



Copyright © 2011, COPEC – Science and Education Research Council

Claudio da Rocha Brito & Melany M.Ciampi (Publishers). All rights reserved.

Personal use of this material is permitted. However, permission to reprint/republish this material for advertising or promotional purposes or for creating new collective works for resale or redistribution to servers or lists, or to reuse any copyrighted component of this work in other works, must be obtained from the publisher.

SHEWC 2011 – Safety, Health and Environment World Congress – (2011: Santos)

161a Proceedings, Safety, Health and Environment World Congress, SHEWC 2011, July 24-27, 2011. Published by Claudio da Rocha Brito (ISBN 978-85-89120-94-4) & Melany M. Ciampi (ISBN 978-85-89549-90-5), 2011.

1.v

1. Environmental – Congress 2. Health – Conference I BRITO, Claudio da Rocha, ed.  
II. CIAMPI, Melany, M., ed III. COPEC – Science and Education Research Council IV. Title

CDD - 370



*Prof. Dr. Claudio da Rocha Brito*  
**Message from the General Chair**

SHEWC'2011 – XI Safety, Health and Environment World Congress once again happens to contribute for the betterment of scientific knowledge exchange. The aim of this event is not just the discussion about safety, health and environment issues that contemporary men have been facing but also to present solutions in which science is the strong allied.

The economical, social and educational crisis of 21<sup>st</sup> Century certainly will be defeated with the most recent developments in science and technology. SHEWC'2011 presents interesting top accomplishments in areas such as energy, fresh waters, global warming, diet nutrition, stress, heart disease, emergency rooms, workers, child safety, terrorism, ergonomics and others.

This congress has been designed to promote the exchange of information about the last achievements of researchers and professionals in these fields. It is an event that has been a success along its more than ten years of existence. The ideas, opinions and professionals contributions are showed in lectures with international specialists in their areas of performance, plenary sessions, presentations of works and workshops.

# SHEWC 2011

Safety, Health and  
Environment World Congress

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization

The congress takes place in the Atlantic Forest Region a special place that encompasses part of the last piece of Atlantic Forest that is the second of the most expressive forests in South America, only losing to the Amazon Forest, the largest in the planet. The Atlantic Forest extends itself along the mountains and slopes facing the sea, as well as along the coastal plains. It is a perfect place to have a meeting such as SHEWC'2011.

XI Safety, Health and Environment World Congress (SHEWC'2011) is organized by COPEC – Science and Education Research Council and promoted by OPASS – Safety, Health and Environment Research Organization in Technical Cooperation (in alphabetical order): AAMP (Fishing Museum Friends Society), ABENGE (Brazilian Society for Engineering Education), ABO (Brazilian Dental Association), AENUI (Asociación de Enseñantes Universitarios de la Informática), AGERCO (Brazilian Agency for Coastal Management), ASEE (American Society for Engineering Education), ASIBEI (Iberian-American Association of Engineering Education Institutions), GCMM (Global Congress on Manufacturing and Management), IEEE-Ed.Soc. (Education Society of the Institute of Electrical and Electronics Engineers), IFEES (International Federation of Engineering Education Societies), IGIP (Internationale Gesellschaft für Ingenieurpädagogik), INTERTECH (International Council for Engineering and Technology Education), IPN (Ingeniøruddannelsernes Pædagogiske Netværk), IRCWR (International Reference Center for Water Reuse), OPASS (Safety, Health and Environment Research Organization), Porto Gente (PortFolk), RBE (Brazilian Network of Engineering), RCI (Réseau Carthagène d'Ingénierie), SBA (Brazilian Automation Society), SBA Young (Student Chapter of the Brazilian Automation Society), SBE (Brazilian Society of Ecotoxicology), SEFI (Société Européenne pour la Formation des Ingénieurs), SPEED (Student Platform for Engineering Education Development) and WCCA (World Council on Communication and Arts).

# SHEWC

Safety, Health and  
Environment World Congress

## 2011

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization

I could not forget to thank also Santos and Region Convention & Visitors Bureau for their cultural support. A special thanks to our sponsors FAPESP (State of São Paulo Research Foundation), CNPq (National Council for Scientific and Technological Development), CAPES (Coordination for Improvement of Personnel of Superior Level) and SUPNET - Technology & Information.

