

7th INTERNATIONAL CONGRESS ON MARINE CORROSION AND FOULING

UNIVERSIDAD POLITECNICA

Valencia, 7-11 November, 1988

ESPANA

SESSION I Corrosion marine

Monday 7th November

ANALISIS ELECTROQUIMICO DE LA CORROSION ATMOSFERICA MARINA DE ACERO SAE 1010

Eduardo Santiago Ayllon and Blanca Margarita Rosales

ESTUDIO DEL COMPORTAMIENTO EN MEDIO MARINO DE UNA PINTURA RICA EN CINC MEDIANTE RUIDO ELECTROQUIMICO

J M Bastidas, S Feliu Jr and S Feliu

CORROSION ATMOSFERICA DEL ACERO Y COBRE EN ZONAS COSTERAS. RESULTADOS DE CUATRO ANOS DE EXPOSICION

L Espada, A Sanchez, A Gonzalez and P Merino

ECUACIONES DOSIS/RESPUESTA PARA LA CORROSION DEL ACERO EN ATMOSFERAS MARINAS

S Feliu Jr, M Morcillo, J M Bastidas and S Feliu

**INFLUENCIA DE PEQUENAS ADICIONES DE CLORURO FERRICO AL AGUA DE MAR EN LA CORROSION DE ACERO Y ALEACIONES DE COBRE.
DETERMINACION POR METODOS ELECTROQUIMICOS**

Juan Jose Royuela

SESSION II Marine biology

Monday 7th November

PRELIMINARY SURVEY OF THE MACROFOULING OCCURRING ON EXPERIMENTAL STEEL COATED PANELS IN THE PENICHE PORT

Elisabete M Almeida and M Adelaide Maia

MACROFOULING COMMUNITY STRUCTURE IN ZUARI ESTUARY (GOA, WEST COAST OF INDIA)

A C Anil and A B Wagh

FOULING COMMUNITIES IN MAR PICCOLO IN TARANTO (IONIAN SEA - SOUTHERN ITALY):

VEGETABLE POPULATIONS IN MESOLITTORAL LEVEL AND INFRALITTORAL FRINGE

E Cecere, M Cormaci, G furnari, A Tursi and O Caciorgna

A CHEMOSENSORY APPROACH TO THE INVESTIGATION OF THE ADHESION OF FOULING DIATOMS TO SURFACES

B Cooksey and K E Cooksey

CORROSION AND BIOFOULING TESTS IN SOUTH CHINA SEA

C Jian and W Xiuzhi

CORROSION ATMOSFERICA MARINA DEL HORMIGON EN LAS PROXIMIDADES DE LA ARMADURA

M C Millan, E Peris, M Martin, J Pascual and J V Llopis

... CON FIBRAS DE ACERO. INFLUENCIA DE LA CONTAMINACION CON CLORUROS

B Perepez, E Gimenez, J Benlloch and E Barber

THE NEW TYPE CONCRETE REBARS CHARACTERIZED BY CHEMICAL COMPOSITION ADJUSTMENT FOR PREVENTING

DETERIORATION OF SEA-SIDE CONCRETE CONSTRUCTION

Haruo Shimada

STUDY OF THE INFLUENCE OF THE ORIENTATION OF ANODIC COATINGS ON THE TIME TO FAILURE OF STEEL UNDER STRESS

CORROSION CRACKING CONDITIONS

Th Skoulikidis and N Kouloumbi

INFLUENCIA DE LA CONCENTRACION DE LOS IONES EN LA CONDUCTIVIDAD DE LA FASE ACUOSA DEL HORMIGON

S Geni, A Moragues, M Cruz Alonso and C Andrade

DURABILIDAD DEL HORMIGON. ACCION DEL AGUA DE MAR SOBRE UN CEMENTO PORTLAND RESISTENTE A LOS SULFATOS.
INFLUENCIA DE LA ADICION DE EXCORIAS Y DE CENIZA VOLATES

