclocha. Comparative study of Quality Management between the automotive sector and the construction sector. 24/11/20.
35. Franco Segarra, Rogelio. Study of the construction process and proposal for improvement in the execution of caissons in the modernization works of the docks of the North port of Gdansk (Poland). 09/23/2020
34. Sevilla Fernández, Marcos. Design and Calculation of a pedestrian walkway over the barranco de Teulada in Villamarchante (Valencia, Spain). 28/05/20
33. Abalco Armas, Henry Roberto. Optimal design of a very high strength concrete truss (VHSC) for the roof of the municipal pool of Almussafes (Valencia, Spain). 16/07/19
32. Payá Roselló, Jordi. Industrial infrastructure management plan for the Lafarge-Holcim cement plant located in the "Sepes" industrial estate, Puerto de Sagunto (Valencia, Spain). 15/04/19
31. Cases Villar, Javier. Creation of an End-of-Work management tool. 28/09/18
30. Hernández Palomares, Víctor. Establishment of a practical document for the development of highway projects in Spain. 28/09/18
29. Wu, Chengru. Quality management in China prefabricated building. 26/09/18
28. Hernández Santos, Ausencio Alexander. Performance management plan for turnkey projects in the construction sector. 20/09/18
27. Pardo Goicoechea, Enrique. Planning and management methodology for redevelopment works. Application to the redevelopment of Pare Barranco street in the city of Valencia (Spain). 20/09/18
26. Brun Izquierdo, Alejandro. Optimal design study for the deck of the viaduct located at Km. 441 of the A-7 highway in the municipality of Cocentaina (Alicante, Spain). Deck analysis. 18/09/18
25. Yepes Bellver, Lorena. Optimal design study for the deck of the viaduct located at Km. 441 of the A-7 highway in the municipality of Cocentaina (Alicante, Spain). Optimization through Kriging models. 18/09/18
24. Augustin, Madalina. Study of the construction scheduling of a car storage building in Port of Valencia (Spain). 19/07/18
23. Cabrero García, David. Design and structural analysis of an extradosed bridge over the Valdelinares river, on the Madrid-Extremadura high speed rail line. Municipality of Plasencia (Cáceres, Spain). Structural check. 21/09/17
22. Contel Martín, Sara. Study of the piles of viaduct 0.3b, in the connection of Mascara with the East-West highway. Municipality of Mascara (Argelia). 27/07/17
21. Ottobriño Capdevila, Borja. Design and structural analysis of an extradosed bridge over the Valdelinares river, on the Madrid-Extremadura high speed rail line. Municipality of Plasencia (Cáceres, Spain). Structural analysis. 26/01/17
20. Ramón Sierra, Cristina. Disputes at construction sites. Methods for quantifying and evaluating delays. 30/06/17
19. Hour, Visoth. Analysis of the current situation of the construction sector in Cambodia. 20/09/16
18. Cervera Vallbona, Ana. Structural analysis of a prestressed beam bridge at KP 18+198 of the Mascara highway over the Oued el Mouaïssiya Ravine (Algeria). Abutments. 15/09/16
17. Esteve Vilar, Víctor. Structural analysis of a prestressed girder bridge at KP 18+198 of the Mascara highway over the Oued el Mouaïssiya Ravine (Algeria). Foundations. 15/09/16
16. Jiménez Serrano de la Cruz, David. Structural analysis of a prestressed girder bridge at KP 18+198 of the Mascara highway over the Oued el Mouaïssiya Ravine (Algeria). Piles. 15/09/16
15. Kubaychuk, Kostyantyn. Structural analysis of a prestressed girder bridge at KP 18+198 of the Mascara highway over the Oued el Mouaïssiya Ravine (Algeria). Deck. 15/09/16
14. Molina Jotel, Víctor. Heuristic optimization of pedestrian walkways with "T" section under economic and sustainability criteria. 18/07/16
13. San Millán Vallejo, Javier. Heuristic optimization of a rectangular cap of four piles cast in situ. 29/09/15
12. Cariñena Díaz, Jaime. Architectural concrete surfaces formed in situ. 18/07/14
11. Ulpiano Cogollos, José Luis. Efficiency, in business management activities, in organizations related to construction and civil engineering. 01/07/14
10. García Segura, Tatiana. Metrics for the efficient design of structures with unconventional concrete based on sustainable multi-objective criteria. 01/07/13

9. Leiro Gómez, Daniel. Automated design and parametric study of earth retaining walls provided with buttresses. 08/02/13
8. Manzanaro Marhuenda, Alicia. Incidence in the flow regime in avenues of the management of the actions in the areas affected by public channels. Case study of the barranco de la Cala basin in the municipality of Finestrat (Alicante). 27/09/12
7. López Crispín, Julián. Efficient design of waffle slabs according to economic and environmental criteria. 26/09/12
6. Martínez Arguisuelas, Alberto. Identification of the technical and economic criteria necessary for the selection of trenchless technology. 24/09/12
5. Pérez López, Eloy. Automated design of continuous box-type prestressed concrete bridge-girder decks for pedestrian use, meeting environmental sustainability criteria. 23/07/12
4. Rodríguez-Calderita Facundi, Ángel Manuel. Efficient design of post slab floors through heuristic optimization based on economic and sustainability criteria. 23/07/12
3. Villalba Izquierdo, Pere. Multi-object heuristic optimization of wide deck slab prestressed bridges. 23/07/12
2. Fernández Serrano, Humberto. Automated design of combined footings under economic and environmental efficiency criteria. 09/12/11
1. Bárcena Saiz, Ángela. Automatic design of composite floors with ribbed sheet, based on energy and economic efficiency criteria. 22/09/11

3.5.2 Bachelor's Thesis Work

70. Martínez Angulo, Álvaro. Study of alternatives for a cycle-pedestrian footbridge over a ravine in La Pobla Tornesa (Castellón). 19/12/23
69. Filimonov, Vasili. Programm scheduling of the construction works of the pedestrian tunnel connecting Xàtiva and Alacant Stations in the underground of Valencia. 28/09/23
68. Tercero Herreros, Ramón. Design and calculation of two metallic warehouses for a tile production plant in the municipality of Vila-Real (Castellón). 06/01/23
67. Prats Latorre, Elisa. Basic project of the Mirador de las Dunas in Guardamar del Segura (Alicante). 25/05/2023
66. Cervera Motos, Francisco. Study of solutions for a pedestrian walkway on the V-21 in the municipality of Mas-salfassar (Valencia). 16/09/22
65. Mínguez Paredes, Javier. Structural design of pedestrian walkway on the V-21 in the municipality of Massalfassar (Valencia). 16/09/22
64. Castelló Navarro, Roberto. Study of solutions for the extension of the overpass of the Camino de Miraflores on the railway of the extension of Tenor Fleeta Avenue in Zaragoza. 13/09/22
63. Nogueira Serrano, Luis. Design of landing track and parking platform for emergency aircrafts in Benagéber (Valencia). 28/07/22
62. Pallardó Benavent, Alicia. Structural design of the underpass under the CV-400, for the Valencia Metropolitan Green Belt section 2, Valencia TM. 24/02/22
61. Domínguez Sánchez, Marc. Comparative study on construction regulations: FIB, EHE and EC2 applied to the arrivals viaduct at Mahon airport (Balearic Islands). 22/12/21
60. Ballesteros Almonacid, María. Study of the state of the regulation work for irrigation located in a tributary of the Santa Lucía Chico River, Uruguay. Proposal to adapt the non-compliances detected. 14/09/21
59. Chacón Moreno, Jesús Nicolás. Current state study and structural repair design of the bridge over Cervera river, in Municipalities of San Mateo and La Jana (Castellón). 20/07/21
58. Trejo Ripollés, Carlos Ángel. Structural design of the facilities for a mechanical transmissions enterprise located in the Parque Logístico of Riba-Roja de Túria (Valencia). 29/06/21
57. Yepes Bellver, Víctor José. Structural design of a pedestrian bridge in the Anillo Verde Metropolitano Sur of Valencia over railway line Valencia-Villanueva de Castellón of FGV, DO 1,5 of CV-407 road. Municipality of Valencia. 29/06/21
56. Prats Palomares, Manolo. Study of structural solutions for the expansion of the existing culvert at kp 21.2 of the CV-14 road, Mas de Fuster ravine, in Zorita del Maestrazgo (Castellón). 09/12/20
55. Honrubia Ruiz, Manuel. Technical-economic study of the execution of the paving conditioning works in the Cabanyal neighborhood of Valencia. 10/23/20
54. Ferrero Montes, Alejandro. Study of solutions through sustainability criteria and analysis of the Life Cycle of an overpass, pergola type, of the Madrid-Levante HSL, in the Parla Municipal District (Madrid). 09/17/20
53. Fuenmayor Icardo, Miguel Arturo de. Structural study and resistant justification of the footbridge over the CV-500 road in Pinedo (Valencia). 07/23/20

