



## Volume 2, Issue 5, May 2011

---

**By IJSER Editorial Board**

IJSER is honoured to announce the publication of the volume 2 issue 5 for the year 2011 of the International Journal of Science & Engineering Research. This Journal provides a glimpse into a few of the many high quality research activities conducted by the talented researchers around the world. The Journal is a compilation of outstanding papers from numerous disciplines submitted by students, researchers and scientists who have been involved in research, scholarly, and creative activities. The papers are through with an enhanced skill set, including better problem solutions, critical thinking, and team-working skills. Since many researchers who are highly qualified in their region, support of academic and research has a direct and positive impact on the upcoming researchers. We would like to express our sincere thanks to all those scientists for choosing IJSER from the first volume of the Journal since year 2010 and making it to 2011 now. We would like to especially thank the editorial members of the IJSER team for their constant support over past 1 year and also a welcome to the new members joining the team. Many thanks to the paper review committee for their constant support in timely reviewing the papers to the best of their expertise knowledge. The support from prominent regional businesses and organizations is greatly appreciated and essential for the advancement of research and journal wellbeing. There is a wide range of paper submission all the way from technology to social science titles like “*A Study of Carcinogenic Components Removal in Chemical Industry*” by R.Uma Mythili, K.Kanthavel, R.Krishna Raj explaining The standard analysis method determines and calculates the constituent of hexavalent chromium and trivalent chromium compounds in

carcinogenic fumes. The research identifies that the presence of Carcinogenic components leads to the low generations of gastric juice, epithelial lining fluids to the human beings and animals. The deep technical titles like “*A Robust  $H_\infty$  Speed Tracking Controller for Underwater Vehicles via Particle Swarm Optimization*” by Mohammad Pourmahmood Aghababa, Mohammad Esmael Akbari covering the details of an  $H_\infty$  controller designing method for robust speed tracking of underwater vehicles, using Particle Swarm Optimization (PSO). Nonlinearity mapping of the underwater vehicles model to a nominal linear model, by employing a linear controller for a nonlinear model, is one of the main contributions of this paper. For reaching the linear  $H_\infty$  controller, the nonlinear models linearized around an operating point. Both nonlinear and linearized models are discussed. A brief explanation of  $H_\infty$  synthesis.

To learn more, please visit <http://www.ijser.org/>. We would like to thank all the contributing authors for providing such a rich variety of outstanding research articles on a broad range of exciting topics. We also would like to thank Graphic Designer and web administration for designing the outstanding coverage and web maintenance of this volume of the Journal.

If you have any questions or comments about the Journal, or would like to receive a printed copy of the most recent volume of the Journal, please contact the Editor board from <http://www.ijser.org/contact-us.aspx>. The Journal is available online, please visit the following website: <http://www.ijser.org/>.

Enjoy!

The Editorial Board