Announcement & Registration Form

T-POD

The 1st International Conference on Technological Advances in Podded Propulsion

14th - 16th April 2004

The School of Marine Science and Technology,
University of Newcastle.
Part of the Fifth Framework Project – FASTPOD

UNIVERSITY OF
NEWCASTLE

Contents

T-POD

The last decade has witnessed a growing uptake of integrated electric driven podded propulsion units. Since their commercial introduction in the early 1990's their range of application, capacity and unit type has increased tremendously. In recognition of this the European Commission has supported a number of large collaborative research and development projects in relation to pod technologies. Further, at its 23rd meeting, the International Towing Tank Conference (ITTC) established a specialist committee on Azimuthing Podded Propulsion to review, over the next three years, the procedures for testing, extrapolation and other issues involving off design loads, stability and impact on the IMO manoeuvrability criteria.

In spite of the above activities there has been no focused international event to discuss the past, present and future of podded propulsion. It is therefore timely to gather together pod manufacturers, shipyards, operators, designers, test facilities, classification societies, regulatory authorities, researchers and other interested parties to discuss and disseminate advances in podded propulsion technology.

T-POD will provide a platform for this discussion and will serve to disseminate the activities within the Fifth Framework Projects sponsored by the EC Framework Programme.

Venue

The main reception including the registration, evening banquet and recital will take place in the King's Hall, situated within the Armstrong Building. The welcome reception, in the evening of the first day, will take place in the historic Turbinia Hall of the Discovery Museum in Newcastle, the home of the famous steam launch "Turbinia".

The Robert Boyle Lecture Theatre, also situated in the Armstrong Building, will be the location for the conference presentations.

T-POD

T-POD Committees

Standing Committee:

Mehmet Atlar (Chairman)	University of Newcastle, UK
François Besnier	Principia Marine, FRANCE
John Carlton	Lloyd's Register, UK
Jürgen Friesch	HSVA, GERMANY
Juha Hanhinen	Deltamarin, FINLAND
Leszek Konieczny	CTO, POLAND
Kazimierz Lapinski	Stocznia Gdynia SA, POLAND
Gianpiero Lavini	Fincantieri – Cantieri Navali Italiani S.p.A., ITALY
Roger Lepeix	ALSTOM Chantiers de l'Atlantique, FRANCE
Pierre Marchall	Technicatome SA, France
Charles Nisbett	BAe Systems, UK
Marek Nowak	Stocznia Szczecinska Nowa Spolka z o.o., POLAND
Jakko Pylkkänen	VTT, FINLAND
Ted Rosendahl	SSPA SWEDEN
Luca Sebastiani	Cetena, ITALY
Osman Turan	University of Strathclyde, UK
Per Wimby	Stena Rederi AB, SWEDEN

Organising Committee:

Mehmet Atlar	Professor of Hydrodynamics
Dr. David Clarke	Senior Lecturer
Dr. Ted Glover	Senior Lecturer (retired)
Kathleen Heads	School Administrator
Atilla Incecik	Lloyd's Register Professor of Offshore Engineering, Head of School of Marine Science and Technology.
Duncan McLean	Visiting Fellow
Dr. Ehsan Mesbahi	Senior Lecturer
George Mitchell	Senior Experimental Assistant
Tony Roskilly	Professor of Marine Engineering
Rod Sampson	Research Associate
Michael Woodward	Technical Manager – FASTPOD

Provisional List of Papers

The following provisional list of papers does not reflect the order and sequence of paper presentation, which is a subject for the final programme.