Demetrio Gaspar-Tebar, Jose Luis Gagrera-Moreno, Victoriano Gonzalez-Vila, Rafael Calvo-De Mora and Miguel Marin-Bohorquez

CUANTIFICACION DEL EFECTO DE LOS CLORUROS EN LA DURABILIDAD DE ESTRUCTURAS METALICAS Y RECUBRIMIENTO

S Feliu

EXAMEN ELECTROQUIMICO Y METALOGRAFICO DE UNIONES SOLDADAS ENTRE META-LES SUMERGIDOS EN AGUA DE MAR

X R Movoa, P Merino, S Villagrasa and L Espada

ENSAYOS QUIMICOS ACELERADOS PARA MEDIR LA TENDENCIA A LA CORROSION POR PICADURAS DE LOS ACEROS
INOXIDABLES EN PRESENCIA DE CLORUROS

I Soria, F J Robledo and E J Herrera

INFLUENCE DE LA PROTECTION CATHODIQUE SUR LA CROISSANCE DES BACTERIES SULFATO-REDUCTRICES ET SUR LA
CORROSION D'ACIERS DOUX DANS LES SEDIMENTS MARINS

J Guezennec, M Therene, N Dowling and D C White

COMPARAISON DE LA CORROSION ELECTROCHIMIQUE D'UN ACIER DE CONSRUCTION NAVALE EN SOLUTION 0,55 NaCl ET
EN EAU DE MER

Tran Thi Tuyet Mai and J J Rameau

SESSION II Marine biology

Tuesday 8th November

MUSSELS IN THE OFFSHORE FOULING OF ITALIAN SEAS

Giulio Belini and Nanuela Montanari

INTERACTIONS WITHIN FOULING BIOFILMS: STUDIES USING A MODEL SYSTEM

K E Cooksey and R E Murray

LAKE TIMSAH AS A BARRIER FOR THE SERPULOID (TUBE WORMS) MIGRATION ALONG THE SUEZ CANAL

A F A Ghobashy, I M Shalaby and S H Shalla

THE BIOFOULING COMMUNITIES ON THE PIER PILLING AT XIAMEN, CHINA

Z G Huang and R X Cai

TOWARDS THE STANDARDISATION OF THE TEST EXPOSURE PROCEDURE IN THE TROPICAL SEA

A A Karande

FOULING OF SEAWATER FILTRATION SYSTEMS OF OFFSHORE OIL PRODUCTION PLATFORMS

R G J Edyvean and J L Lynch

ECOLOGY OF FOULING COMMUNITIES AND THEIR IMPACT ON MARINE WOOD BORING ORGANISMS IN PORTONOV COASTAL AREA - SOUTH EAST COAST OF INDIA

R Radhakrishanan and R Natarajan

MICRO-ORGANISMS CANNOT SETTLE SUCCESSFULLY ON THE SURFACE OF THE SPONGE *HALICHONDRIA PANICEA*

B Wolfrath and D Barthel

SELECTION OF ANTI-FOULING MATERIALS AND ITS ANTI-FOULING MECHANISM

Haruo Shimada

DIVERSITY AND SEASONALITY OF MICROBIAL AGGREGATION-ADHESION ENHANCING (AAE) BIOFOULING
MACROMOLECULES IN COASTAL SEAWATER