I want to thank specially the authors and participants for their collaborations and willing to share their contributions for the development of science and technology in their fields of expertise.

I am very glad to welcome you to SHEWC'2011

Thank you all

**Prof. Dr. Claudio da Rocha Brito**  
*GENERAL CHAIR*  
President of COPEC



*Prof. Dr. Melany M. Ciampi*

**Message from the Technical Program Chair**

In according to the scientists and specialists five hundred years ago, the Atlantic Forest of Brazil covered approximately 330 million acres (about twice the size of Texas), but today more than 85% of this forest has been cleared and what remains is highly fragmented. Despite its diminished state, the Atlantic Forest still ranks as a global conservation priority. Although it is just a small fraction of the size of the great Amazon rainforest, the Atlantic Forest still harbors a range of biological diversity similar to that of the Amazon.

In a piece of this fantastic location there are the sea shore cities of Sao Paulo State where SHEWC'2011 is taking place. Once again it is my pleasure to be the Technical Program Chair of Safety, Health and Environment World Congress. It is the 11th edition and along the years it is possible to see the evolution of such important congress for the international scientific community.

This edition has counted with the collaboration of many researchers and professionals whose works in the fields of



interest have contributed for the discussions and the proposition of solutions that are so important for the harmonious development of our society.

It is important to point out the work of the reviewers who diligently have dedicated time and efforts for the revision process. Equally important are the contributions of workshops leaders and plenary session's lecturers bringing interesting topics related to the theme "**Socio-Ecological Issues Challenging Human Development**".

On behalf of the Technical Program Committee of SHEWC'2011 I would like to thank all the people involved in the Congress and hoping that everybody enjoys it.

Thank you all

**Prof. Dr. Melany M. Ciampi**  
*TECHNICAL PROGRAM CHAIR*  
President of OPASS



*Prof. Dr. Joseph Harari*  
**Message from the Vice Chair**

The Safety, Health and Environment Research Organization (OPASS) is an Organization of Civil Society of Public Interest that has the goal to develop researches in environment which aims to foster integrated environmental researches, seeking the conservation and protection of the natural resources, by the following actions.

- To accomplish integrated researches for the conservation of the natural resources and environmental protection;
- To create and to manage database on environmental researches;
- To publish the results of the researches in a wide way for the community's knowledge;
- To discuss the priorities of research programs with the community;
- To accomplish Congress, conferences, lectures, seminars, workshops and courses on environmental problems;
- To motivate the change of experiences and information with other institutions and government organizations to celebrate agreements to establish partnerships, to associate to people and institutions interested in environmental researches;



- To act to the public powers or private entities, requesting measures regarding the objectives of the entity;
- To participate in state, national and international institutions in the efforts for improvement of the environment conditions;
- To develop specialization courses and professional re - qualification;
- To act in the constant defense of the strategic role of the science and technology for the economical, social, cultural development and for the sovereignty of the Countries.

As in the Atlantic Forest Region is where the Nucleus develops most of its activities a Regional Nucleus has been created. It is the NPABS - Atlantic Forest Coast Region Environment Research Nucleus that develops several activities in the region. It has been promoting monthly meetings in institutions of higher education in Santos and other cities open to scientists, authorities, companies, environmentalists and interested people in general for the discussion of problems of the environment in the region and the contributions of the scientific researches for its solution.

