



ARCHIMEDES



HELLENIC REPUBLIC
MINISTRY OF EDUCATION, LIFELONG LEARNING
AND RELIGIOUS AFFAIRS

Research Project Submission Platform

Sign out

Archimedes Phase II Evaluation Results for Proposal:

32
HYDROELASTIC RESPONSE OF LARGE FLOATING STRUCTURES AND ARBITRARILY SHAPED BODIES IN AN ENVIRONMENT OF VARYING 3D BATHYMETRY.
HydELFS

Evaluator I

Completeness and Clarity of the Research Proposal (YES/NO): <u>YES</u>
<i>project is clearly presented, aims are well indicated, good state of the art and innovative aspects well justified. The project is well structured and the WPs are well organized, integrated and justified.</i>

Impact of the Research Proposal (20%): 3.5

good possibility of impact, naturally depending on the achievement of the objectives. The scientific team give good indication of success

Excellence of the Research Proposal(40%): 3.5

Good proposal, well justified, good knowledge of the state of the art and on the advances needed in this area. Budget could be reduces in some 10-15%. No breakdown of costs during the years is presented. Good proposals for dissemination of the project and of the subject.

Excellence of the Research Team (40%): 3.6

the research team has experience in this field and give confidence on the achievement of the proposed goals

Evaluator II

Completeness and Clarity of the Research Proposal (YES/NO): YES

The abstract states the importance of the "interaction between sea waves and very large floating elastic structures and bodies". It goes on the "aim of the proposed project is the development of innovative design and computational tools by introducing new nonlinear hydroelastic/hydrodynamic mathematical models for the calculation of the wave-structure

and wave-ice interaction, in general bathymetry regions. This will permit the resolution of technical problems by simulating/predicting the interaction of waves with large floating structures, as well as with sea-ice contributing to global environmental risk assessment. In this research numerical models and techniques will be developed for wave propagation over coastal and marine areas of varying 3D bathymetry." Though the interaction with sea ice is mentioned, this is unlikely to be an important application for near-shore Greece.

Impact of the Research Proposal (20%): **3.8**

The abstract states this is "an interesting problem, finding important applications in designing large offshore floating structures (production/extraction and storage/offload stations, offshore wind farms) and in the coastal zone as floating airports, facilities, bridges, marinas or breakwaters." It goes on: "This will permit the resolution of technical problems by simulating/predicting the interaction of waves with large floating structures, as well as with sea-ice contributing to global environmental risk assessment." No member of the team demonstrates any experience with ice. As ice sheets are one of the two key pillars of the proposal this deficiency of knowledge is significant, and may lessen the international impact of the research in countries where sea ice is a relatively important consideration.

Excellence of the Research Proposal(40%): **3.9**

The proposal is outstanding and exceeds the requirements and content of the call. The interdisciplinary effort of scientists working at Greek and American universities is a very important aspect of the proposal. The objectives of the proposal are innovative in nature and have many important potential applications. The proposed work goes beyond the current state-of-the-art by developing methods and techniques that can be used for continuing the study of the interaction and control of large floating elastic bodies in a hydrodynamic setting. The project will contribute substantially to the increase of Greek engineering competitiveness in Europe and the whole World and its visibility. In addition, the proposal intends to employ young independent researchers for training.

Excellence of the Research Team (40%): **3.9**

The research team consists of 5 members from TEI Athens, including the coordinator, one professor each from NTUA, Texas T&M university and Hellenic Centre for Marine Research plus three external professors and 2 PhD candidates. The coordinator has much experience in teaching and research and will undoubtedly need significant administrative help as this seems to be a new undertaking for him.



Ministry of Education, Lifelong Learning and Religious Affairs
37, Andrea Papandreou Street 15180 Marousi, Athens, Greece.

TEI ΑΘΗΝΑΣ	32	HydELFS	HYDROELASTIC RESPONSE OF LARGE FLOATING STRUCTURES AND ARBITRARILY SHAPED BODIES IN AN ENVIRONMENT OF VARYING 3D BATHYMETRY.	KOKKINOS FILIS- TRIANANTAPHYLLOS <i>OK wait ✓</i>	83.000,00	17.000,00	project is clearly presented, aims are well indicated, good state of the art and innovative aspects well justified. The project is well structured and the WPs are well organized, integrated and justified.	good possibility of impact, naturally depending on the achievement of the objectives. The scientific team give good indication of success	Good proposal, well justified, good knowledge of the state of the art and on the advances needed in this area. Budget could be reduces in some 10-15%. No breakdown of costs during the years is presented. Good proposals for dissemination of the project and of the subject.
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