52. García Cárcel, Alberto. Study of solutions for the footbridge over the CV-500 road in Pinedo (Valencia) through life cycle analysis and AHP method. 07/23/20
51. Herron Gonzalez, Jorge Luis. Geotechnical design of the foundations of the viaduct over the Guadiana river in section II of the southern round of Badajoz. 01/31/20
50. Aparisi López, Tatiana. Study of solutions for the viaduct over the Arroyo del Cerezo, in the splitting of the Segovia bypass. Concrete solution. Bases of calculation and obtaining efforts. 12/20/18
49. Escamilla Ros, Cristina. Study of solutions for the viaduct over the Arroyo del Cerezo, in the splitting of the Segovia bypass. Concrete solution. Structural checks. 12/20/18
48. Pérez-Almazán Piwowarsky, Cristian. Economic feasibility study for the creation of a left turn on Tarongers avenue, Valencia. 12/18/18
47. Zahonero Ruiz, Angel. Metal pergola project for vehicle parking in the El Bosque de Chiva urbanization (Valencia). 17 / 09/18
46. Delgado Contreras, Gonzalo. Design of the structure of a hangar located in the cargo terminal of the Manises Airport, Valencia. 06/21/18
45. Gadea Ferrando, Roger. High speed railway bridge design between KP 3+005 and KP 3+070 of the Caceres-Talayuela railway tram to the Caceres province. 09/21/17
44. Fuster Moragues, Joaquín. Expansion project of the bridge over the Júcar-Turia canal located at PK 42+680, Picassent (Valencia). 09/19/17
43. Casinos Monte, María Isabel. Study of structural solutions of the lamination deposit of excess flows of the sanitation network of the South of Santiago de la Ribera. TM of San Javier (Murcia). Alternatives Analysis. 07/27/17
42. Fresneda Exposito, Víctor. Studies for the construction and operation of the SG-20 highway in the province of Segovia. Drainage and landscape management. 07/13/17
41. Oltra Benavent, Teresa. Studies for the construction and operation of the SG-20 highway in the province of Segovia. General organization of the works. Structures 07/13/17
40. Aspás García, Marina. New western access to the Santa Clara industrial estate in Montalban, Teruel province. 07/10/17
39. Castro Martín, Noelia. Studies for the construction and operation of the Sg-20 highway in the province of Segovia. Structure conservation program. 07/10/17
38. Payá Roselló, Jordi. Study of solutions and valued memory of prefabricated industrial buildings without specific use in the Fuente del Jarro Industrial Park, Paterna (Valencia). 07/10/17
37. San Blas Gómez, Borja. Study of solutions and valued memory of the metallic industrial buildings without specific use in the Fuente del Jarro Industrial Park, Paterna (Valencia). 07/10/17
36. García Fernández, Joel. Design Improvement Study of the A-1515 road between the A-23 link and the municipality of Rubielos de Mora (Teruel). Alternative Structure 1. 06/22/17
35. Ruano Cachinero, Carlos. Design Improvement Study of the A-1515 road between the A-23 link and the municipality of Rubielos de Mora (Teruel). Alternative structure 2. 06/22/17
34. Fernández Benítez, Sandra. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). Alternative Center. Study of solutions and structural design of the bridge over the Barranco del Montú. 06/15/17
33. Cervera Soriano, Elisa. Study for the external emergency reinforcement in the drinking water supply tank at the municipal district of Cádiz. 12/15/16
32. Sevilla Fernández, José Luís. Project for the replacement of the N-8 road, in the P.K. 1003+300 of the Bobadilla-Granada High Speed railway, Illora (Granada). 12/01/16
31. Mestre Cotanda, Mireia. Project for the structures of the Moncófar WWTP (Castellón). 07/14/16
30. Ibáñez, Ignacio. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). Alternative Center. Study of solutions and structural design of the bridge over the Barranco del Remedio and CV-346. 07/13/16
29. Ortega Díaz, Carlos. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). Alternative Center. Study of solutions and structural design of the bridge in Rincón del Calvo. 07/13/16
28. Catalán Pérez, Jorge. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). South alternative. Study of alternatives and structural design of the first bridge over the Chelva river. 07/12/16
27. Spain Monedero, Fernando. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). South alternative. Study of alternatives and structural design of the second bridge over the Chelva river. 07/12/16

26. Sevilla Fernández, Marcos. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). South alternative. Study of alternatives and structural design of the bridge over the Barranco del Convento. 07/12/16
25. Claramonte Pérez, Sandra. Storm tank project at the Estivell WWTP, in the city of Toledo. 07/07/16
24. Kettani, Ismail. Comparative study of the influence of different factors in the design of buried structures for underpasses. Underpasses under rail. PI. on the Tocon-Valderrubio High Speed, section. T. M. de Obeilar (Granada). 07/06/16
23. Montoliu Henares, Gema. Comparative study of the influence of different factors in the design of buried structures for underpasses. Underpasses under the road. PI. on the Mascara Highway (Algeria). 07/06/16
22. Brun Izquierdo, Alejandro. Study of Alternatives for the structures at the entrances to the new Xirivella Shopping Center (Valencia). Justification of the solution adopted and Assessment. 07/01/16
21. Yepes Bellver, Lorena. Study of alternatives for the structures at the entrances to the new Xirivella Shopping Center (Valencia). Geotechnical study and comparative analysis. 07/01/16
20. Cardona Guerrero, Eduardo Antonio. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). Alternative North. Study of solutions and structural design of the bridge over the Barranco del Montú. 06/21/16
19. Martínez Gandía, Martín. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). Alternative North. Study of solutions and structural design of the bridge over the Barranco del Remedio and CV-346. 06/21/16
18. Ortuño Ortuño, Antonio. Studies for the drafting of the Basic Project of the variant of the CV-35 highway as it passes through the municipality of Chelva (province of Valencia). Alternative North. Study of solutions and structural design of the substructures. 06/21/16
17. Camarena Escribano, Marina. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (province of Castellón). Alternative North. Design and dimensioning of the bridge over the Barranco to the East of Figueroles. 06/14/16
16. Natividad Roig, Francisco. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (province of Castellón). Alternative North. Design and dimensioning of the bridge over the Lucena river. 09/04/15
15. Montenegro Yar, Cristianavid. Structure project for ODT in the Retortillo stream and replacement of the road at PK 268.4 of the L.A.V. Madrid-Extremadura in the municipality of Malpartida de Plasencia (Cáceres). 01/28/16
14. Sáenz Rada, Asier. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (Province of Castellón). Alternative Center. Design and dimensioning of the bridge over the Barranco to the East of Figueroles. 07/13/15
13. Sánchez Laosa, Javier. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (Province of Castellón). Alternative Center. Design and dimensioning of the bridge over the Lucena River. 07/13/15
12. Palao Puche, Juan Pedro. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (Province of Castellón). Alternative South. Hydraulic Design of the Fluvial Engineering Works for the protection of the bridge over the Lucena River. 07/07/15
11. Zheng Lu, Jia Wei. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (Province of Castellón). Alternative South. Structural conception and design of substructures and factory works. 07/07/15
10. Zheg Lu, Jia Yi. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (Province of Castellón). Alternative South. Structural conception and design of decks for the bridge over the Lucena River. 07/07/15
9. Álvarez Mondaca, Ignacio José. Tender to award the Construction Project of the CV-190 variant as it passes through the municipality of Figueroles (Province of Castellón). Alternative South. Structural conception and design of the deck of the bridge over the Barranco del Tossal de la Negra. 07/07/15
8. Cervera Vallbona, Ana. Road replacement project at KP 7+129 of the Cocentaina - Muro de Alcoy section of the A-7. 07/11/14
7. Arnau Colomer, Antoni Germà. Road replacement project at KP 9+220 of the Cocentaina - Muro de Alcoy section of the A-7. 07/10/14
6. Villalba Garzarán, Manuel. Road replacement project at KP 2+915 of the Cocentaina - Muro de Alcoy section of the A-7. 07/08/14
5. Blasco Cuesta, Francescavid. Road replacement project at PK 11+557 of the Cocentaina - Muro de Alcoy section of the A-7. 06/27/14
4. Melero Morán, Pablo. Road replacement project at PK 7+673 of the Cocentaina - Muro de Alcoy section of the A-7. 06/27/14

3. Cabrero García, David. Road replacement project at PK 10+278 of the Cocentaina - Muro de Alcoy section of the A-7. 06/24/14
2. Chiquillo Ferrándiz, Juan. Road replacement project at PK 11+446 of the Cocentaina - Muro de Alcoy section of the A-7. 06/17/14
1. Contel Martín, Sara. Study of the structural solution and civil engineering facilities of the bullfighting show venue in the town of Sarrión, province of Teruel. 06/25/14

