



**Seatrade Award  
The 10th SEATRADE AWARDS  
Innovation Category  
Ceremony at  
Guildhall, London, 24 May 1999**



“A former Southampton Institute PhD student has won a prestigious international maritime industry prize for the research work he did at the institute. Dr. Mohamed Farghaly, now Vice President of the Arab Academy for Science and Technology and Maritime Transport in Egypt, was presented with one of the Seatrade Awards at the London guildhall in front of the world’s maritime industry. The awards were presented by William O’Neil, Secretary General of the International Maritime Organization. He was also Chairman of Judges. Dr. Farghaly, who in 1996 became the first student to gain a PhD from the Institute’s Maritime Faculty, won the innovation category of the awards for his PhD thesis work on a decision-making system for collision avoidance. The Seatrade Awards are like the Oscars of the maritime industry. Most of the major shipowners and shipping organization were among the 330 guests. Dr. Farghaly’s work involved the development of an expert system able to perform intellectual processing of collision avoidance factors. This was the eleventh annual Seatrade Awards which attracts entries from all over the world. This year there were 79 entries from 18 countries.

Extracted from “PhD Research wins maritime industry Oscar”, page 17, the magazine of Southampton Institute’s Alumni Association – issue 7 autumn 99.



Seatrade AWARDS, GUILDHALL, City of LONDON, Monday 24 May 1999  
Guest of Honors, "William O'Neil", IMO Secretary General

## The 1999 Short Listed Entries, Category 3: Innovation

### 3.1 IMC Maritime System Development BV, **Holland**

Introduced "the Remotely Controlled Lifting Hook", which is based on a remote controlled connection/release of the hook and the lifting eye. This is achieved by fitting a steering wire smoothly to the tip of the hook; the wire is guided through the lifting eye of the load, and by pulling the wire the lifting eye automatically moves into the hook opening; where a safety latch prevents the release. Release of the Load can be controlled by the steering wire; by a slap to the wire or by use of a 'bowden-cable'.

The new hook combines increased safety to the operator and lifting operations in more adverse weather conditions.



Winners of Seatrade Awards, 1999

### 3.2 Integrated Simulators Complex ISC, **Egypt** (The Winner)

Based on Dr. Farghaly's PhD Thesis Introduced "A Decision-Making System for Collision Avoidance", which comprises of the design and testing of a sensible flow of relevant data within a Collision Avoidance advisory decision-making system using most available resources, and introduces a new approach to define the concept of ships' safe distance and evaluates the different types of manoeuvres. The innovative features of this system can be summarized in four points:

- Analyse the International Collision Regulations to identify uncertainty areas and introduce new ideas to resolve such areas;
- Design and test the flow of relevant data within a Collision Avoidance advisory decision-making system using most of the available resources;
- Introduce a new concept of the ship's safe distance and nine-point scale to evaluate different types of manoeuvre; and
- Develop a software programme to test the flow of data, and verify the concepts of the new proposed ideas.

Winners of Seatrade Awards, 1999

### 3.3 MOBIL International Aviation and Marine Sales Inc., **USA**

Introduced "the Residual Fuel detection (RFD) Test", which is a unique and automated analytical method for the detection and quantification of unburned residual



fuel in marine engine oils. The method is based on electron spin resonance (ESR) spectroscopy. Key to that method is the fact that ESR distinguishes unburned fuel vanadium from raw fuel that is often present in used marine engine oil. When trended over time, test results provide valuable information about the rate of raw fuel contamination. When the vanadium content of residual fuel is known, the percentage of raw fuel contamination can be calculated. In short, this is the first reliable and accurate analytical technique for monitoring unburned residual fuel contamination, the first use of ESR spectroscopy for analysis of used marine oils, and the first such routine test offered to any marine lubricant customers.

### **3.4 PSA Corporation Limited, Container Terminals Division, Singapore**

PSA Corporation, the world's largest container terminal operator and number one transshipment hub, handles in Singapore, 10% of global throughput or more than 15 million twenty-foot equivalent units (TEUs) of containers annually. Voted "Best Container Terminal operator (Asia)" for the 10<sup>th</sup> time by the prestigious Asian Freight Industry Awards, PSA pioneers the exclusive "**Flow-through**" **Container Gate System**, a paperless system which ensures efficient, speedy and reliable shipment and delivery of import and export containers. Daily, some 8000 trucks pass through its gate with peak hour rates surpassing 700 trucks. These gates are a crucial and integral link for identification of containers and trucks, 365 days a year. The innovative features are to attain seamless traffic flow, the entire gate process was meticulously re-engineered, and advance technologies developed and applied:

- Container Number Recognition System for automatic container identification (first in the world to combine Machine Vision and Neural Network technologies for seaport terminal operations);
- Radio Frequency (RF) technology for automatic truck identification;
- RF contactless card for automatic driver identification, and
- Real-time Wireless Paging Facility to dispatch instructions.