Calculation method for steering forces of a pod in hybrid propulsion

P Ruponen and J Matusiak

Helsinki University of Technology, FINLAND

Study on the powering performance evaluation for the CRP-Pod propulsion ships

G Seokcheon, S Heungwon and B J C Bong

Hyundai Heavy Industries Co. Ltd, KOREA

Double Acting Tanker – Experiences from model tests and sea trials

P Tragardh and P Lindell

SSPA Sweden AB, SWEDEN

Pod propulsion research and development at the Applied Research Laboratory of Penn State University

J E Eaton and M Billet

ARL Penn State University, USA

Parametric investigations designed to help focused pod technology developments

P Goubault and J Perree

Principia Marine, FRANCE

Open water experiments with two pod propulsor models

M Grygorowicz and J A Szantyr

Gdansk University of Technology, POLAND

Measuring podded propulsor performance in ice

A Akinturk, S Jones, C Moores and J Bell

National Research Council – IMD, CANADA

Investigations about the forces and moments at podded drives

H J Heinke

Potsdam Model Basin, GERMANY

Manoeuvrability tests of a vessel with pod propulsion

L Kobylinski

Ship Handling Research and Training Centre, POLAND

Design of a model pod test unit

A MacNeil[1], R Taylor[2], S Molloy [2], T Randell[2], N Bose[2], P Liu[3], and B Veitch[2]

[1]Oceanic Consulting Corp., [2]Memorial University & [3]NRC-IMD, CANADA

Experience feed-back based class rules for pods

P Rennard
Bureau Veritas, FRANCE

Experimental investigation of flow around a podded propulsor using LDA

D Wang, M. Atlar and I Paterson
School of Marine Science and Technology,
University of Newcastle upon Tyne, UK

Numerical investigation on hydrodynamic performance of podded propeller

M Islam[1], R Taylor[1], J Quinton[1], B Veitch[2], N Bose[2], B Colbourne[2] and P Liu[1]
[1]NRC-IMD and [2]Memorial University, CANADA

Cavitation and vibration investigations for podded drives

J Friesch
Hamburgische Schiffbau Versuchsanstalt GmbH (HSVA), GERMANY

On propulsive performance of a small bulk-carrier model with twin podded propellers

K Nakatake[1], J Ando[1], A Yoshitake[1]and M Tamashima[2]
[1]Kyushu University and [2]Fluid Techno Co. Ltd., JAPAN

Numerical and experimental investigation tools for preliminary design of podded propulsor components

F Di Felice, M Felli, L Greco, F Pereira, F Salvatore and C Testa
INSEAN- Italian Ship Model Basin, ITALY

Systematic geometric variation of podded propulsor models

S Molloy, A. MacNeil, R Taylor, B Veitch and N Bose
Memorial University, CANADA

Numerical simulations of flows around a ship with podded propulsor

K Ohashi and T Hino
National Maritime Research Institute, JAPAN

Fluctuating pressure distribution on pod

F Deniset[1], J-Y Billard[1], R Jaouen[1] and J-M Laurens[2]
[1]Institute de Recherche de l'Ecole Navale & [2]ENSIETA, FRANCE

Full scale performance of double-acting tankers "Tempera and Mastera"

N Sasaki[1], J Laapio[2], B Fagerstrom[2], K Juurmaa[3] and G Wilkman[3]
[1]Sumitomo H. I. Ltd., JAPAN, [2]Fortum Oil and Gas Oy and [3]MARC, FINLAND

A discussion on the hydrodynamic performance for podded propeller in steady flow by using surface panel method

Z Lijun and W Yanying

Dalian University of Technology, CHINA

Selected aspects of pod propulsor work in operational conditions

J Kanar et al

CTO Ship Design Research Centre, POLAND

Manoeuvring aspects of pod-driven ships

Z Ayaz, O Turan and D Vassalos

Universities of Glasgow and Strathclyde, Ship Stability Research Centre, UK

Rim-drive propulsion – Improving reliability and maintainability over today's pods

B van Blarcom, A Franco, M Lea, S Peil, D Thompson and P van Dine

General Dynamics Electric Boat, USA

Steering with pods

A Junglewitz and O A el Moctar

Germanischer Lloyd, GERMANY

Preliminary results of testing on steady and unsteady dynamics of an azimuthing podded propulsor relating to vehicle manoeuvring dynamics