3.5.3 Final Degree Projects

138. Romero Benítez, Keny. Drainage work project for the replacement of the Barranco del Retortillo in the P.K. 210+419 of the Madrid-Extremadura High Speed Railway in the Malpartida de Plasencia Municipal District (Cáceres). 09/25/15
137. Salguero Estevan, Alejandro. Project for the Construction of a forest watchtower in the Carrascal de la Font Roja Natural Park in the municipality of Alcoy. 09/24/15
136. Bretón Gallén, José Carlos. Design of the bottom drainage structures and provisional diversion of the Urrobi river in the Nagore tail dam within the Itoiz reservoir. Municipality of Nagore (Navarra). 09/28/15
135. Gabaldón García, Mizar María. Project for the replacement of the Cortijo de Casas Blancas road, in the P.K. 64+590 of the High Speed rail line between Bobadilla and Granada. Municipal District of Íllora (Granada). 09/25/15
134. Soria Ros, Enric Josep. Expansion project of the passage over the South collector on the access road to the Valencia Technical Treatment Center. 09/24/15
133. García Gutiérrez, María de la Concepción. Urbanization project for the Plaza Unión Musical in the municipality of Torrent (Valencia). 09/18/15
132. Montes Liébana, Álvaro. Replacement project of the Camino Hondo (CV-234/06) in the Pozo de Urama-Cea River section of the North / Northwest High Speed Line. Municipality of Grajal de Campo (León). 09/18/15
131. Domingo Sánchez, Elena. Study of the dynamic behavior and track-deck interaction of the Tuela viaducts, in the Lubián-Túnel de la Canda section of the North-Northwest High Speed corridor. Municipality of Lubián (Zamora). 09/17/15
130. Aguilar Martín, Cristina. Underpass project for the replacement of the Camino de Bigastro, in the P.K. 7+800 of the CV-95 municipality of Orihuela (Alicante). 09/16/15
129. Arocas Cogolludo, José Manuel. Replacement project of the Camino del Arroyo del Retortillo, PK 219-330 of the L.A.V. Madrid-Extremadura, in the municipality of the Malpartida de Plasencia (Cáceres). 09/16/15
128. Fuster Tudela, Rhut. Underpass project for the replacement of the Camí del Ballester, in the P.K. 11+200 of the CV-95 highway. Municipality of Jacarilla (Alicante). 09/16/15
127. Lacuesta Martínez, Miguel Ángel. Project for channeling the Barranco de Benimodo in the municipalities of Carlet, Benimodo and L'Alcúdia. 09/16/15
126. Marín Atienza, Óscar. Urbanization Project of the Single Execution Unit of the Beach Sector (SP-1) of El Puig de Santa María (Valencia). 09/16/15
125. Lewandowski, Marek Edward. Study of the foundation of three wind turbines of 2 MW of nominal power each in the Czystewo Wind Farm the municipality of Strzelce Krajeńskie, Lubusz Voivodeship (Poland). 07/24/15
124. Mayado Navarro, Félix. Underpass project for the replacement of the Camino de las Romanas, on the Madrid-Extremadura High Speed Line, PK 253+82, Malpartida de Plasencia Municipal Terminal (Cáceres). 07/24/15
123. Iserte Michó, Joaquín. Replacement project of the Vereda Zamorana Road at PK 64.9 of L.A.V. Palencia-León. Municipality of Grajal de Campos (León). 07/17/15
122. Martínez Santos, José Luis. Project of the structures for the pedestrian connection of the platforms of the Font de Sant Lluís station in Valencia. 06/30/15
121. Lloret Domínguez, Edgar. Bridge project over the Serpis River in the junction between CV-685 and CV-680. Municipality of Villalonga (Valencia). 06/24/15
120. Laporta Fuster, Eugenio. Comparative study of different construction solutions for the redevelopment of the Ruzafa neighborhood in the city of Valencia. 05/21/15
119. Penadés Plà, Vicent. Project for the replacement of the Camino de Grajal de Campos, in the P.K. 58.7 of the L.A.V. from Palencia to León. Municipality of Villada (Palencia). 05/14/15
118. Ramo Noguera, Arturo. Project of the Structure of 3 buildings for the C.E.I.P. in the municipality of Sobradriel (province of Zaragoza). 01/30/15
117. Martínez Contel, Aurora de Mediavilla. Project of the provisional facilities for the service to passengers, during the adaptation works of the Zamora train station to the High Speed. Municipal district of Zamora. 12/12/14
116. Cáceres Frías, Edgard Josué. Calculation of buckling resistance of mega columns reinforced with laminated profiles for tall buildings: Application to the Sunning building in the Beijing Metropolitan Area, Beijing (China). 10/23/14

115. Llorca Peiró, Cristina. Underpass project for the connecting branch at KP 57+250 of the Autopista de Mediterráneo (A-7). Municipal District of Cocentaina (Alicante). 09/23/14
114. Arnal Roig, Ricardo. Drainage work project on the Arroyo Valderranas at P.K 48+907 of the Madrid-Galicia L.A.V. Section: Palencia-León. Municipality of Villada (Palencia). 09/17/14
113. Font Pérez, Alba. Project for the replacement of the Camino del Convento, in the P.K. 62+390 of the LAV Palencia-León, T. Me Grajal de Campos (León). 09/17/14
112. Sanchis Seco, Marta. Project for the replacement of the Camino de las Veguillas, through an underpass, at P.K 48+507 of the Madrid-Galicia L.A.V. Section: Palencia-León. Municipality of Villada (Palencia). 09/17/14
111. Paredes Borrachero, José Manuel. Study of solutions and calculation of the structure under tracks for the pedestrian junction of the platforms of the new Zamora High Speed Railway station. 09/09/14
110. Esteve Vilar, Víctor. Road replacement project at PK 11+153 of the Cocentaina-Muro de Alcoy section of the A-7. 07/15/14
109. Moreno Placer, Lorena Astrud. Fauna Pass Project in the P.K. 90.62 of the Monroyo bypass, on the N-232the municipality of Monroyo (Teruel). 07/15/1
108. Paz García, Mónica Giuliana. Basic Project for the improvement of the passage over the Serpis River in the area of L'Alqueria d'Asnar (Alicante). 05/19/14
107. Macarro Polo, Óscar. Surface Conditioning and Reinforcement Project of the CV-425 highways from P.K 21+100 to 25+900 and CV-428 from P.K 10+250 to 11+300 of Municipality of Cortes de Pallas and Dos Aguas. 04/01/14
106. Solís Brocal, Omar. Project for the replacement of the road to Las Umbrías at P.K 121+120 of the A-15 motorway (Municipality of Pozalmuro, province of Soria). 03/27/14
105. González Tarín, Ismael. Industrial Warehouse Project without defined use in the Castilla Industrial Estate in Cheste (Valencia). 01/30/14
104. Solsona Moragas, Natalia. Replacement project of the Camino de la Serrana, in the P.K. 31+000 of the Alicante-Murciathe municipality of Cox (Alicante). 12/17/13
103. Red Avignon, Miquel. Level Crossing Suppression Project by underpass under the railroad in P.K. 107+500 of the La Encina-Valencia Line, passing through the Alfafar (Valencia) Terminal. 12/10/13
102. Pavía Gómez, Ana. Project of Sports Facilities for Municipal Soccer-11 field in Alfafar (Valencia). 11/19/13
101. Ferrandis Gracia, Maria Esther. Underpass project for the replacement of the Cañada Real del Puerto del Pico, in P.K. 38+200 of the A-58 motorway. Municipality of. Cáceres. 09/23/13
100. García Úbeda, Jacobo. Study of solutions for the formwork of the deck of the viaduct over the Barranco Hondo de Masegar, in the New Madrid-Levante High Speed Rail Access: section of Siete Aguas-Bunyol (Valencia). 09/23/13
99. Mokrini, Nabil el. Overpass project at PK 8+700 of the A-58 highway from Cáceres to Trujillo. Municipality of de Cáceres. Cáceres province. 09/19/13
98. Ruiz Sanz, Juan Vicente. Storm Tank Project in the E.D.A.R. of Alguazas (Murcia). 09/19/13
97. Moreno Ruiz, Natalia. Project of the Sorozarreta Tunnel Mouths of the New Railway Network of the Basque Country, section: Ezkio Itsaso - Beasain, at PKs 0+807.88 and 2+488.50, Municipalities of Ormaiztegui and Beasain (Gipuzcoa). 06/11/13
96. Soria Ros, Enric Josep. Underpass project for the replacement of the Camino de La Estafeta, in the P.K. 8+210 of the CV-95 highway. Municipality of Orihuela (Alicante). 05/14/13
95. Casalta Serrano, René. Roundabout project for access to Industrial Sector S4, at PK 1+600 of CV-159the municipality of Cabanes (Castellón). 02/19/13
94. Soler Moreno, Carlos. Project for the replacement of Camí del Molí in the P.K. 819+300 of the N-340 road, Albaida variant. Municipal District of Atzeneta d'Albaida (Valencia). 10/23/12
93. Puche García, Victoria Scholastica. Project of structures for the replacement of the road at PK 14.2 of the future CV-95 in the Orihuela Municipal District (Alicante). 10/16/12
92. López Tomás, Elena. Overpass project at PK 112+000 of the A-15 motorway, in the Olvega Municipal District. Soria province. 10/11/12
91. Carrasco Verde, Andrés. Ecoduct project at PK 124+743 of the A-15 highway, Villarel Campo-Ágredathe municipality of Villarel Campo (Soria). 09/25/12
90. Matarredona Desantes, Laura. Overpass project over the Alicante-Madrid railroad tracks in the Southwest Urban Round of Villena (Alicante). 09/13/12
89. Miró Monedero, Rafael. Ecoduct project at PK 119+804 of the A-15 highway, Villar del Campo-Ágredathe municipality of Matalabreras (Soria). 09/11/12
88. Salas Arias, Fernando Andrés. Design and calculation of the structure for drainage work at PK 400+200 of the Madrid - Castilla la Mancha - Valencian Community High Speed Railway Line. Municipality of. Almansa (Albacete). 07/17/12