**Prof. Dr. Joseph Harari**  
*VICE CHAIR*

President of Regional Nucleus of OPASS in Atlantic Forest Coast Region





*General Chair:*

**Claudio da Rocha Brito**

*Technical Program Chair:*

**Melany M. Ciampi**

*Vice Chair:*

**Joseph Harari**

*Advisory Committee:*

**Anette Kolmos**, President of SEFI

**Dana Dobrovská**, President of IMC

**Denis Willemin**, President of RCI

**Khalil S. Taraman**, President of SME Education  
Foundation

**Krishna Vedula**, President of IFEEES

**Michael E. Auer**, President of IGIP

**Muthar Al-Ubaidi**, President of INTERTECH

**Renata S. Engel**, President of ASEE

**Rob Reilly**, President of IEEE Ed. Soc.



*Technical Program Committee:*

**Melany M. Ciampi**, Chair of Committee  
**Alexandre Botari**, Brazil  
**Amâncio Carvalho**, Portugal  
**André Luiz de Lima Reda**, Brazil  
**Anita Westerström**, Sweden  
**Antonio Eduardo Poleti**, Brazil  
**Carolina da Rocha Brito**, Brazil  
**Catharina da Rocha Brito**, Portugal  
**Cecilia da Rocha Brito**, Brazil  
**Claudio da Rocha Brito**, Brazil  
**Dan Budny**, USA  
**Edmundo Tovar**, Spain  
**Federico Flueckiger**, Switzerland  
**Göran Westerström**, Sweden  
**Irina Avenarius**, Russia  
**Ivanildo Hespanhol**, Brazil  
**James Wolfer**, USA  
**José Carlos Curvelo de Oliveira Jr.**, Brazil

**Luis Amaral**, Portugal  
**María Feldgen**, Argentina  
**Oswaldo Clúa**, Argentina  
**Pedro José da Silva**, Brazil  
**Protasio Ferreira e Castro**, Brazil  
**Rosa Vasconcelos**, Portugal  
**Teresa Larkin**, USA  
**Valter Castro Alves**, Brazil  
**Vladimir G. Zakharov**, Russia  
**Yolanda Guran-Postlethwaite**, USA

*Support Committee:*

**Cristina R. Brito**, treasurer  
**José Albano F. Mouta**, designer

# **SHEWC** 2011

Safety, Health and  
Environment World Congress

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization

*Medical Committee:*

**Carolina da Rocha Brito**, INCOR-USP  
**Catharina da Rocha Brito**, University of Trás-os-Montes  
e Alto Douro  
**Cecilia da Rocha Brito**, CRB Academic Research  
**Sidney Capps Fernandes**, Precardio

# SHEWC 2011

Safety, Health and Environment World Congress

ORGANIZATION



Science and Education Research Council

PROMOTED BY



Safety, Health and Environment Research Organization

## COOPERATORS

ORGANIZATION



Science and Education Research Council

PROMOTED BY



Safety, Health and Environment Research Organization

## TECHNICAL COOPERATION



## SUPPORTED BY



## CULTURAL COOPERATION



HOST



# **SHEWC** 2011

Safety, Health and  
Environment World Congress

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization

## PLACE OF THE EVENT



**English**



**Português**



**Español**

# *SHEWC* 2011

Safety, Health and  
Environment World Congress

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization



A CRIANÇA E A TV NAS REFEIÇÕES: A PERCEPÇÃO DE CUIDADORES SOBRE O PROCESSO SAÚDE-DOENÇA E ALTERAÇÕES NOS PADRÕES DE ALIMENTAÇÃO DE CRIANÇAS DE ÁREAS RURAIS DO NORDESTE BRASILEIRO .....	040
A IMPORTÂNCIA SOCIOAMBIENTAL DOS IGARAPÉS & PERCEPÇÃO DOS ALUNOS DO ENSINO MÉDIO .....	055
A NEW APPROACH FOR ONLINE TRAINING ASSESSMENT FOR BONE MARROW HARVEST WHEN PATIENTS HAVE BONES DETERIORATED BY DISEASE .....	009
A STUDY ON THE CHARACTERISTICS AND MOTIVES OF OCCUPATIONAL ACCIDENTS .....	002
A TELEVISÃO DIGITAL NA SAÚDE PÚBLICA.....	039
ACESSIBILIDADE AOS CENTROS DE ATENDIMENTO DA FIOCRUZ.....	013
ADEQUAÇÃO DA ARQUITETURA PREDIAL DA ASSOCIAÇÃO DOS IDOSOS DO CORAODO (ASSIC) PARA USO COM SEGURANÇA POR PESSOAS COM MOBILIDADE REDUZIDA (PMR'S) E NECESSIDADES ESPECIAIS (PNE'S) .....	045
ANÁLISE DA DISTRIBUIÇÃO ESPACIAL DE ENDEMIAS A PARTIR DE FERRAMENTAS DE CEQ .....	017