J W Stettler, F S Hover and M S Triantafyllou

Massachusetts Institute of Technology, USA

Hull design and optimisation with pod propellers with 5 and 6 blades

G Bertaglia, G Lavini and S Scarpa

Fincantieri Cantieri Navali Italieni SpA, ITALY

New podded drives for the power range 1-5 MW

S Kaul

Schottel GmbH & Co, GERMANY

Problem of the designing of CRP propellers for propulsion complex: "Propeller on the shaft + Electric thrusters"

A Pustoshny[1], V Bushkovsky[1], A Vasiljev[1], S Kaprantsev[1], I Frolova[1], A Jacolev[1] and T Veikonheimo[2]

[1]KSRI, Russia and [2]ABB Azipod, FINLAND

A comparison of the stopping modes for pod driven ships

M D Woodward, D Clarke and M Atlar

School of Marine Science and Technology,

University of Newcastle upon Tyne, UK

Research on wake model of pod propulsion

Q Z Fang

Naval Research Centre, CHINA

Propulsion system evolution

T Kontes

Festival Cruises, GREECE

Effect of pods on the roll behaviour of passenger vessels

O Turan, D Clelland, C Tuzcu and A Olcer

Universities of Glasgow and Strathclyde, Ship Stability Research Centre, UK

Operability of fast podded Ropax vessels in rough seas

K Sarioz[1], M Atlar[2], E Sarioz[1], M D Woodward[2], R Sampson[2]

[1]Faculty of Naval Architecture and Ocean Engineering,

Technical University of Istanbul, TURKEY

[2]School of Marine Science and Technology,

University of Newcastle upon Tyne, UK

Developments of ultra large container vessel with CRP-Pod propulsion system

S H Choi, K J Paik, Y C Lee and S E Kim

Samsung Ship Model Basin, Samsung Heavy Industries Co., Ltd, KOREA

On the hydrodynamic design of podded propulsors for fast commercial vessels

A Sánchez-Caja, J V Pylkkänen

(VTT Industrial Systems, Finland)

On the extrapolation of podded propulsor open water tests to full scale by RANS simulations

A Sánchez-Caja[1], A Pustoshny[2], M Lobachev[2]

([1]VTT Industrial Systems, Finland and [2]KSRI, Russia)

Podded propulsors driven by superconducting motors

M J O'Connor et al

(American Superconductor Corporation, USA)

Travel

How to get to Newcastle

Newcastle is an historic city with a vibrant industrial past. It has become today, the forefront of technical innovation, leisure and culture. Newcastle is situated on the coast in the North East of England, and by train journey is 3 hours North of London and 1.5 hours South of Edinburgh.

Travelling to Newcastle

Newcastle is well served by the major roads in the UK; from the South by the A1 or the A19, and from the West by the A69. For more detailed information the AA (www.theaa.com) will be able to provide times and routes from your location. Newcastle has rapid access to the rest of the UK and Europe by means of an international airport on the northern edge of the city providing links to most European capital cities; a fast rail connection to London and Edinburgh; a coach station and ferry services to Holland, Germany and Scandinavia.

For information on events and activities taking place in Newcastle together with additional listings of hotels, and other useful information see also: www.visitnewcastle.co.uk

Hotels and Accommodation

Hotels in Newcastle

The following gives a selection of hotels that can be found within Newcastle. These have been selected to give easy access to the University or local public transport links. Additional hotels may be found by following the tourist information link given above

Copthorne Hotel (Exclusive Hotel)
The Close, Quayside, Newcastle upon Tyne, NE1 3RT.
Tel. +44 (0)191 222 0333
Web: www.millenniumhotels.com
Situated on Newcastle's Quayside the Copthorne Hotel is close to the main railway station and Metro links to the University.

