Prof. Carlos Navarro´s brief curriculum

Dr. Navarro obtained his B. Sc. Eng. in 1976 at the Polytechnic University of Madrid and his Doctorate in 1987 at the University of Cantabria (Spain). He worked as an engineer in private industry for ten years (1977-1987) on soil-structure interaction problems and earthquake engineering in Nuclear Power Plants. He joined the University in 1976 as Assistant Professor in the Materials Science Department of the Polytechnic University of Madrid. In 1987, he left the private sector and was appointed Professor of this Department. In1993 he was appointed Full-Professor of Structural Analysis at the Carlos III University of Madrid (his present University). He headed the Mechanical Engineering Department from 1995 until 1998, when he was elected Dean of the Engineering Faculty of that University. From 1996 to 1998 he was also Head of the Spanish Association of Composite Materials (AEMAC) and is currently a member of its Executive Council. Since 1992 he has also been a member of the Governing Board of the European Association DYMAT (Association for the Promotion of the Study of the Dynamic Behaviour of Materials) and in September 2000 he was elected as Head of this European Association. In 2004, he was appointed Vice-President of Carlos III University of Madrid in charge of all concerning with the European Convergence in the High Education Area.

Professor Navarro's contributions to research span a wide field in Mechanical Engineering: dynamic structural problems, dynamic characterization of materials, numerical and analytical modeling of impact problems, composite materials engineering and dynamic Fracture Mechanics. He has been engaged in several research projects in these fields supported by the Spanish Commission of Science and Technology (CICYT) and the Council of the Community of Madrid. At present he is engaged in the dynamic response of composite materials (CFRP´s and new plastic composites reinforced with ceramic particles) subjected to projectile impact, and in the development of engineering and analytical models to simulate impact problems on metals, composites, ceramic/metal, ceramic/composite armors.

Recent Scientific Publications:

- L. Rubio, J. Fernández-Sáez y C. Navarro, “Determination of dynamic fracture-initiation toughness in SHPB three-point bending tests”, EXPERIMENTAL MECHANICS, 2003, Vol. 43, No. 4, pp 379-386

- A. Arias, R. Zaera, J. López-Puente y C. Navarro, “Numerical modeling of the impact behaviour of new particulate-loaded composite materials”, COMPOSITE STRUCTURES, 2003, Vol. 61, pp. 151-159

- T. Gómez del Río, E. Barbero, R. Zaera y C. Navarro, “Dynamic tensile behaviour at low temperature of CFRP using a Split Hopkinson Pressure Bar”, COMPOSITES SCIENCE AND TECHNOLOGY, 2005, Vol. 65, Issue 1, pp 61-71

- S. Sánchez, E. Barbero, R. Zaera y C. Navarro, “Compression after impact strength of thin composite laminates”, COMPOSITES SCIENCE AND TECHNOLOGY, 2005, Vol. 65, Issue 13, pp 1911-1919

- J. López-Puente, A. Arias, R. Zaera y C. Navarro, “The effect of the thickness of the adhesive layer on the ballistic limit of ceramic/metal armours”, INT. JOURNAL IMPACT ENGINEERING, 2005, Vol. 32, Issues 1-4, pp. 321-336

- T. Gómez del Río, R. Zaera , E. Barbero y C. Navarro, “Damage in CFRPs due to low velocity impact at low temperature”, COMPOSITES PART B: ENGINEERING, 2005, Vol. 36, Issue 1, Jan 2005, pp. 41-50

- J. López-Puente,R. Zaera, y C. Navarro, “An analytical model for high velocity impacts on Thin CFRP’s woven laminated plates”, INT. JOURNAL OF SOLIDS AND STRUCTURES, 2007, Vol. 44, pp.2837-2851.

- J. López-Puente,R. Zaera, y C. Navarro, “Experimental and numerical analysis of normal and oblique ballistic impact on thin carbon/epoxi laminates”, COMPOSITES PART A: APPLIED SCIENCE AND MANUFACTURING, 2007, In Press

- Sánchez-Sáez, S., Barbero, E., y Navarro, C.**,** "Analysis of the dynamic flexural behaviour of composite beams at low temperature", COMPOSITE SCIENCE AND TECHNOLOGY, 2007, Vol. 67, Issue 11-12, pp: 2616-2632.