ANÁLISE DA DISTRIBUIÇÃO ESPACIAL DO AGRAVO AIDS NO ESTADO DA PARAÍBA NO PERÍODO DE 2000-2010 .....	018
ANÁLISE DA QUALIDADE DA ÁGUA NO MUNICÍPIO DE REDENÇÃO – PA: ESTUDO DE CASO DO RIO GAGO .....	057
ANÁLISE DA RESPONSABILIDADE POR DANOS AMBIENTAIS DA INDÚSTRIA DO PETRÓLEO .....	038
ANÁLISE E REGRESSÃO EM ÁRVORE (CART) APLICADA AO DATA MINING EM SAÚDE PÚBLICA.....	047
ANÁLISE ECONÔMICA DE RISCOS PARA A SEGURANÇA NA CONSTRUÇÃO.....	025
ANÁLISE ESPACIAL DA MORTALIDADE PÓS-NEONATAL NO MUNICÍPIO DE JOÃO PESSOA, PB .....	019
ANÁLISE ESPACIAL DE UMA DÉCADA DE MORTES VIOLENTAS POR HOMICÍDIOS, NA CIDADE DE JOÃO PESSOA .....	016
ANÁLISE ESPECTROSCÓPICA DE CONTAMINANTES EM SOLO EM CONSTRUÇÃO CIVIL ATRAVÉS DA TÉCNICA DE ICP-MS.....	037
ARTEMÍDIA DILIGENTE: SEGURANÇA, TURISMO E PATRIMÔNIO CULTURAL .....	061





AS CONFERÊNCIAS DO CLIMA, COPENHAGUE E CANCÚN, SEUS CONFLITOS, SEUS INTERESSES ECONÔMICOS, SEUS ACORDOS, E O COMPROMISSO COM O SISTEMA DE ORGANIZAÇÃO COLETIVA.....	021
ASSESSMENT OF COLLABORATIVE MEDICAL TRAINING BASED ON VIRTUAL REALITY USING POSSIBILISTIC NETWORKS .....	010
ATIVIDADE CURRICULAR DE EXTENSÃO (ACE) NOSSO AMBIENTE DA UNIVERSIDADE FEDERAL DO AMAZONAS (UFAM): INSTRUMENTO DE DESENVOLVIMENTO HUMANO E DE TRANSFORMAÇÃO DA ASSOCIAÇÃO DOS IDOSOS DO COROADO (ASSIC), MANAUS (AM) .....	043
ATIVIDADE TURÍSTICA E EDUCAÇÃO AMBIENTAL: PROPOSTAS PARA A RESOLUÇÃO DOS CONFLITOS FUNDIÁRIOS NO PARQUE NACIONAL DO ITATIAIA.....	046
AUTISMO - PERSPECTIVA DE MELHOR QUALIDADE DE VIDA POR UMA DIÉTA ADEQUADA ..	031
AVALIAÇÃO DAS CONFERÊNCIAS ESTADUAIS DE MEIO AMBIENTE-CEMAS & PERFIL DOS DELEGADOS.....	051
AVALIAÇÃO DO CONHECIMENTO DE CONSUMIDORES DA CIDADE DE ITAPEVI SOBRE OS IMPACTOS CAUSADOS PELO DESCARTE DE PRODUTOS FARMACÊUTICOS .....	034