T R Tosteson

AN ACCOUNT OF FRICTIONAL RESISTANCE INCURRED ON OCEAN GOING RESEARCH VESSELL ORV SAGAR KANYA DUE
TO FOULING

A B Wagh and K Nandakumar

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Wednesday 9th November

THE EFFECT OF HYDROSTATIC PRESSURE ON THE ELECTROCHEMICAL BEHAVIOUR OF SOME COPPER ALLOYS

A M Beccaria and D Festy

CHARACTERIZATION OF CONDENSER TUBE COATINGS BY ELECTROCHEMICAL IMPEDANCE

A Colombo, G Rocchini and P Spinelli

OXYGEN REDUCTION ON "PASSIVE" METALS AND ALLOYS IN SEAWATER. EFFECT OF BIOFILM

Ragnar Holthe, Per Olav Gartland and Einar Bardal

CORROSION OF THE BRAZED JOINT BETWEEN Cu90Ni10Fe PIPES

P Vassiliou and V J Papazoglou

CATHODIC PROTECTION OF STEEL IN PURE CULTURES OF THE MARINE BACTERIA *VIBRIO NATRIEGENS*

L Fiksdal and J Guezennec

ON THE BARNALCE-INDUCED CREVICE CORROSION PHENOMENON IN STAINLESS STEEL

M Eashwar, G Subramanian and P Chandrasekaran

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Wednesday 9th November

A STUDY OF MARINE FOULING DIATOMS ON SHIPS IN THE NORTH ATLANTIC
D C Woods and R L Fletcher

MECHANISM OF CORROSION POTENTIAL ENNOBLEMENT BY MARINE BIOFILMS
Stephen C Dexter and Shiang-Ho Lin

ENHANCED CORROSION RATES OF AISI 316 STAINLESS STEEL WELDMENTS IN THE MARINE ENVIRONMENT DUE TO BACTERIA
N J E Dowling, C Lundin, C H Lee, M Franklin and D C White

SYNERGISTIC ACTION OF BACTERIA ON THE CORROSION OF MILD STEEL IN A MARINE MEDIUM
Christine C Gaylarde

BACTERIAL ATTACHMENT ON Cu/Ni ALLOYS AND ITS RELATION WITH CORROSION
S G Gomez de Saravia, M F L de Mele, H A Videla and E Erauskin

MICROBIAL INTERVENTION IN COPPER CORROSION
Brenda J Little

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Thursday 10th November

CORROSION DE ARMADURAS EN HORMIGONES EN CONTACTO CON AGUA DE MAR:
EL EFECTO DE LA GALVANIZACION Y EL USO DE NITRITOS COMO INHIBIDOR

C Andrade, C Alonso, S Goni and J A Gonzalez

COMPORTAMIENTO FRENTE A LA CORROSION MARINA DE RECUBRIMIENTOS DE NIQUEL DEPOSITADO POR VIA QUIMICA Y POR VIA ELECTROLITICA

E Julve

COMPORTAMIENTO ELECTROQUIMICO DE UNA ALEACION Cu:Ni EN AGUA DE MAR CONTAMINADA CON SULFUROS

Maria del Carmen Leiro and Bianca M Rosales

USO DE LAMINAS DE FLUORURO DE POLIVINILO APLICADAS EN FRIO PARA LA PROTECCION SUPERFICIAL DE ACEROS
AL CARBONO EN AMBIENTES MARINOS

P Merino, X R Novoa, M Izquierdo and L Espada

COMPORTEMENT DE QUELQUES ALLIAGES CU-ZN A LA CORROSION

Emanuele D Mor

PROTECCION CATODICA DEL INTERIOR DE UN SISTEMA DE TUBERIAS DE AGUA DE REFRIGERACION

J Ladera, E Cucarella and M A Guillen

PINTURA MARINAS PARA BUQUES. RESULTADOS DE INVESTIGACIONES

M Morcillo, S Gimenez, J Simancas, J Antunano and A Monje

OBSERVATIONS ON THE CATHODIC PROTECTION OF STEEL IN BIOLOGICALLY ACTIVE SEAWATER

R G J Edyvean, C J Hutchinson and N J Silk

A CONTRIBUTION TO THE DEFINITION OF A QUALIFICATION PROCEDURE FOR APPLICATION OF STAINLESS STEELS IN SEAWATER

J M Krougman and F P IJaseling

THE CORROSION AND PROTECTION OF STEEL PIPE PILES IN NATURAL SEAWATER

Kiyoshi Katawaki, Tatsuo Asama and Kazuyuki Doi

A COMPARATIVE STUDY OF THE CuNi30Fe ELECTROCHEMICAL BEHAVIOUR IN SEA WATER AND DIFFERENT CHOLORIDE SALINE SOLUTION TO ASSESS THE EFFECT OF MICROFOULING SETTLEMENT

