

Popularisation of Science and Technology

# Maritime Faculty Presented Student Works at the Festival of Science

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The Festival of Science is presented in (Puljak, 2015) (available at: [http://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=203412](http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=203412)). The Faculty of Maritime Studies was represented by two talented students: Matko Stanić and Željka Popović.

The first demonstration was a solar ship, with actual solar panel control (Stanić, 2015). Panel efficiency was maximized

by lending them the ability to rotate towards sources of light using simple photo-resistors instead of electronics. Mr. Stanić built the solar panel ship model from scratch. A video of the ship's navigation is available in the supplementary materials (at link: [http://toms.com.hr/archive/vol4/no2/maritime\\_faculty\\_presented\\_student\\_works.mp4](http://toms.com.hr/archive/vol4/no2/maritime_faculty_presented_student_works.mp4)).

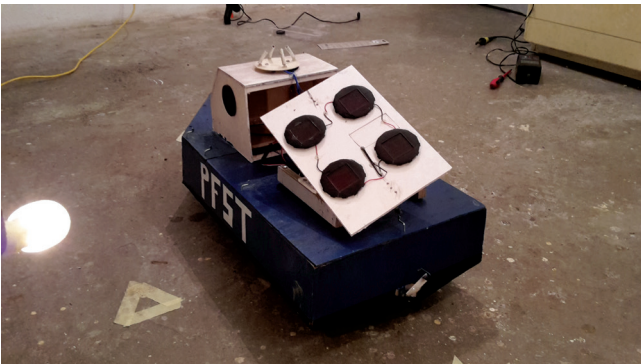


Figure 1.  
Ship model at the Festival.

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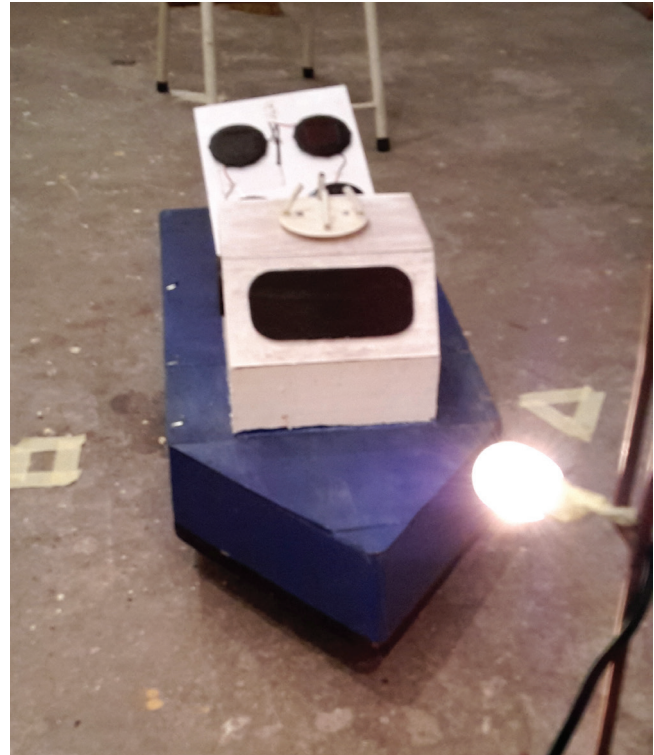


**Figure 2.**  
Solar panel rotation towards sources of light (starboard).



**Figure 3.**  
Solar panel rotation towards sources of light (port and aft).

The other presentation of the Faculty of Maritime Studies in Split was an experimental simulation of a magnetic storm, performed by student Željka Popović, also a member of the Faculty's Student Council. She used a student globe, compass and an electromagnet. Compass needle started changing direction with the approach of the solar storm (with the electromagnet acting as the storm). The experiment shows how we depend on our star.



**Figure 4.**  
Solar panel rotation towards sources of light (starboard).

The needle was also shown to change direction in the presence of a turned-on mobile phone.

#### REFERENCES

- Puljak, L., (2015), Festival of Science: An Opportunity to Promote University Research, *Transactions on Maritime Science*, 4(1), pp. 85.  
[http://hrcak.srce.hr/index.php?show=clanak&id\\_clanak\\_jezik=203412](http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=203412)
- Stanić, M., (2015), *Upravljanje modelom broda na solarni pogon*, (in Croatian), Master Thesis, Split: University of Split, Faculty of Maritime Studies in Split.