AVALIAÇÃO DOS INDICADORES DE DESENVOLVIMENTO DO SOLO EM ÁREAS EM RECUPERAÇÃO.....	029
AVALIAÇÃO DOS RISCOS E BENEFÍCIOS NA TERAPIA DE REPOSIÇÃO HORMONAL.....	035
AVALIAÇÃO MICROBIOLÓGICA DA ÁGUA SUBTERRÂNEA DE UMA UNIVERSIDADE AMAZÔNICA.....	054
CERTIFICAÇÃO E ETIQUETAGEM COMO MECANISMOS DE PROMOÇÃO DA EFICIÊNCIA ENERGÉTICA EM EDIFICAÇÕES COMERCIAIS.....	050
CONFINED SPACES IN CONSTRUCTION: EVALUATION AND RISK CONTROL IN WATERPROOFING SERVICES.....	006
CONSCIENTIZAÇÃO QUANTO AO USO DAS EMBALAGENS E SACOLAS ECOLOGICAMENTE CORRETAS EM REDENÇÃO – PA .....	056
CONTABILIDADE DE CUSTOS ECOLÓGICOS COMPLETOS (CCEC): UMA ANÁLISE CRÍTICA..	049
COST ANALYSIS OF LIGHTWEIGHT MEMBRANES IN HOUSING AT TEMPERATE CLIMATES ..	007
DESENVOLVIMENTO DE PROGRAMA LIVRE PARA DIMENSIONAMENTO SEGURO E RÁPIDO DE ESTRUTURAS METÁLICAS: A EXPERIÊNCIA DA FACULDADE DE TECNOLOGIA DA UNIVERSIDADE FEDERAL DO AMAZONAS (UFAM).....	042



DINÂMICA FLUVIAL DE NUTRIENTES REMOVIDOS POR ENXURRADA DE UMA BACIA RURAL NO SUDOESTE PAULISTA – O RIBEIRÃO CAMPESTRE EM LINS, SP .....	011
ESTABILIDADE HIDRÁULICA E SEDIMENTOLÓGICA DA EMBOCADURA DO RIO TRAMANDÁI – ESTUDO QUALITATIVO .....	023
ESTRUTURA ORGANIZACIONAL E ESTRATÉGIAS COMPETITIVAS: UM ESTUDO DE CASO DO FRIGORÍFICO JBS-FRIBOI.....	036
ESTUDO DA AVALIAÇÃO DE BALANÇOS EM PRAÇAS PÚBLICAS.....	012
ESTUDO ERGONÔMICO EM UMA SALA DE ESTERILIZAÇÃO DE MATERIAS HOSPITALARES, NA QUAL OS FUNCIONÁRIOS EXERCEM SUAS FUNÇÕES NA POSIÇÃO EM PÉ.....	027
FONTES DE CONTAMINAÇÃO DAS PORÇÕES CONTAMINADAS DO RECURSO SOLO, EM ÁREAS URBANAS DE INTERESSE DE USO IMOBILIÁRIO, POR DERIVADOS DE PETRÓLEO .....	024
GERAÇÃO DE ENERGIA ELÉTRICA A PARTIR DO ESTRUME BOVINO COM O MOTOR JENBACHER: UM ESTUDO DE CASO NO MUNICÍPIO DE CORUMBÁ-MS .....	032
GERENCIAMENTO DOS RESÍDUOS SÓLIDOS DE SAÚDE: UM ESTUDO DE CASO.....	048
GERENCIAMENTO DOS RESÍDUOS SÓLIDOS NO LIXÃO DE REDENÇÃO - PA.....	058



GUIDELINES TO IMPROVE WASTE MANAGEMENT IN PORTUGUESE CONSTRUCTION INDUSTRY .....	008
HOSPITAIS VERDES: COMUNICAÇÃO E CONSCIENTIZAÇÃO AMBIENTAL .....	060
IDENTIDADE VISUAL DO GRUPO DE GESTÃO COMUNITÁRIA DO COROADO (GIGEC COROADO): INSTRUMENTO DE DIVULGAÇÃO E DE FORTALECIMENTO DE AÇÕES COMUNITÁRIAS E DE DESENVOLVIMENTO HUMANO .....	044
IMPACTO AMBIENTAL NO SOLO OCASIONADO PELO LIXÃO MUNICIPAL DE REDENÇÃO – PARÁ .....	059
NUMERICAL MODELING OF SURFACE WAVES IN SANTA CATARINA STATE – SOUTHERN BRAZIL .....	005
NUMERICAL MODELING OF THE HYDRODYNAMICS OF SANTA CATARINA STATE – SOUTHERN BRAZIL .....	004
O PROCESSO DE CERTIFICAÇÃO DE BOAS PRÁTICAS DE FABRICAÇÃO EM UMA EMPRESA DE PRODUTOS PARA A SAÚDE NA CIDADE DE SÃO PAULO – ESTUDO DE CASO.....	033
OBRAS DE MELHORAMENTOS PARA ADEQUAÇÃO DO PORTO DE SANTOS À CONDIÇÃO DE PORTO CONCENTRADOR .....	020