Malmaison Hotel (Exclusive Hotel)
Quayside, Newcastle upon Tyne, NE1 2PA
Tel. +44 (0)191 245 5000
E-mail: newcastle@malmaison.com
The Malmaison Hotel combines a traditional French brasserie feel with a classic contemporary hotel. The hotel is situated on the Quayside, 15 minutes walk from the University

Britannia Hotel (Moderate Priced Hotel)
Newcastle Airport, Woolsington, Newcastle upon Tyne NE13 8DJ
Tel. + 44 (0)191 401 9988
This modern hotel is well within walking distance of the Airport terminal building and offers a large car park. Access to the University is via a convenient and direct Metro rail link to the Haymarket Metro Station adjacent to the University.

Holiday Inn Newcastle City (Moderate Priced Hotel)
New Bridge Street, Newcastle upon Tyne, NE1 8BS
Tel. + 44 (0)870 400 9058
Web: www.newcastle.holiday-inn.com
Situated in the heart of Newcastle's city centre, the Holiday Inn is within walking distance of the University and a short taxi ride from the main railway station.

Royal Station Hotel (Moderate Priced Hotel)
Neville Street, Newcastle upon Tyne, NE1 5DH.
Tel. + 44 (0)191 232 0781
Web: www.royalstationhotel.com
The Royal Station hotel is situated adjacent to the main railway station and provides easy access to all of the main line and Metro rail links. The University is within 10 minutes walking distance from the hotel.

Swallow Imperial Hotel (Moderate Priced Hotel)
Jesmond Road, Newcastle-upon-Tyne, NE2 1PR
Tel. + 44 (0)191 281 5511
The Swallow Imperial is located in Jesmond, a 10 minutes walk from the University. The hotel has comfortable rooms and offers a pool and other leisure facilities.

Castle Leases Student Accommodation
(Budget Priced Accommodation)
Contact: Jeanette.Turnbull@ncl.ac.uk
There are a limited number of single study bedrooms all with wash-hand basin and shared shower and bathroom facilities.

T-POD Registration Instructions

Complete the contact details on the Registration Form with the information required. Ensure you provide an e-mail address to receive notification of updates on the conference.

Indicate the desired form of payment.

Mail or Fax the form to the address below to complete registration.

We kindly request those delegates paying by cheque to enclose a copy of this form with their remittance.

Please send the completed Registration Form and payment to:

T-POD
University of Newcastle,
School of Marine Science and Technology
Armstrong Building, Newcastle upon Tyne,
NE1 7RU, U.K.

Or Fax to:
+44(0) 191 222 5491 / 5067

Registration Fees:

£350 for delegates

£375 for late registration (after 1st February 2004)

£295 for principal authors (1 per paper)

£225 students - Students are kindly requested to enclose a copy of their student card or certification by programme director.

The fee includes registration, conference proceedings which will be handed to you upon registration at the conference desk, lunches, coffee/tea from Wednesday to Friday, the Reception on Wednesday evening and the Recital and Conference Dinner on Thursday evening.

Payment

Payment can be made by either Cheque, Bank Transfer or Credit Card as detailed on the Registration Form.

Cancellation of Registration

All fees, less a cancellation charge of £50 per conference delegate, will be refunded for cancellation requests received before 16th February 2004.

No refund of fees will be made for cancellation after this date but the conference proceedings will be mailed to you.

Registration Form

Surname

First Name Title ☐ Prof ☐ Dr ☐ Mr ☐ Ms

Organisation

Address

City

Country

Tel Fax

E-mail

Delegate £350 ☐

Delegate (registration after 1st February 2004) £375 ☐

Principal Author £295 ☐

Student £225 ☐

Method of Payment (please tick where appropriate)

Delegates wishing to pay by cheque:

I enclose a cheque ☐

Eurocheque ☐ made payable to: University of Newcastle

Delegates wishing to pay by Bank Transfer:

Bank Transfer in Sterling to Account No. 20177776 ☐

Bank Transfer in Euros to Account No. 69141744 ☐

Bank Transfer in US$ to Account No. 69141644 ☐

Sort Code: 20-59-42 Swift Code: BARCGB22 20-59-42

(Please Quote T-POD when placing your bank transfer)

Delegates wishing to pay by credit card:

Mastercard ☐ Visa ☐ Eurocard ☐

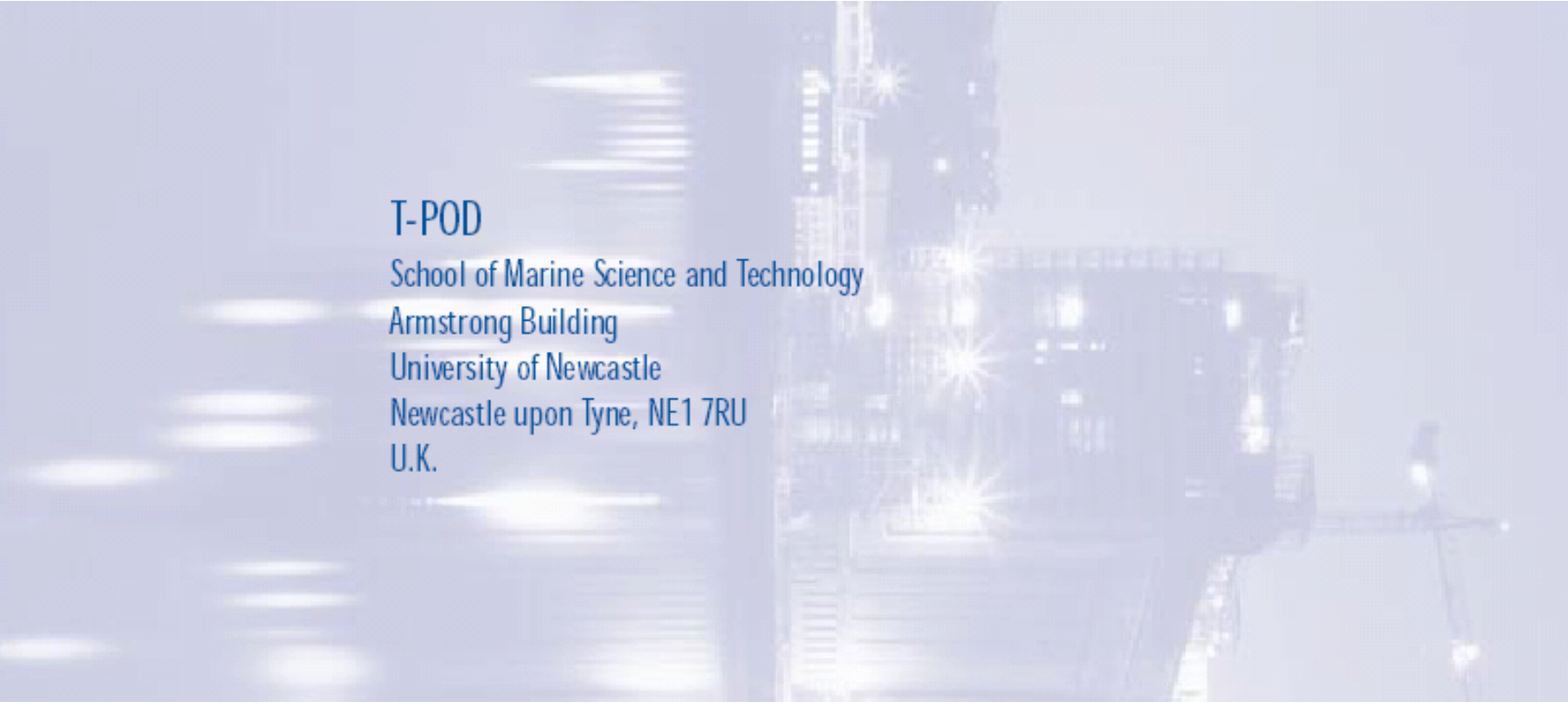
Credit Card Number ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Expiry Date

Name on Credit Card

Signature of Holder

If you Fax this form please ALSO enclose a copy with your remittance. Students are requested to attach a copy of their student card or certification by Programme Director.



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Conference contact details:

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