87. Gabaldón Garrido, José Miguel. Lower passage project in the replacement of Veredae Veguillas in the P.K. 49+200 of the High Speed Rail Access to Madrid the municipality of Parla (Madrid). 06/19/12
86. Botella Andreu, Francisco. Underpass project at PK 42+500 of the A-58 motorway. Cáceres Municipal District, Cáceres province. 06/05/12
85. Miraz, Patricio Guido. Ecoduct Project at PK 121+270 of the A-15 Highway, at Municipality of Pozalmuro, province of Soria. 06/05/12
84. Torres Hernández, Raquel. Pontoon project on the CV-649 highway over the Barranco de la Saladella. Municipality of Vallada (Valencia). 06/05/12
83. Cifuentes Hortelano, Rocío. Underpass project for the replacement of the Camino Castañar at P.K. 110+450 of the Autovía A-15 the municipality of Olvega (Soria). 05/15/12
82. Ciges Navalón, María Luisa. Underpass project for access to the Partida La Carrasca del Rey in the P.K. 124+410 of the A-15 motorway in the municipality of Villar del Campo (Soria). 04/24/12
81. Martínez Mínguez, Guillermo. Underpass project for the replacement of the Long Way, in the P.K. 116+250 of the A-15 highway. Municipality of Matalabrerías (Soria). 04/17/12
80. Sempere Sancho, Silvia. Cross drainage work project in the P.K. 123+800 of the A-15 highway, at its junction with the Arroyo de la Rejera. Municipality of Villar del Campo (Soria). 04/17/12
79. Sánchez Bermúdez, José Manuel. Flyover project at PK 4+758 of the A-58 motorway, from Cáceres to Trujillo (Cáceres). 12/15/11
78. Boix Roca, Miguel. Underpass project for the replacement of the Camino de la Beguera at PK 216+780 of the A-15 the municipality of Matalabrerías (Soria). 11/08/11
77. Gómez Masiá, Adolfo. Overpass project for the replacement of the Cañada de los Tordejales Road, in the P.K. 113+940 of the A-15 highway. Municipality of Matalabrerías (Soria). 09/22/11
76. Montagud Pérez Lis, Santiago. Comparative study of geometric design requirement for visibility in curves according to Chilean and Spanish regulations. 07/13/11
75. Oltra Canales, Cristina. Cross drainage work project and wildlife crossing at PK 109+500 of the Navarra Highway (A-15). Municipal District of Olvega (Soria). 07/06/11
74. Martínez Pedro, María Vicenta. Overpass project at PK 123+600 of the A-15 motorway (Autovía de Navarra) the municipality of Villar del Campo (Soria). 06/09/11
73. Pérez Pastor, Miguel Ángel. Underpass project at PK 248/110 of the Valencia-Zaragoza FFCC Line in Partida del Juncar (La Masía) at Municipality of Segorbe (Castellon). 06/08/11
72. Prats Padrón, Andrea. Study of the Functionality, Distribution and Planning of the execution of the Underground Parking located on Avenida Doctor Tomás Sala between C / San Marcelino and C / Pio IX (Valencia). 04/13/11
71. Forés Boluña, Eva. Overpass project for the replacement of the SO-380, in the P.K. 115+200 of the A-15 highway. Municipality of Matalabrerías (Soria). 04/07/11
70. Ortiz Sanjuán, Salvador. Bridge project over the Soria-Castejón railway, in the P.K. 123+930 of the A-15 highway. Municipality of Villarel Campo (Soria). 03/31/11
69. Borillo Llorca, Paula. Flyover project for the replacement of the Camí de Frangi Baix, in the P.K. 615+123 of the A-7 highway the municipality of Cocentaina (Alicante). 03/10/11
68. Bertomeu Soler, Francesc. Bridge project over the Channeling of the Barranco de Cambró, in the P.K. 3+415 of Highway CV-50. Municipality of Tavernes de la Valldigna (Valencia). 02/17/11
67. García Segura, Tatiana. Analysis of the route alternatives and structural calculation of the link between the CV-400 highways and the CV-407 in the municipality of Valencia. 12/23/10
66. Sobrecases Martí, Salvador. Project to suppress the level crossing through an underpass at PK 3+153 of Line 5 of the Valencia Metro, Airport - Riba-Roja del Turia section. Municipality of Manises (Valencia). 12/14/10
65. Garzón Garrigues, Diego. Bridge project over the Barranco del Hito in the P.K. 120+430 of the A-15 Municipality of Matalabrerías (Soria) highway. 12/02/10
64. Villalba Izquierdo, Pere. Overpass project at the P.K. 109+380 of the A-15 motorway in the Municipality of M. of Olvega and Ágrede (Soria). 12/02/10
63. Esteban Narro, Ana Araceli. Overpass project for the replacement of the CV-705 Highway, at PK 804+230 of the Mediterranean Highway (A-7). Municipality of Wall of Alcoy (Alicante). 11/25/10
62. Pérez Giner, Raúl. Overpass project at PK 782+000 of the A-7 motorway, in the municipality of Cocentaina (Alicante). 11/25/10
61. Catalan Pellicer, Borja. Conditioning and Reinforcement of the road surface of the CV-600 Highway, section: Llocnou d'en Fenollet to Barxeta (Valencia). 11/23/10
60. Carrión Domingo, Francisco. Bridge project over the Tramusser Ravine, on the AP-7 / E-15 Highway Service Road PK 535+500 the municipality of Almussafes (Valencia). 10/21/10

59. Iborra, Jaume. Conditioning Project for the CV-345 highway. Section: Campo Abajo - Titaguas. TMunicipality of M. of Alpuente and Titaguas (Province of Valencia). 09/23/10
58. Ferrándiz Armero, Juan José. Underpass project for Highway SO-P-2004 at P. K. 109+700 of Highway A-15the municipality of Olvega (Soria). 09/21/10
57. García Fuentes, José Javier. Underpass project at the CV-13 junction with CV-145. Municipality of Torreblanca (Castellón). 09/21/10
56. Raga Rojas, David. Urbanization Project of the Fondo de la Litera II Industrial Sector in the municipality of Fraga (Huesca). 09/21/10
55. Alfaro Mingot, Ignacio Javier. Bridge project in the P.K. 236+700 of the N-332 over the channeling of the Vaca River. T. M. de Tavernes de la Vallidigna (Valencia). 09/16/10
54. Prats Padrón, Angela. Bridge project over the channeling of the Barranco de les Fonts, for the replacement of the Camí de les Marjals, in the municipality of Xeraco (Valencia). 09/16/10
53. Vera Saura, José Pedro. Overpass project at PK 122+400 of the Navarra A-15 motorwaythe municipality of Pozalmuro (Soria). 09/16/10
52. Cazallas Cantero, Manuel Alejandro. Replacement project, through an underpass, of the Convent path in the P.K. 57+120 of the Northwest High Speed ??Rail Corridorthe municipality of Grajal de Campos (León). 07/21/10
51. Martínez Martínez, Francisco. Underpass project for the replacement of the Via Pecuaria Colada del Monte, at PK 125+200 of the A-15. Municipality of Villar del Campo (Soria). 07/21/10
50. Arnau de Gracia, María Beatriz. Expansion structure project for the Laboratory Building of the Faculty of Civil Engineering of the Technical University of Ostrava. 07/14/10
49. González García, Javier. Underpass project at KP 75+570 of the Palencia-León LAV, for the replacement of the Transversal Municipality of. the Burgo Ranero (León). 06/23/10
48. López Gervasio, Ana Patricia. Design of the extension structure of the Dining Room Building of the Faculty of Civil Engineering of the Ostrava University. 06/09/10
47. Sánchez Sánchez, David. Underpass project for the replacement of the Camino Hondo in the P.K. 56+350 of the Northwest High Speed Rail Corridor. Municipal District of Grajal de Campos, province of León. 06/09/10
46. Segado Jiménez, Saray. Underpass project at the P.K. 47+400, of the Bobadilla-Granada branch of the L.A.V. Madrid-Granadathe municipality of Illora (Granada). 05/12/10 18 and 19
45. Barbier, Antoine. Overpass project at the P.K. 13+730 of the CV-13 highwaythe municipality of Benlloch (Castellón). 04/15/10
44. Escribano Carramolino, Javier. Replacement project for Carrer dels Pous in the Airport - Ribarroja section of Line 5e Metrovalencia. TM of Ribarroja del Turia (Valencia). 03/24/10
43. Pérez Díez, María del Carmen. Project of the landscaping structures around the Sangueta station on Avenida de la Vila Joiosathe municipality of Alicante. 01/20/10
42. Ribes Pascual, Adrián. Overpass project at the P.K. 802+688 of the future A-7 motorway in the Municipal District of Muro de Alcoy (Alicante). 10/22/09
41. Vélez Gómez, María Isabel. Overpass project for the replacement of the road at P.K 26+800 of the Turia CV-35 motorway. Municipal district of Liria, province of Valencia. 09/17/09
40. García Benavent, Juan. Underpasses project for the replacement of the Reguerón del Hurchillo service roads, at PK 5+200 of the CV-95 highway. Municipality of Orihuela (Alicante). 09/09/09
39. Espín Fernández, María del Mar. Overpass project at PK 33+000 of the A-58 Trujillo-Cáceres highway. Municipality of. Cáceres. 07/14/09
38. Joueidi, Jamal. Overpass project at the P.K. 16+400 of the CV-95 highway, for the replacement of the CV-940the municipality of. San Miguel de Salinas (Alicante). 07/14/09
37. Martín Hernández, Andrés. Underpass project at the P.K. 390+200 of the A-23 highway. section: Lanave - Jabarella Reservoir. Municipality of. Sabiñánigo (Huesca). 07/08/09
36. Sancho Ortiz, Antonio. Road replacement project for the CV-95 junction at PK 8+365the municipality of de Jacarilla (Alicante). 07/08/09
35. Marco Miguel, Sergio. Overpass project at the P.K. 803+441 of the future A-7 highway. Municipal District of Muro de Alcoy (Alicante). 07/02/09
34. Soler Montolio, Francisco Javier. Bridge project over the Barranco de Grifo, in the P.K. 29,450 of the new A-70 / E-15 highwaythe municipality of Elche (Alicante). 06/18/09
33. Martínez Arguisuelas, Alberto. Underpass project at the P.K. 7+788 of the Airport - Riba-Roja del Turia section, under Line 5 of the Valencia Metro. Municipality of Riba-Roja del Turia. Valencia province. 05/27/09
32. Montolio Barrachina, Sergio. Irrigation Raft Project for the Real Acequia de Moncada Irrigation Community in the Municipal District of Museros (Valencia). 05/27/09