POSIÇÃO EM PÉ NO TRABALHO DE AUXILIARES EDUCACIONAIS E AGENTES DE SEGURANÇA DE UMA UNIVERSIDADE.....	028
PROJETO TE VEJO NA ESCOLA: RECURSOS AUDIO-VISUAIS (RAV'S) COMO FONTE ALTERNATIVA DE EDUCACAO PARA CIENCIAS.....	052
PROTAGONISMO JUVENIL E EDUCAÇÃO DE PARES: SUBSÍDIOS PARA A PROMOÇÃO DA SAÚDE SEXUAL E REPRODUTIVA NAS POLÍTICAS PUBLICAS DA SAÚDE VOLTADAS PARA ADOLESCENTES .....	041
RENATURALIZAÇÃO DE RIOS, COM A APLICAÇÃO DE TÉCNICAS DE BIOENGENHARIA EM OBRAS DE ENGENHARIA HIDRÁULICA, UMA IMPLEMENTAÇÃO DO CÓDIGO FLORESTAL BRASILEIRO.....	022
SANITÁRIO SOLAR: A TRANSDISCIPLINARIDADE COMO FERRAMENTA DE PROJETO, DESIGN E DESENVOLVIMENTO SUSTENTÁVEL.....	053
SOCIO-ECOLOGICAL ISSUES CHALLENGING HUMAN DEVELOPMENT .....	001
STATISTICAL METHODS FOR ANALYZING CANCER MORTALITY .....	003
UM ESTUDO DE CASO SOBRE SATISFAÇÃO DO CLIENTE .....	015



UM ESTUDO DO CONFORTO AMBIENTAL DO ÔNIBUS.....	014
UMA ANÁLISE COMPARATIVA DA APLICAÇÃO DO MODELO DE MARKOWITZ E DE REDES NEURAIS ARTIFICIAIS NA COMPOSIÇÃO DE UMA CARTEIRA ÓTIMA DE ATIVOS .....	030
VESTUÁRIO CIRÚRGICO: SEGURANÇA E CONFORTO .....	026



### A

Alexandra H. S. Facinni	054			
Alexandre Tadeu Simon	049			
Álvaro Ferreira Lisboa Júnior	048			
Amanda Carvalho Miranda	034	035		
Ana Carla Alves de Sousa	018			
Ana Lúcia B. de Andrade	051	054		
Ana Paula Bonfante	039			
André Luiz de Lima Reda	011			
Angela Maria Belloni Cuenca	040			
Angela Pellegrin Ansuj	003			
Angeluz Fernandes Lima do Patrocínio	058			
Annunziata Donadio Chateaubriand	042	043	044	045
Anthoniany A. Silva de Lima Alves	019			
Antonio César Galhardi	047			
António Pedro Reis	007			
Armanda Maria Couto	008			



## **B**

Beatriz Martins Teixeira	038
Béda Barkokébas Jr.	006
Beny Frenkiel	027
Bianca M. Vasconcelos	006
Breno Reis dos Santos	057
Bruno Miranda Soares	056
Bruno Rolim da Silva	059
Bryan Pellegrin Ansuji	001





## C

Caio Flávio Nunes Bastos	059
Cicero Magérbio Gomes Torres	041
Cláudio da Rocha Brito	001
Cleomara Guidugli Jorge Debuz	031



### D

Daniel Braga Hübner	046	
Darci Augusto Moreira	056	059
Dayse Borges de Nazaré	057	
Deise Cristiane Trevisan	029	
Diego Souza Auler	042	



## E

Eduardo Guilherme Satolo	049
Eduardo Jorge de Britto Bastos	029
Elesandro Antonio Baptista	032
Elza Maria Neffa Vieira de Castro	046
Emanuelle Guidugli Jorge Debuz	031
Enio Junior Seidel	002
Eribertta da Rocha Oliveira	057



