



Symposium on “Advances in Hydrodynamics and Autonomous Sea Vehicles”

1. INTRODUCTION

A two day Symposium on “Advances in Hydrodynamics and Autonomous Sea Vehicles” is being organised during 20th and 21st Jan 2022 at NSTL as a part of nation's celebrations on Azadi Ka Amrut Mahotsav.

2. AIM/PURPOSE

Technology Directorate (Hydrodynamic Research) of NSTL has been carrying out extensive studies on marine vehicles to provide the much needed hydrodynamic performance characteristics to the designers of warships/submarines, underwater weapons and autonomous vehicles. Hydrodynamic tests facilities play a vital role in carrying out a large number of hydrodynamic model tests for performance evaluation of surface ships and under water vehicles in terms of powering, manoeuvring, seakeeping and also in the development of prediction methodologies. These technological methods developed at NSTL have furthered DRDO's effort in pursuing indigenous model testing/performance evaluation activities leading to self-reliance in experimental hydrodynamics.

With the recent advances in hydrodynamics and increased importance on the autonomous sea vehicles, it is proposed to organize a two day Symposium on “**Advances in Hydrodynamics and Autonomous Sea Vehicles**” during **20th and 21st Jan 2022** at **NSTL**. Experts in the relevant fields from Academia, R&D organizations, Indian Navy (User group) and Industry are being invited to deliver talks on the proposed theme with about 40 participants (online/offline). The Symposium will greatly benefit NSTL's objective of attaining self reliance in hydrodynamics as well as technical know-how on the recent advances in hydrodynamic and autonomous sea vehicles.

3. RELEVANCE OF THE SYMPOSIUM THEME

In the dynamic scenario of today's world there exists an increased demand in autonomous sea systems and related advancements in hydrodynamics of nation's interests. Development of such systems and technologies will help in country's self reliance and more importantly nation's security with strategic importance. The onus is therefore upon R&D organizations working in these areas, to constantly strive to provide best solutions to the user, the Indian Navy.

4. THRUST AREAS

- Hydrodynamics and control of marine vehicles
- Recent advances in hydrodynamics
- Autonomous Underwater Vehicles
- Autonomous Sea-surface Vehicles
- Simulation Based Design

5. SYMPOSIUM PROCEEDINGS

It is also proposed to bring out detailed proceedings of the symposium for distribution and record keeping.

Azadi Ka Amrit Mahotsav

Meeting link :

Date- 20/01/2022

<https://drdo.webex.com/drdo/j.php?MTID=me259b46a63326964a25c972a5387488a>

Azadi Ka Amrit Mahotsav

Meeting link :

Date- 21/01/2022

<https://drdo.webex.com/drdo/j.php?MTID=m1d21a01f4ebf3eb02a3992a89c9ae69d>