31. Palerm Sabater, Blanca. Overpass project in the connection of Llocnou de Sant Jeroni KP26.5 of CV-60 road in the municipality of Llocnou de Sant Jeroni. Province of Valencia. 05/21/09
30. Martínez Falcó, Iván Bernardo. Underpass project for the replacement of the Camino Cañada Real del Puerto, in the P.K. 787,035 of the N-340. (Municipality of Alcoy, Alicante). 03/04/09
29. Pérez Rodríguez, María del Carmen. Structures project for the connection between CV-95 and CV-945, P.K. 13+250. Municipality of Orihuela (Alicante). 02/26/09
28. Ruiz Castelló, Joan. Underpass project on Calle Alicante, for the connection of the future Central Station with Calle Segorbe, in the city of Valencia. 02/04/09
27. Marqués Casamayor, Victoria. Draft collector project for the Margen Sur Urbanization, 4th Floor, Camí la Mar. Sagunto (Valencia). 07/08/08
26. Masià Fornés, Verónica. Underpass project for the San Vicente road, under the L.A.V. Madrid-Alicante in the municipality of Monforte del Cid (Alicante). 07/01/08
25. Planelles Beltran, Vicente. Road replacement project in the P.K. 17+370 of the future CV-95 highway in the municipality of San Miguel de Salinas (Alicante). 06/24/08
24. Tejedor Mardomingo, Ignacio. Overpass project at the P.K. 993,457 of the N-340, Torre la Sal link, in the municipality of Cabanes (Castellon). 03/06/08
23. Salaix Rochera, Carlos-Rafael. Urbanization project of the Ciudad Deportiva del C.D. Castellón located in Partida Magdalena (Castellón). 10/23/07
22. Silvestre Martínez, Ramón. Road access project to the new hospital in Dénia (Alicante). 09/25/07
21. Serrano Gimeno, Ángel. Flyover project over the P.K. 400.7 of the New High Speed Rail Access of Levante in Venta del Moro (Valencia). 09/13/07
20. Rivero Barquín, Álvaro. Flyover project over the Xàtiva-Alcoi FFCC in the North round of Xàtiva (province of Valencia). 07/19/07
19. Attas, David. Bridge project over the Acequia de Faitanar, in C / Don Carlos Dinnbier. Molí d'Animeta sector. Quart de Poblet (Valencia). 07/02/07
18. Díaz Gil, Raúl. Overpass project at the access to the Ridel Industrial Park, PK 94.0 of the CN-340, Mutxamel (Alicante). 03/29/07
17. Ferrando Fons, José Miguel. Bridge project over the Barranco de L'Angelíu in the Ronda Norte de Xàtiva (Valencia). 03/29/07
16. Romeu Mont, Óscar. Flyover project over the future L.A.V. Valencia-Castellón, at the entrances to the Golf Mar Urbanization, El Puig (Valencia). 03/29/07
15. Méndez García, Enrique. Project of the structures for the replacement of the Vereda del Cid in the P.K. 403+100 of the Madrid-Alicante High Speed Line, at the municipality of Monforte del Cid (Alicante). 03/27/07
14. Mascarós Villanueva, Montserrat. Bridge project over the Barranco de Porxinos on the CV-370. Variant of Ribarroja del Turia (Valencia). 03/22/07
13. López López, Jerónimo. Viaduct project over the River Albaida, at PK 601.5 of the Muro de Alcoy-Puerto de Albaida section of the N-340, Albaida (Valencia). 12/14/06
12. Baixauli Pérez, Vicente. Preliminary draft of duplication of the CV-222 highway. Section Betxí - Alquerías del Niño Perdido (Castellón). 10/19/06
11. Torres Machí, Diego. Overpass project at PK 407.1 of the New Levante High Speed Rail Access in Caudete de las Fuentes (Valencia). 09/28/06
10. Vilaplana Mora, José Miguel. Overpass project at the P.K. 5+400 of the variant of the CN-332 Between Ondara and Vergel, Ondara (Valencia). 09/28/06
9. Trujillo Seguí, Jaime. Bridge project over the N-340, PK 605.8, Puerto de Albaida (Albaida, Valencia). 09/14/06
8. Menchón Bofill, Alberto. Flyover project at P.K. 409.3 of the New Levante High Speed Rail Access. Caudete de las Fuentes (Valencia). 07/20/06
7. Piqueras García, Miguel Ángel. Overpass project over the P.K. 1+100 of the highway connecting the Distribuidor Sur with the A-7, in the municipality of Aldaya (Valencia). 01/12/06
6. Ortín Grau, Miguel. Overpass project at KP 4+500 of the connection of Distribuidor Sur with the A-7 in Aldaia (Valencia). 10/13/05
5. Rodrigo Balaguer, María Desamparados. Overpass project at the P.K. 0+640 of the A-8 motorway. Tamón (Asturias). 07/28/05
4. Ortega García, Manuel. Overpass project at PK 0+131 of the Tamón-Villalegre section of the Cantábrico Highway (Asturias). 06/23/05
3. Auñón Valero, Ramón. Project for the East Round of Macastre (Valencia). 06/09/05
2. Paredes Fernández, Carolina. Overpass project at PK 2+900 of the Distribuidor Sur highway connecting with the A-7. Aldaia (Valencia). 05/19/05
1. Fernandez Carrión, Rocío. Collaboration in the execution of the diversion of arterial pipes in the Airport and Manises areas. 04/10/02

3.6 Participation in Educational Innovation Projects

- Excellence and Innovation in the learning process of the project-construction process in Civil Engineering (EXCELCON) EICE 01/09/2013 31/08/2014 2013, 2014, 2015, 2016, 2017 y 2018
- The introduction of professional responsibility in the Bachelor's degree in Public Works Engineering (B04 / 13) PIME01/09/2013 31/08/2014 2013
- The case study based on a constructive project as a didactic and coordination strategy of specific and generic competences between postgraduate subjects in construction management (B01 / 12) PIME 09/01/2012 08/31/2013 2012
- Excellence and Innovation in the learning process of the project-construction process in Civil Engineering (EXCELCON) EICE 01/09/2012 31/08/2013 2012
- Excellence and Innovation in the learning process of the project-construction process in Civil Engineering (EXCELCON) EICE 01/09/2011 31/08/2012 2011
- Teaching Innovation Group (PACE) 2009

4 Research

Two (2) six-years of international-quality research.

ORCID: 0000-0003-1376-8441

Research ID: L-1774-2014 (Web of Science)

UNESCO field codes:

3305 CONSTRUCTION TECHNOLOGY

- 3305.04 BRIDGES
- 3305.05 CONCRETE TECHNOLOGY
- 3305.06 CIVIL ENGINEERING
- 3305.10 FOUNDATIONS
- 3305.24 PREFABRICATED CONSTRUCTIONS
- 3305.25 PRESTRESSED CONCRETE
- 3305.32 STRUCTURAL ENGINEERING

4.1 Publications in JCR Journals

29. RUIZ-VÉLEZ, A.; GARCÍA, J.; ALCALÁ, J.; YEPES, V. (2024). *Sustainable road infrastructure decision-making: Custom NSGA-II with repair operators for multi-objective optimization*. *Mathematics*, 12(5):730. DOI:10.3390/math12050730
28. ZHOU, Z.; ZHOU, J.; ZHANG, B.; ALCALÁ, J.; YEPES, V. (2024). *The centennial sustainable assessment of regional construction industry under the multidisciplinary coupling model*. *Sustainable Cities and Society* (11)1 - 21. DOI: 10.1016/j.scs.2024.105201
27. ZHOU, Z.; ZHOU, J.; ALCALÁ, J.; YEPES, V. (2024). *Thermal coupling optimization of bridge environmental impact under natural conditions*. *Environmental Impact Assessment Review*, 104:107316. DOI:10.1016/j.eiar.2023.107316
26. YEPES-BELLVER, L.; BRUN-IZQUIERDO, A.; ALCALÁ, J.; YEPES, V. (2023). *Embodied energy optimization of prestressed concrete road flyovers by a two-phase Kriging surrogate model*. *Materials*, 16(20); 6767. DOI:10.3390/ma16206767
25. ZHOU, Z.; ALCALÁ, J.; YEPES, V. (2023). *Carbon impact assessment of bridge construction based on resilience theory*. *Journal of Civil Engineering and Management*, 29(6):561-576. DOI:10.3846/JCEM.2023.19565
24. ZHOU, Z.; ALCALÁ, J.; YEPES, V. (2023). *Experimental Research on Diseases of Emulsified Asphalt Mortar Board for Ballastless Tracks*. *Journal of Materials in Civil Engineering*, 35(6):04023156. DOI:10.1061/JMCEE7.MTENG-15149
23. RUIZ-VÉLEZ, A.; ALCALÁ, J.; YEPES, V. (2023). *A parametric study of optimum road modular hinged frames by hybrid metaheuristics*. *Materials*, 16(3):931. DOI:10.3390/ma16030931
22. RUIZ-VÉLEZ, A.; ALCALÁ, J.; YEPES, V. (2022). *Optimal design of sustainable reinforced concrete precast hinged frames*. *Materials*, 16(1):204. DOI:10.3390/ma16010204
21. PARTSKHALADZE, G.; ALCALÁ, J.; MEDZMARIASHVILI, E.; CHAVLESHVILI, G.; SURGULADZE, B., I.; YEPES, V. (2022). *Heuristic Optimization of a New Type Prestressed Arched Truss*. *Materials*, 15(22): 8144. DOI:10.3390/ma15228144
20. ZHOU, Z.; ALCALÁ, J.; YEPES, V. (2022). *Research on the optimized environment of large bridges based on multi-constraint coupling*. *Environmental Impact Assessment Review*, 97:106914. DOI:10.1016/j.eiar.2022.106914
19. YEPES-BELLVER, L.; BRUN-IZQUIERDO, A.; ALCALÁ, J.; YEPES, V. (2022). *CO₂-optimization of post-tensioned concrete slab-bridge decks using surrogate modeling*. *Materials*, 15(14):4776. DOI:10.3390/ma15144776