M F L de Mele, G Brankevich and M A Videla

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ENSAYOS BIOLOGICOS PARA LA EVALUACION DE PINTURA ANTIINCRUSTANTES

E Arias, P Suau and P Molera

PINTURAS ANTIINCRUSTANTES DE MATRIZ SOLUBLE TIPO ALTO ESPESOR

Vincente J D Rascio, Carlos A Giudice and Beatrix del Amo

APPORT DE LA BIOLUMINESCENCE DANS L'INTERPRETATION DES TESTS DE SELECTION DE BACTERICIDES SPECIFIQUES DES BACTERIES SULFATO-REDUCTRICES

Paul Auclair and Paul Couget

ETUDE DE L'INFLUENCE D'ELEMENTS "POISONS" SUR LA RESISTANCE A LA CORROSION BACTERIENNE EN MILIEU MARIN D'ACIERS INOXYDABLES

G Hernandez, C Lemaitre, J Guezennec, J Paudouard and G Beranger

ANTIFOULING PAINTS OF HIGH SEA WATER DISSOLUTION RATE

Beatiz del Amo, Carlos A Giudice and Gustavo Villoria

MODIFIED ORGANOTIN ANTIFOULANTS

C A Dooley, J P Testa Jr and P Kenis

MICROFOULING AND LEACHING FROM PAINTS

A J Mitchell and E G Bellinger

THE USE OF CALCIUM RESINATE IN THE FORMULATION OF SOLUBLE MATRIX ANTIFOULING PAINTS BASED ON CUPROUS OXIDE

Carlos A Giudice, Beatrix del Amo and Vicente J D Rascio

ADHESION OF BARNACLES AND DEVELOPMENT OF NON-TOXIC ANTIFOULANTS

Elek Lindner, Carol A Dooley and Marca Doeff

SELECTIVE ACTING ANTIFOULING ADDITIVES

Joachim Lorenz

DETERMINATION OF MINIMUM EFFECTIVE RELEASE RATES OF ANTIFOULANTS BY MEMBRANE PERFUSION

Elizabeth B Gates, William C Banta, George Loeb and Elaine Johnson

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SURFACE MODIFICATION OF CuZn20A12 ALLOY WITH PIRIMOINE DERIVATIVES

Krzysztof Debrowiecki and Kazimierz Boron

MICROENVIRONMENTAL CHANGES AROUND FOULING ORGANISMS AND THEIR CORROSION IMPLICATIONS

E G Bellinger and P Wall

THE EFFECTS OF CATHODIC PROTECTION ON THE MICROFLORA AND PERFORMANCE OF ANTIFOULING PAINTS

E G Bellinger and A J Mitchell

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SURFACE PROPERTIES ON NON-TOXIC ANTIFOULING PAINT FILM

K Nanishi, M Murase, Y Yonehara, M Kishihara and T Hirama

MICROFOULING ON ALUMINIUM PANELS PLACED IN THE TROPICAL WATERS

N B Bhosle, K Venkat and A B Wagh

EFFECT OF TRIBUTYLTIN OXIDE (TBTO) ON THE OVARIAN MATURATION OF THE PRAWN, *CARIDINA WEBERI*

R Nagabhushanam, B Indira, R Sarojini and Mary Frances Thompson

EFFECT OF BIOACTIVE MATERIALS FROM SOFT CORALS ON BACTERIA ASSOCIATED WITH COMMON FOULER

Vitalina Mary, Avelin Mary, R Sarojini and R Nagabhushanam