The system improves clearance from five min/truck (1988) to 25 sec/truck (1997) amidst an eight-fold increase in container throughput; creatively achieved which no increase in gate civil infrastructure and manpower resources.



The four runners of the Innovation Category, from the right: Singapore, Holland, Egypt (the Winner) and USA

## Congratulation letter from Seatrade Awards Secretariat

25 MAY-1999 11:25 FROM

KENNING HILTON; Page 3

TO 01716829397

P. 003

25 May 1999

Dr Mohamed Farghaly  
Executive Vice President & Dean  
Integrated Simulator Complex (ISC)  
Gamal Abdel Naser Avenue  
1029 Miami  
Alexandria  
Egypt



**Seatrade  
AWARDS**

The Seatrade Awards Secretariat  
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Colchester CO1 1RB, UK  
Telephone: +44 1206 545121  
Fax: +44 1206 545190  
E-mail: 100125.543@compuserve.com

Dear Dr Farghaly

Congratulations on your success in gaining the 1999 Seatrade Awards in the Innovation category.

The trophy which you received on behalf of Integrated Simulator Complex (ISC) at the Awards Ceremony Dinner in the Guildhall is, of course, to be retained by your company.

This success also entitles Integrated Simulator Complex (ISC) to display the Seatrade Award logotype on letterheads, advertisements, literature and other forms of public display regarding the Decision-making System for Collision Avoidance. I am enclosing a disk containing various formats of the logotype that may be used for this purpose.

Also enclosed are a couple of complimentary photographs of the Seatrade Awards Ceremony Dinner. More can be ordered if required.

With the Seatrade Awards Dinner now established as an annual event, the Seatrade Awards Secretariat will shortly be accepting entries for the 2000 assessment. I hope that we shall see entries from your company in this or future years, and will arrange for entry forms to be sent to you in due course.

My colleague, Sue Lockyear will shortly be sending you an engraved plaque for your Award.

With very best wishes for the continued success of the Decision-making System for Collision Avoidance.

Yours sincerely

**LAURA J PARIS**  
Projects Manager

Enc

Administered by:  
The Seatrade Organisation Limited  
Registered in the UK Number 070214



## Seatrade AWARDS

The Seatrade Awards Secretariat  
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Colchester CO1 1RB, UK  
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### CONGRATULATIONS

The Seatrade Awards concept was developed with two objectives in mind:

1. To encourage innovation.
2. To give some tangible reward for successful endeavour.

Naturally, we are very happy that winners and runners-up should be able to gain some commercial benefit from subsequent publicity.

I am pleased to advise you that press releases giving the product description submitted by each shortlisted organisation were sent off today to over 275 publications worldwide. In many cases the description was accompanied by the company name, address, telephone and fax details, together with your name as contact, so there is a possibility that you may be called by a member of the press for further information.

You are now entitled to use the Awards logotype in any way you choose. For example - on stationery, in advertisements, on exhibition stands and so on. Large or small, the logotype has been designed to work at all sizes, and by all methods of reproduction. A disk containing the logo is enclosed for your convenience.

**Naturally, we would be pleased to receive copies, for our files, of any publicity in which you use the Awards logo, or copies of any press coverage that you receive as a result of the Seatrade Awards.**

Administered by:  
The Seatrade Organisation Limited  
Registered in the UK Number 070214

# Congratulation letter from The British Council in Cairo, Egypt

المجلس الثقافي البريطاني

The British Council



Our ref CAI/620/2  
CAI/561/6

Your ref

Tel ext

تشجيع التعاون الثقافي  
والتعليمي والقي بين  
بريطانيا والبلدان الأخرى

Promoting cultural, educational  
and technical co-operation between  
Britain and other countries

Dr M Farghaly Sayed  
Vice President  
Arab Academy for Science and  
Technology, and Maritime Transport  
P O Box 1029  
Alexandria

١٩٢ شارع النيل  
المجوزة - القاهرة  
التيلون ٣٠٣١٥١٤ ( ٨ خطوط )  
٣٤٤٨٤٤٥ - ٣٤٤٨٤٤٥  
فاكس ٣٤٤٣٠٧٦  
الانترنت  
british.council@eg.britcoun.org

192, Sharia El Nil  
Agouza - Cairo  
Telephone 3031514 ( 8 lines )  
3448445 - 3448263  
Fax 3443076  
Internet  
british.council@eg.britcoun.org

16 June 1999

I was delighted to hear that you have won the international Seatrade Award for Innovation and would like to offer my congratulations. I understand that the prize was awarded for work which arose from your doctoral thesis which you prepared at the Southampton Institute.