18. MARTÍNEZ-MARTÍN, F.J.; YEPES, V.; GONZÁLEZ-VIDOSA, F.; HOSPITALER, A.; ALCALÁ, J. (2022). *Optimization design of RC elevated water tanks under seismic loads*. Applied Sciences, 12(11):5635. DOI:10.3390/app12115635
17. ZHOU, Z.; ALCALÁ, J.; YEPES, V. (2022). *Regional sustainable development impact through sustainable bridge optimization*. Structures, 41, 1061-1076. DOI: 10.1016/j.istruc.2022.05.047
16. ZHOU, Z.; ALCALÁ, J.; YEPES, V. (2021). *Optimized application of sustainable development strategy in international engineering project management*. Mathematics, 9(14):1633. DOI:10.3390/math9141633
15. ZHOU, Z.; ALCALÁ, J.; KRIPKA, M.; YEPES, V. (2021). *Life cycle assessment of bridges using Bayesian Networks and Fuzzy Mathematics*. Applied Sciences, 11(11):4916. DOI:10.3390/app11114916
14. ZHOU, Z.; ALCALA, J.; YEPES, V. (2021). *Environmental, economic and social impact assessment: study of bridges in China's five major economic regions*. International Journal of Environmental Research and Public Health, 18(1):122. DOI:10.3390/ijerph18010122
13. ZHOU, Z.; ALCALA, J.; YEPES, V. (2020). *Bridge Carbon Emissions and Driving Factors Based on a Life-Cycle Assessment Case Study: Cable-Stayed Bridge over Hun He River in Liaoning, China*. International Journal of Environmental Research and Public Health, 17(16):5953. DOI:10.3390/ijerph17165953
12. PARTSKHALADZE, G.; MSHVENIERADZE, I.; MEDZMARIASHVILI, E.; CHAVLESHVILI, G.; YEPES, V.; ALCALA, J. (2019). *Buckling Analysis and Stability of Compressed Low Carbon Steel Rods in Elasto-Plastic Region of Material*. Advances in Civil Engineering, 2019: 7601260. DOI:10.1155/2019/7601260
11. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J.; PEREZ-LOPEZ, E. (2015). *Hybrid harmony search for sustainable design of post-tensioned concrete box-girder pedestrian bridges*. Engineering Structures, 92:112-122. DOI:10.1016/j.engstruct.2015.03.015
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9. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J. (2014). *Life-cycle greenhouse gas emissions of blended cement concrete including carbonation and durability*. International Journal of Life Cycle Assessment, 19(1):3-12. DOI:10.1007/s11367-013-0614-0
8. TORRES-MACHI, C.; YEPES, V.; ALCALA, J.; PELLICER, E. (2013). *Optimization of high-performance concrete structures by variable neighborhood search*. International Journal of Civil Engineering, 11(2):90-99.
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6. YEPES, V.; GONZALEZ-VIDOSA, F.; ALCALA, J.; VILLALBA, P. (2012). *CO2-Optimization Design of Reinforced Concrete Retaining Walls based on a VNS-Threshold Acceptance Strategy*. Journal of Computing in Civil Engineering, 26 (3):378-386. DOI:10.1061/(ASCE)CP.1943-5487.0000140
5. MARTINEZ, F.J.; GONZALEZ-VIDOSA, F.; HOSPITALER, A.; ALCALA, J. (2011). *Design of tall bridge piers by ant colony optimization*. Engineering Structures, 33(8):2320-2329. DOI:10.1016/j.engstruct.2011.04.005
4. PEREA, C.; YEPES, V.; ALCALA, J.; HOSPITALER, A.; GONZALEZ-VIDOSA, F. (2010). *A parametric study of optimum road frame bridges by threshold acceptance*. Indian Journal of Engineering & Materials Sciences, 17(6):427-437.

3. YEPES, V.; DIÁZ, J.; GONZALEZ-VIDOSA, F.; ALCALA, J. (2009). *Statistical Characterization of Prestressed Concrete Road Bridge Decks*. *Revista de la Construcción*, 8(2):95-109.
2. YEPES, V.; ALCALA, J.; PEREA, C.; GONZALEZ-VIDOSA, F. (2008). *A Parametric Study of Optimum Earth Retaining Walls by Simulated Annealing*. *Engineering Structures*, 30(3): 821-830.
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4.2 Other Publications

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10. YEPES, V.; PEREZ-LÓPEZ, E.; GARCIA-SEGURA, T.; ALCALA, J. (2019). *Optimization of high-performance concrete post-tensioned box-girder pedestrian bridges*. *International Journal of Computational Methods and Experimental Measurements*, 7(2):118-129. DOI: 10.2495/CMEM-V7-N2-118-129
9. YEPES, V.; PEREZ-LÓPEZ, E.; ALCALA, J.; GARCIA-SEGURA, T. (2018). *Parametric study of concrete box-girder footbridges*. *Journal of Construction Engineering, Management & Innovation*, 1(2):67-74.
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8. ALCALA, J.; GONZALEZ-VIDOSA, F.; YEPES, V.; MARTI, J.V. (2018). *Embodied energy optimization of prestressed concrete slab bridge decks*. *Technologies*, 6(2):43.
DOI:10.3390/technologies6020043
7. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J. (2017). *Computer-support tool to optimize bridges automatically*. *International Journal of Computational Methods and Experimental Measurements*, 5(2):171-178.
6. TORRES-MACHI, C.; YEPES, V.; ALCALA, J.; PELLICER, E. (2013). *Integración de investigación y docencia de posgrado a través del diseño eficiente de estructuras*. *MSEL Modelling in Science Education and Learning*, 6(3), No.8. ISSN: 1988-3145.
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4. CARBONELL, A.; ALCALA, J.; GONZALEZ-VIDOSA, F.; YEPES, V. (2007). *Heuristic optimization of reinforced concrete vaults for road crossings*. *Ingenierla Civil*, 145: 79-88. ISSN: 0213-8468 (in spanish).
3. YEPES, V.; ALCALA, J.; PEREA, C.; GONZALEZ-VIDOSA, F. (2006). *Parametric study of optimal reinforced concrete retaining walls*. *Ingenierla Civil*, 142: 129-139. ISSN: 0213-8468. [A parametric study of optimum reinforced concrete retaining walls] (in spanish).
2. CARRERA, J.M.; ALCALA, J.; YEPES, V.; GONZALEZ-VIDOSA, F. (2005). *Heuristic optimization of reinforced concrete road bridge frames*. *Hormigón y Acero*, 236: 85-95. ISBN: 0439-5689 (in spanish).
1. ALCALA, J.; CARRERA, J.M.; GONZALEZ-VIDOSA, F.; YEPES, V. (2005). *Simulated annealing applied to the economic optimization of reinforced concrete retaining walls*. *Hormigón y Acero*, 236: 97-108. ISBN: 0439-5689 (in spanish).

4.3 Participation in Conferences

26. GONZALEZ-VIDOSA, F.; ALCALA, J.; NAVARRO, F. (2020) *On the structural design of characteristic decks for three-span postensioned road flyovers*. 10th International Conference on High Performance and Optimum Design of Structures and Materials (HPSM/OPTI 2020)
25. MOLINA-JOTEL, V.; ALCALA, J.; MARTI, J.V.; YEPES, V. (2017). *Diseño de pasarelas de hormigón postesado de sección en T mediante optimización heurística bajo criterios económicos y de sostenibilidad*. VII Congreso de ACHE, A Coruña, junio.

