

WORLD MARITIME TECHNOLOGY CONFERENCE SUBJECT STREAMS

MARINE ENGINEERING SYSTEMS

ICMES 2006: 10th International Conference on Marine Engineering Systems

In looking to the future there are a number of developmental, environmental and political issues which affect marine engineering systems design. This conference stream will consider how marine engineering systems may change and evolve to meet these and other emerging constraints and opportunities.

waste management • ballast water management • hydrodynamics and hull forms • manoeuvrability and propulsors • energy efficiency and utilisation • ship emissions • standards and regulation • control

COMMERCIAL SHIPPING

Commercial shipping plays a key role in the world economy carrying raw materials, goods and people across the oceans and along the waterways of the world. Innovative and sustainable ship designs, construction methods, operational management and ship disposal contribute to the ongoing success of the world commercial shipping industry and all rely on the continuous development of new maritime technologies. This conference stream will highlight some of these new technologies and describe how they are enabling commercial shipping to become ever more safe and efficient and to minimise its environmental impact.

ship design • construction • operation • repair and maintenance • disposal

NAVAL ENGINEERING

INEC 2006: 8th International Naval Engineering Conference

All navies are facing increased financial, environmental, legislative, and support constraints, whilst under pressure to maintain maximum operational capability. This conference stream will consider the innovative and novel concepts being developed to address these challenges and the practicalities of turning them into reality.

innovative platform designs • global support solutions • propulsion systems • auxiliaries • SMART acquisition • modelling and simulation • human factors

OFFSHORE OIL AND GAS

For the last 200 years, hydrocarbons have formed the basis for world energy supplies. In today's evolving energy market the industry is facing not only the challenges of new and frontier regions such as deepwater and marginal fields but at the same time focussing on developing and deploying technology to help mitigate production decline in mature basins. This conference stream will address the complex and changing role of offshore E&P and consider the impact of new knowledge and technology on ultimate recovery.

floating production systems • production and operations • increased recovery • development challenges

UNDERWATER VEHICLES

Underwater vehicles are playing an increasingly important role in the exploration and exploitation of the subsea domain world-wide, with important contributions to be made in the military, commercial and scientific sectors. This conference stream will concentrate on the key technical developments in autonomous and remotely-operated vehicles, and their associated enabling technologies.

vehicles and platforms • navigation, guidance, control and communication • sensors/interfaces • applications

MARINE RENEWABLE ENERGY

MAREC 2006: 4th International Marine Renewable Energy Conference

Two thirds of the planet is occupied by the earth's oceans. Traditionally mankind has looked towards the oceans for transport and food. Now, due to the ever-increasing demand for energy, mankind is now looking towards the oceans as a sustainable energy source. This global energy challenge is being executed in the shadow of global climate change. This conference stream will highlight how the marine and offshore industries are adapting in order to rise to the global energy challenge.

technology • power and control • O & M • policy and planning • environmental

EEZ MANAGEMENT

36% of the world's oceans are encompassed within the United Nations Convention on the Law of the Sea (UNCLOS) definitions of an Exclusive Economic Zone (EEZ). 97% of world trade travels by sea and thus passes through someone's EEZ and port facilities. Maintaining law and order, environmental protection, safety of navigation and transit of shipping, and safety of life at sea present many challenges. This conference stream focuses on the innovative solutions linked with state of the art technologies to address these challenges.

command and control • maintenance of law and order • environmental protection • safety of navigation and transit • ship and port facility security (ISPS Code) • management of mineral and ecological resources • EEZ management vessels

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COAST AND OCEAN MAPPING

The measurement, description and depiction of the nature and form of the seabed has been crucial to the exploration and management of marine resources, yet, we know more about the face of the moon than the ocean floor. This conference stream focuses on the development of new and innovative hydrographic and ocean mapping technologies and their applications.

innovative platforms • communications • remote sensing • processing • ocean policy

OPERATIONAL OCEANOGRAPHY

Operational oceanography has been a major topic of research and development over the past decade and there is increasing practical experience in implementation. However, in this exciting area there remain many wide-ranging challenges and opportunities. This conference stream will focus on the delivery of effective oceanographic observing, monitoring and forecasting systems.

initiatives and regulatory frameworks for operational oceanography • ocean observing systems • ocean forecast modelling and data assimilation • ocean data management and dissemination • industry and government applications

REEFS OF THE WORLD

Reefs are hotspots for biodiversity, have high economic value as both tourism sites and productive fishing locations and in some shallow locations they present a challenge to shipping operations. Reefs also present an opportunity for a balanced approach to integrated ocean management where there is a challenge to create stability between the pressure from economic development and the high conservation value. This conference stream will focus on coral, temperate, deepwater and artificial reefs and their common traits.

biodiversity of submarine reefs • eco-security: exotic species translocation • climate change effects on reefs • oceans policy