The description that I have for the project is that it is about a decision making system for collision avoidance at sea. It comprises the design and testing of sensible data flow of relevant data within the collision avoidance decision making system, using most available resources, and introduces a new approach to define the concept of the ships' safe distance and evaluate the different types of manoeuvre. As a keen amateur sailor I have some personal interest in the work!

We would like to publicise your success in our LINK Newsletter (copy of the May edition enclosed), perhaps in the September issue (since the July one has gone to the press). If you would have no objection to our doing this, might I ask if you could provide us with a photograph of yourself to accompany the announcement, or an action photograph illustrating trials of your decision-making systems at sea.

With congratulations and best wishes,

Yours sincerely,

David Marler  
Representative and  
Cultural Counsellor, British Embassy  
Enclosure  
DM/AH



ISSUE / AUTUMN 22

# headway

The magazine of Southampton Institute's Alumni Association

## PhD Research wins maritime industry 'Oscar'

**A** former Southampton Institute PhD student has won a prestigious international maritime industry prize for the research work he did at the Institute.

Dr Mohamed Farghaly, now Vice President of the Arab Academy for Science Technology and Maritime Transport in Egypt, was presented with one of the four annual Seatrade Awards at the London Guildhall in front of a who's who of the world's maritime industry.

The awards were presented by William O'Neil, Secretary-General of the International Maritime Organisation. He was also Chairman of Judges.

Dr Farghaly, who in 1996 became the first student to gain a PhD from the

Institute's Maritime Faculty, won the innovation category of the awards for his PhD thesis work on a decision-making system for collision avoidance. The project had been supervised by Maritime Faculty Dean, Professor Malek Pourzanjani.

"The Seatrade Awards are like the Oscars of the maritime industry," said Professor Pourzanjani. "Most of the major shipowners and shipping organisations were among the 300 guests. This is a tremendous recognition for Mohamed's work and for the research work of the Maritime Faculty."

Dr Farghaly's work involved the development of an expert system able to perform intellectual processing of collision avoidance factors.

This was the eleventh annual Seatrade Awards which attracts entries from all



Dr Mohamed Farghaly (left) receives his award from William O'Neil.

over the world. This year there were 79 entries from 18 countries. Other short-listed entries in the innovation category include Mobil International Aviation and Marine Sales Inc from the US and Singapore-based PSA Corporation Ltd.

ANDREW WOOLLOCK'S  
'VISIONS OF JAPAN'

INSTITUTE GRADUATES  
MAKING THE NEWS

SPECIAL REUNION FEATURE



SOUTHAMPTON  
INSTITUTE



## Back cover of Seatrade Awards leaflet

*“...the Awards add great value and honour to the winners, their projects and the concerned companies or organisations... these Awards are considered the Oscars of the shipping industry world.”*

*Dr. Mohamed Farghaly, E.V.P., Arab Academy for Science, Technology & Maritime Transport*

*“The Seatrade Awards are a chance for the industry and the general public to become more aware that shipping is both changing and, at least by the very nature of this award, improving. The Awards showcase all the short-listed entries and enable others to see the very best ideas that are on offer to shipping. Shipping must show the public that innovation is happening in its industry too and that this innovation can be a positive force for safety and the general public well-being.”*

*Dr Michael Kennedy, Director, Hellenic Steamship Corporation*

*“Our company now has the benefit of using the Seatrade logo which as a new company, gives us credibility in a mature and conservative market. The awards are the catalyst for companies to look at what they are doing, where they are going, and to demonstrate their own particular excellence in innovative ways.”*

*Bill Cooper, Managing Director, Luminaus Technology Ltd.*

*“The Seatrade awards programme encourages ship owners to look at innovative technologies and consider adopting them to improve ship performance, the environment and commerce.”*

*Jason A. Caplan, EnSolve Biosystems Inc.*



[www.seatrade-global.com](http://www.seatrade-global.com)