24. YEPES, V.; GONZALEZ-VIDOSA, F.; MARTI, J.V.; ALCALA, J.; PELLICER, E. (2017). *Puentes pretensados de alta eficiencia social y medioambiental bajo presupuestos restrictivos: Proyecto BRIDLIFE*. VII Congreso de ACHE, A Coruña, junio.
23. MARTI, J.V.; ALCALA, J.; GARCIA-SEGURA, T.; YEPES, V. (2016). *Heuristic design of precast-prestressed concrete U-beam and post-tensioned cast-in-place concrete slab road bridges*. HPSM/OPTI 2016. WIT Transactions on The Built Environment, Vol 166. ISBN: 978-1-78466-143-4.
22. GARCIA-SEGURA, T.; YEPES, V.; MARTI, J.V.; ALCALA, J. (2015). *Algoritmo híbrido de enjambre de luciErnagas y aceptación por umbrales para diseño de vigas*. X Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados MAEB 2015, 4-6 de febrero, MErida, pp. 699-705. ISBN: 978-84-697-2150-6.
21. ALCALA, J.; YEPES, V.; MARTI, J.V.; BARCENA, A. (2014). *Diseño automático de forjados mixtos con chapa nervada, basado en criterios de eficiencia energética y económicos*. VI Congreso de ACHE, 3-5 de junio, Madrid. ISBN: 978-84-89670-80-8.
20. ALCALA, J.; YEPES, V.; MARTI, J.V.; RODRIGUEZ-FACUNDI, A. (2014). *Optimización de forjados de losa pretensada utilizando criterios económicos y de sostenibilidad*. VI Congreso de ACHE, 3-5 de junio, Madrid. ISBN: 978-84-89670-80-8.
19. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J. (2014). *Sustainable design using multiobjective optimization of high-strength concrete I-beams*. The 2014 International Conference on High Performance and Optimum Design of Structures and Materials HPSM/OPTI 2014, 9-11 June, Ostend, Belgium. WIT Transactions on The Built Environment, Vol 137, pp. 347-358. doi: 10.2495/HPSM140331
18. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J. (2014). *Life-cycle emissions of reinforced concrete made with blended cements*. 18th International Congress on Project Management and Engineering. 16-18 de julio, Alcañiz (Teruel), pp. 1-10. ISBN: 978-84-617-2742-1.
17. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J.; MARTI, J.V. (2014). *Optimización multiobjetivo para el estudio de la sostenibilidad del hormigón autocompactante*. VI Congreso de ACHE, 3-5 de junio, Madrid. ISBN: 978-84-89670-80-8.
16. GARCIA-SEGURA, T.; YEPES, V.; ALCALA, J.; MARTI, J.V. (2014). *Influencia de la carbonatación y durabilidad en el ciclo de vida del hormigón fabricado con cementos con adiciones*. VI Congreso de ACHE, 3-5 de junio, Madrid. ISBN: 978-84-89670-80-8.
15. MARTI, J.V.; YEPES, V.; ALCALA, J.; GONZALEZ-VIDOSA, F. (2014). *Diseño de tableros isostáticos de puentes de vigas artesa prefabricadas pretensadas con criterios económicos*. VI Congreso de ACHE, 3-5 de junio, Madrid. ISBN: 978-84-89670-80-8.
14. YEPES, V.; MARTI, J.V.; ALCALA, J.; GARCIA-SEGURA, T. (2014). *Diseño eficiente de estructuras con hormigones no convencionales basados en criterios sostenibles multiobjetivo: HORSOST*. VI Congreso de ACHE, 3-5 de junio, Madrid. ISBN: 978-84-89670-80-8.
13. ALCALA, J.; MARTI, J.V.; YEPES, V. (2013). *CO2 optimization of precast-prestressed concrete road bridges with steel fiber-reinforcement*. 5th International Congress on Energy and Environment Engineering and Management. Lisbon, 17-19 July 2013, CD. ISBN: 978-989-98406-5-2
12. YEPES, V.; ALCALA, J.; GARCIA-SEGURA, T. (2013). *Multiobjective optimization of high-performance reinforced concrete I-beams by simulated annealing*. 22nd International Conference on Multiple Criteria Decision Making, 17-21 June, MALaga, (Spain).
11. MARTI, J.V.; ALCALA, J.; YEPES, V.; GONZALEZ-VIDOSA, F. (2012). *Diseño heurístico de puentes de hormigón pretensado como ejemplo de docencia en posgrado*. XVI Congreso Internacional de Ingeniería de Proyectos, AEIPRO, 11-13 de julio, Valencia, pp. 2345-2356
10. MARTI, J.V.; YEPES, V.; GONZALEZ-VIDOSA, F.; ALCALA, J. (2012). *CO2-Optimization of PC precast bridges by hybrid heuristics*. SSCS 2012 Numerical Modeling. Strategies for Sustainable Concrete Structures, May 29-June 1, Aix-en-Provence, France.
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8. YEPES, V.; VILLALBA, P.; ALCALA, J.; GONZALEZ-VIDOSA, F. (2011). *Energy consumption optimization design of prestressed concrete slab bridge decks*, in Proceedings of 4th International Congress on Energy and Environment Engineering and Management, 26-27 May, Mérida (Spain), pp. 153. ISBN: 978-84-9978-014-6.
7. YEPES, V.; ALCALA, J.; GONZALEZ-VIDOSA, F. (2011). *Caracterización multifactorial de tableros aligerados de canto constante optimizados mediante técnicas heurísticas*. V Congreso de ACHE, Barcelona, 10 pp.
6. ALCALA, J.; VILLALBA, P.; YEPES, V.; GONZALEZ-VIDOSA, F. (2011). *CO2 Optimization of Prestressed Concrete Slab Bridge Decks by Simulated Annealing*, in Abstracts of Optimization 2011, Portuguese Operational Research Society, Lisbon, pp. 82.
5. VILLALBA, P.; ALCALA, J.; YEPES, V.; GONZALEZ-VIDOSA, F. (2010). *CO2 optimization of reinforced concrete cantilever retaining walls*. Proceedings of the 2nd International Conference on Engineering Optimization, Lisbon, 6-9 September. 10 pp. CD-ROM. ISBN: 978-898-96264-3-0.
4. PEREA, C.; YEPES, V.; ALCALA, J.; HOSPITALER, A.; GONZALEZ-VIDOSA, F. (2006). *Heuristic optimization of reinforced concrete road bridge frames*. Proceedings of the Eighth International Conference on Computational Structures Technology. Civil-Comp Press. Paper 208, 9 pp. Las Palmas, Spain. ISBN: 1-905088-08-6.
3. PEREA, C.; ALCALA, J.; MARTINEZ, F.; YEPES, V.; GONZALEZ-VIDOSA, F. (2006). *Optimum design of the box frame tunnel of the Underground Line Palma-UIB*. Proceedings of the X International Conference on Project Engineering. Valencia, Spain. September, pp. 269-278. ISBN: 84-9705-987-5.
2. GONZALEZ-VIDOSA, F.; YEPES, V.; ALCALA, J.; CARRERA, M.; PEREA, C. (2005). *Simulated annealing optimization of walls, portal and box reinforced concrete road structures*, in Hernández, S. and Brebbia, C.A. (ed.): Proceedings of 9th International Conference on Computed Aided Optimum Designed in Engineering (OPTI-2005). WIT Press, pp. 175-186. Skiathos (Greece), may 2005. ISBN: 1-84564-016-0. ISSN: 1746-4498 (print). (pdf)
1. GONZALEZ-VIDOSA, F.; YEPES, V.; ALCALA, J.; CARRERA, M.; PEREA, C. (2005). *Optimización por cristalización simulada de pórticos y marcos de paso de carretera*. I Jornadas de Investigación en Construcción. Instituto E. Torroja. CSIC. Vol. I, pp. 373-381. Ed. AMIET. Madrid, 2, 3 y 4 de junio de 2005. ISBN: 84-931709-5-X.

4.4 Book Chapters

2. MARTI, J.V.; ALCALA, J.; GARCIA-SEGURA, T.; YEPES, V. (2017). *Heuristic design of a precast-prestressed concrete U-beam and post-tensioned cast-in-place concrete slab road bridges*. High Performance and Optimum Design of Structures and Materials II, Cap. 2, pp. 17-38. Editorial WIT Press, año 2016. ISBN 978-1-78466-143-4.
1. GONZALEZ-VIDOSA, F.; YEPES, V.; ALCALA, J.; CARRERA, M.A.; PEREA, C.; PAYÓ, I.J. *Optimization of reinforced concrete road structures by simulated annealing*. Simulated Annealing, Cap. 5, pp- 307-320. Editorial: I-Tech Education and Publishing, año 2008. ISBN 978-953-7619-07-7.

4.5 Participation in Funded Research Projects

4.5.1 Participation in Publicly Funded R&D Projects

AGENCIA ESTATAL DE INVESTIGACIÓN HYBRID OPTIMIZATION OF THE LIFE CYCLE OF BRIDGES AND MIXED AND MODULAR STRUCTURES OF HIGH SOCIAL AND ENVIRONMENTAL EFFICIENCY UNDER RESTRICTIVE BUDGETS

Ref.: PID2020-117056RB-I00

Investigadores participantes: Yepes Piqueras, Víctor; Alcalá González, Julián; Ruiz Vélez, Andrés; Martí Albiñana, José Vicente; Martínez Muñoz, David; Negrín Díaz, Iván Antonio

01/09/2021 - 31/08/2024

72.842,00 €

CLIMATE-KIC HOLDING B.V. Pioneers into Practice Spain 2022

Investigadores participantes: Gómez Martín, María Esther; Molines Llodra, Jorge; Sanz Benlloch, María Amalia; Giménez Carbó, Ester; Andrés Doménech, Ignacio; Alcalá González, Julián

01/09/2022 - 31/12/2022

10.000,00 €

CLIMATE-KIC HOLDING B.V. MARITIME THEMED ACCELERATOR

Ref.: EIT_3.1.1_210206_P066_1A

Investigadores participantes: Gómez Martín, Maria Esther; Medina Folgado, Josep Ramón; Coll Arnau, Salvador; Pallarés Rubio, Luis; Aguilar Herrando, José; Giménez Carbó, Ester; Andrés Doménech, Ignacio; Pallarés Rubio, Francisco Javier; Alcalá González, Julián.