## F

Felipe Araújo Calarge	033	034	037	049
Fernando A. P. da Silva Fortunato	032			
Fernando de Almeida Santos	025			
Fernando de Souza Carvalho	028			
Flávio Alberto Cantisani de Carvalho	042			
Francisco Francinete Leite Junior	041			



## G

Geisa Pereira dos Santos	035
Geovan Mendes dos Santos	045
Gustavo Roberto Ganzerli Nahas	020

# SHEWC

Safety, Health and  
Environment World Congress

## 2011

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization

## H

Haroldo Luiz N. da Silva	050
Henrique dos Santos Pereira	051

# SHEWC

Safety, Health and  
Environment World Congress

## 2011

ORGANIZATION



Science and Education  
Research Council

PROMOTED BY



Safety, Health and Environment  
Research Organization

## I

Iara Braga	026
Isabela Mayara Cheida	052
Izabelle Laviny L. Dantas	006



### J

Jackson Bezerra da Silva	032					
Jaqueline Carril Ferreira da Rocha	043	045				
Jaqueline Rocha Borges dos Santos	035					
João Pedro Couto	007	008				
Jordana Nogueira de Almeida	018					
José Antonio Jânio Soares	059					
José Carlos Curvelo Santana	032	033	034	035	036	037
José Luiz Gonçalves Rodrigues	024					
José Renê de Oliveira	001					
Joseph Harari	001	004	005			
Joyce L.C. Lira	044					





## L

Liliane dos Santos Machado	009	010
Luiz Antonio Vasques Hellmeister	053	
Luíz Gustavo Torri Fogli	020	



## M

Maiara Domingues Pereira Nunes	058	
Márcia Silva de Oliveira	031	
Marcos Paulo Rangel da Silva	015	
Maria Aparecida Faustino Pires	021	022
Maria do Carmo Jampaulo Plácido Palhaci	052	053
Maria José Abreu	026	
Maria Regina de Aquino-Silva	029	
Marina Ryfer	012	013
Marina S. de Almeida	044	
Maroá Schaaf Zotelli	033	
Maykell Tayrinne Carvalho Larroque	056	
Melany M. Ciampi	001	
Milton Vieira Junior	032	036
Mohamad Said Darwich	058	
Mônica de Moraes Oliveira	060	061
Monique Barbosa Paiva	015	



## N

Natana Taila Adorno Moreira	057
Nathalia Santos	037



### P

Paulo Candeia de Freitas Chixaro Neto	004	005			
Paulo Henrique Kaupa	030				
Paulo Mendonça	007				
Paulo Rogerio Gallo	040				
Pedro José da Silva	020	021	022	023	024
Pelópidas Cypriano PEL	060	061			
Poliana Fernandes de Almeida	036				
Protasio Ferreira e Castro	012	013	014	015	



### R

Rafael Grigório Silva Gomes	018					
Rafaela Salvaia	049					
Ramachandran Radharamanan	002	003				
Raquel Cymrot	027	028				
Renato José Sassi	030					
Renato Oliveira Cecilio	004	005				
Rodrigo Pinheiro de Toledo Vianna	019					
Ronei Marcos de Moraes	009	010	016	017	018	019
Roseli Fernandes Gennari	037					
Rosinaldo Carvalho Pantoja	059					



## S

Sandra Maria Ribeiro de Souza	060	
Sérgio Ricardo Lourenço	050	
Sharlene Melanie Martins de Araújo	045	
Silvia Maria Soares de Araujo Pereira	012	013
Simone Cristina Caldato	011	
Sophia Karlla Almeida Motta-Gallo	040	



## T

Talitha Plácido Palhaci	053	
Tarcísio Lira Milhomem	059	
Thiago Gomes Silva	043	
Thiago Marques Coelho	004	005
Thiago Michel de Brito Farias	034	037



## V

Valtania F. da Silva	016	
Vânia Cristina Pires Nogueira Valente	039	
Victor Hellmeister	053	
Vivaldo José Breternitz	047	
Vivian Figueiredo Pereira de Almeida	014	
Viviane de O. L. Zeferino	054	055





**W**

Wanessa Weridiana da L. Freitas	016	018
Wania Maria Papile Galhardi	047	
Welison Teodoro de Sousa	058	
Wesley da Rocha Lima	058	