01/10/2021 - 31/12/2021

21.206,00 €

GENERALITAT VALENCIANA EFFICIENT CONTRACTING OF INFRASTRUCTURES UNDER CRITERIA OF SOCIAL AND ENVIRONMENTAL SUSTAINABILITY (CONSOST)

Ref.:GV/2018/085

Contributing researchers: Garcla-Segura, Tatiana; MontalbAn-Domingo, Laura; AlcalA-GonzAlez, JuliAn; Sanz-Benlloch, Marla Amalia.

01/01/2018 - 01/01/2019

5.900,00 €

MINISTERIO DE ASUNTOS ECONOMICOS Y TRANSFORMACION DIGITAL DECISION MAKING IN THE MANAGEMENT OF THE LIFE CYCLE OF PRE-STRESSED BRIDGES OF HIGH SOCIAL AND ENVIRONMENTAL EFFICIENCY UNDER RESTRICTIVE BUDGETSS

Ref.:BIA2014-56574-R-AR

Contributing researchers: PenadEs-PIA , Vicent; Garcla-Segura, Tatiana; Tasquer-Val, Daniel; AlcalA-GonzAlez, JuliAn; Yepes, V.; MartI Albiñana, JosE Vicente; Pellicer, Eugenio; Gonzalez Vidosa, Fernando.

01/01/2015 - 01/10/2018

41.140,00 €

MINISTERIO DE ASUNTOS ECONOMICOS Y TRANSFORMACION DIGITAL EFFICIENT DESIGN OF STRUCTURES WITH UNCONVENTIONAL CONCRETE BASED ON SUSTAINABLE MULTI-OBJECTIVE CRITERIA THROUGH THE USE OF DATA MINING TECHNIQUES

Ref.:BIA2011-23602

Contributing researchers: Garcla-Segura, Tatiana; AlcalA-GonzAlez, JuliAn; MartInez MartIn, Francisco JoaquIn; Luz Ivars, Alejandro JosE; Yepes, V.; MartI Albiñana, JosE Vicente; Gonzalez Vidosa, Fernando.

01/01/2012 - 31/05/2015

21.780,00 €

GENERALITAT VALENCIANA ECONOMIC AND ENVIRONMENTAL CRITERIA FOR THE OPTIMAL DESIGN OF IN-SITU CONCRETE OVERCAPES THROUGH ARTIFICIAL INTELLIGENCE AND DATA MINING TECHNIQUES

Ref.:GV/2010/086

Contributing researchers: Villaba Izquierdo, Pere; AlcalA-GonzAlez, JuliAn; Adam, Jose M; Yepes, V.

01/01/2010 - 01/01/2012

6.000,00 €

UNIVERSITAT POLITECNICA DE VALENCIA DATA MINING APPLIED TO THE ESTABLISHMENT OF DESIGN CRITERIA AND OPTIMAL PREDIMENSIONING OF BRIDGE BOARDS OF PRESTRESSED CONCRETE SLAB

Ref:PAID-06-09-2743

Contributing researchers: Villaba Izquierdo, Pere; AlcalA-GonzAlez, JuliAn; Yepes, V.; Gonzalez Vidosa, Fernando.

04/03/2009 - 04/01/2010

46.180,00 €

MINISTERIO DE EDUCACION OPTIMAL SUSTAINABLE DESIGN OF PRE-TENSIONED BRIDGE DECKS

Ref: BIA2006-01444

Contributing researchers: F. GonzAlez Vidosa, A. Hospitaler, V. Yepes y J. AlcalA.

01/10/2006 - 01/10/2009

32.065,00 €

MINISTERIO DE FOMENTO ECONOMIC HEURISTIC OPTIMIZATION OF ROAD AND RAIL PASSING FRAMES

Ref: 80016/A04

Contributing researchers: F. GonzAlez Vidosa, A.Hospitaler, V. Yepes y J. AlcalA

01/11/2005 - 30/11/2007

30.000 €

4.5.2 Participation in R&D Contracts of Special Relevance with Companies and/or Administrations

PREVALESA S.L. OPTIMIZED DESIGN OF A PREFABRICATED CROSS BEAM WITH HAC WITH FIBERS, APPLYING ARTIFICIAL INTELLIGENCE

Contributing researchers: Alcalá-González, Julián; Martí Albiñana, José Vicente; Yepes, V.; González Vidosa, Fernando.

04/03/2009 - 04/01/2010

46.180,00 €

Rover-Alcisa S.A. OPTIMIZATION BY SIMULATED CRYSTALLIZATION OF REINFORCED CONCRETE RETAINING WALLS

Contributing researchers: F. González Vidosa, A. Hospitaler, V. Yepes y J. Alcalá.

30/11/2005 - 30/10/2007

6.000,00 €

Gadea Hermanos S.A. ECONOMIC OPTIMIZATION OF PREFABRICATED REINFORCED CONCRETE FRAMES

Contributing researchers: V. Yepes, F. González Vidosa y J. Alcalá.

01/02/2006 - 31/01/2007

6.000,00 €

S.A. de Obras y Servicios, COPASA DEFINITION OF A BRIDGE OPTIMIZATION METHODOLOGY FOR PRESTRESSED CONCRETE SLAB

Contributing researchers: F. González Vidosa, J. Alcalá y V. Yepes

01/09/2006 - 30/08/2008

15.000,00 €

4.6 Supervised Doctoral Theses

2. *Life cycle optimization analysis of bridge sustainable development*

Zhiwu Zhou

Date: 13/01/2023

Directors: Yepes, V.; Alcalá-González, Julián

1. *Heuristic optimization of postensioned slab floors*

Ángel Manuel Rodríguez-Calderita Facundi

Date: 09/12/2015

Directors: Yepes, V.; Alcalá-González, Julián

4.7 Patents

BEAM IN COMPOSITE STEEL-CONCRETE BOX

Authors: Alcalá González, Julián; Navarro Ferrer, Ferran

Ref.: P202030530

National registration date: 04/06/2020

4.8 Artistic Exhibitions

Technology and research in building 2015

VALENCIA EXCO FAIR / CEVISAMA. FMI

Start date: 02/11/2015 End date: 02/13/2015

Authors: David Llacer, Enrique; Yepes, V.; Rodríguez-Calderita-Facundi, Ángel Manuel; Alcalá González, Julián

5 Other Achievements

- *Colegio de Ingenieros de Caminos, Canales y puertos. Colegiado nº 11.691*
- Personal member of *Asociacion de Ingenieros de Caminos, Canales y Puertos y de la Ingeniería Civil* (Spanish Association of Civil Engineering)
- Personal member of *ACHE - Asociación Española de Ingeniería Estructural* (Spanish Association of Structural Engineering)
- Director of the Business Chair ROVER-UPV.
- Director of the Business Chair CHM-Digitalization.

5.1 Other Courses and Seminars Taught

Steel elements design. Year 2015-2016. Hours: 10.5

Construction techniques of civil engineering for building professionals. Retaining structures and soil improvement. Year 2010-2011. Hours: 6

Construction techniques of civil engineering for building professionals. Overpasses structures in roads. Year 2010-2011. Hours: 27

Construction techniques of civil engineering for building professionals. Earthmoving and compaction equipment. Year 2010-2011. Hours: 9

He has participated in the PRAKTIKUM⁵ program:

- 2018 E.T.S.I. CAMINOS, CANALES Y PUERTOS Faculty and Project Coordinator
- 2017 E.T.S.I. CAMINOS, CANALES Y PUERTOS Faculty Coordinator and Project Participating Professor
- 2016 E.T.S.I. CAMINOS, CANALES Y PUERTOS Faculty Coordinator and Project Participating Professor
- 2015 E.T.S.I. CAMINOS, CANALES Y PUERTOS Project Participating Professor

5.2 Attendance at Pedagogical Training Courses

He has attended the following courses organized by ICE⁶

- Prevention against Sars-Cov-2 coronavirus infections at work. Teaching and research staff. 23/06/2020 - 30/05/2020 (2 horas)
- Options to generate question batteries in PoliformaT. 11/06/2020 (2 hours)
- Copyright. Permitted Uses of Copyrighted Material. Search and selection of materials with free use licenses. 06/06/2019 (4 hours)
- Integration and evaluation of competencies in the final degree and master's work. 30/01/2018 (4 hours)
- How to control plagiarism through Poliformat: the TURNITIN tool. 29/01/2018 (2.5 hours)
- Project-based learning. 12/02/2015 - 13/02/2015 (25 hours)
- Integration and evaluation of competences in the final degree and master's work. 08/04/2014 23/04/2014 (5 hours)
- Elaboration of multimedia resources for teaching: teaching publications with the UPV's LaTeX staff - (University pedagogical and technological training plan) 15/01/2014 - 06/02/2014 (25 hours)
- Preparation of Screencast videos with CamStudio. 28/05/2013 (4 hours)
- Preparation of subtitles for teaching videos. 21/05/2013 (4 hours)
- Preparation of rubrics for the evaluation of competences. 14/05/2013 (8 hours)
- Tutoring and monitoring of student work through Poliformat. 28/06/2011 (6 hours)
- Polimedia plus: multimedia resource for teaching. 08/05/2012 - 28/05/2012 (20 hours)
- Learning ecosystems: challenges of engineering / science education in the 21st century. 24/01/12 (6 hours)
- Genetic algorithms. 08/03/2004 - 12/03/2004 (10 hours)
- Reinforced and prestressed concrete (based on spanish concrete code EHE). 08/11/1999 - 30/11/1999 (40 hours)

⁵Summer workshop program for high school students organized by the UPV

⁶Institute of Education Sciences, Universitat Politècnica de Valencia