

VIII ENIN ORAL TECHNICAL SESSIONS

MAY 7, TUESDAY

Auditorium Salão de Jogos A

I01 - Energy Generation Sector, Advances in New Nuclear Power Plants Deployment and Technology Innovations & trends

| Time | Paper ID | Title / Authors |
|---------------|------------|--|
| 14:30 - 14:45 | I01_ 23649 | Should Brazil Invest in Small Modular Reactor? <i>Valéria Emiliana Alcântara e Alves, Daniel José Leibing Sarney, Amir Zacarias Mesquita, Vitor Fernandes de Almeida</i> |
| 14:45 - 15:00 | I01_ 23691 | Nuclear Power Plants: Recent Advances Towards to Safety <i>Lorenzo de Micheli, Claudia Giovedi Motta, Almir de Oliveira Neto, Alfredo Abe</i> |
| 15:00 - 15:15 | I01_ 23848 | Amaná - Clean Energy Complex: Nuclear Innovation with the Use of SMRs for Synthetic Fuel Production Using Brackish Water and Atmospheric CO2 <i>Larissa Pinheiro, Iago de Oliveira Gomes, Isabella Rezende Magalhães, Suelen Cristina Silva Oliveira, João Victor Gioseffi, Maciel Alegrio Lopes</i> |
| 15:15 - 15:30 | I01_ 24016 | A Little about Nuclear Fusion <i>Amir Zacarias Mesquita, Leonardo Yago Zwetsch Varella, Walewska Golveia Silva, Welen Nunes Lima, Thessa Cristina. Alonso.</i> |
| 15:30 - 15:45 | I01_ 24057 | Separation Techniques of Lithium Isotopes by Ion Exchange Method and Monitoring by ICP-MS <i>José Oscar Vega Bustillos, Juliana Ikebe Otomo, Paulo Henrique Barreto Leão, Beatriz Soto Roveló, Daniela da Costa Gonçalves Santos, João Coutinho Ferreira, Vanderlei Bergamaschi, Vinicius Alvarenga</i> |
| 15:45 - 16:00 | I01_ 24160 | The Possible Contributions of Graphene to the Nuclear Industry <i>Marcus Vinicius Vieira, Fernando M. Araujo-Moreira</i> |

I02 - Plant Operation Strategies, costs and capacity factors in the Nuclear Generation of Large Utilities

| Time | Paper ID | Title / Authors |
|---------------|------------|---|
| 16:00 - 16:15 | I02_ 23617 | Evaluation of the integrity of mechanical components by selective leaching in metals <i>Bruno Vieira Lopes, Maritza Rodríguez Gual, Rennan de Souza da Silva</i> |

I06 - Human Resources and Professional Development

| Time | Paper ID | Title / Authors |
|---------------|------------|---|
| 16:15 - 16:30 | I06_ 24036 | Experience of the Galeão Air Force Hospital (HFAG) in health training and qualification in approaching victims of radiological and nuclear agents <i>Moisés Bonifácio das Neves, Newton Hirata, Jayme Alberto Mendes, Humberto Silva Fonseca</i> |

MAY 8, WEDNESDAY

Auditorium Salão de Jogos A

I04 - Public Awareness, sustainability and social impact of nuclear technologies

| Time | Paper ID | Title / Authors |
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|---------------|------------|--|
| 17:00 - 17:15 | I04_ 23770 | Environmental Performance Assessment in Nuclear Research Facilities: A Review <i>Daniel Henrique Honório, Erica Kushiara Akim, Antonio Carlos Farrapo Junior, Diogo Aparecido Lopes Silva</i> |
| 17:15 - 17:30 | I04_ 23860 | Exploring the Synergy between Nuclear Technology and Gamification: An Approach to Nuclear Education <i>Rafael dos Santos, Inaya Lima</i> |
| 17:30 - 17:45 | I04_ 24171 | An Analysis of Brazil's Situation in the Global Survey on Public Support for Nuclear Energy <i>Fernando Razuck</i> |

I05 - Nuclear Safety & Security, non-Proliferation, Safeguards and Nuclear Forensics, Radioprotection and Safety Culture

| Time | Paper ID | Title / Authors |
|---------------|------------|---|
| 17:45 - 18:00 | I05_ 24174 | Nuclear Non-proliferation: an analysis of the international system in view of nuclear weapons <i>Amanda Rodrigues de Carvalho, Elaine Aparecida Rodrigues, Julia Cristina Garcia, Delvonei Alves de Andrade, Jose Oscar William Vega Bustillos</i> |
| 18:00 - 18:15 | I05_ 23890 | Three Decades of ABACC: A Regional Safeguards System in the Framework of International Safeguards and Nuclear Cooperation for Peaceful Purposes <i>Fabio Dias, Agustín Arbor González, Ana Maria Vaz de Araujo, Leonardo Ariel Pardo, Marco António Saraiva Marzo, Maria Cristina Lourenço, Sonia Fernández Moreno</i> |
| 18:15 - 18:30 | I05_ 23667 | A historical overview: radiological and nuclear preparedness needs - safe and adequate country response <i>Madison Coelho de Almeida, Raul dos Santos, João Régis dos Santos, Delvonei Alves de Andrade</i> |
| 18:30 - 18:45 | I05_ 23781 | Basic Principles of Safeguards by Design <i>Peter Rance, Jeremy Whitlock, Traci Newton, Michael Barletta, Neivy Lopez Pino</i> |
| 18:45 - 19:00 | I05_ 23974 | Classification assessment of radiological controlled areas subdivision zones <i>Helio Massaharu Murata, Douglas Brandão Baroni, Anelise Ruzzarin, Fagner Chagas Rother, Sad Sandrini Borsoi</i> |

MAY 9, THURSDAY

Sala de Seminário 2A

I06 - Human Resources and Professional Development

| Time | PaperID | Title / Authors |
|---------------|------------|---|
| 15:45 - 16:00 | I06_ 23856 | O DISCURSO DOS PROFISSIONAIS DE ENG. NUCLEAR SOBRE A INFLUÊNCIA DO MESTRADO E OU DOUTORADO NA CONSTRUÇÃO DE SUAS IDENTIDADES ACADÊMICAS E PROFISSIONAIS <i>Rafael Santos, Inaya Lima</i> |
| 16:00 - 16:15 | I06_ 24023 | Working with Canvas in a Public Institute of Research and Development in the nuclear sector: a Team Effort to Achieve Its Goals <i>Adriana Lourenço d'Ávila, Ana Gabriella Amorim Abreu Pereira, Guilherme Dutra Gonzaga Jaime</i> |

VIII ENIN POSTER TECHNICAL SESSIONS

MAY 7, TUESDAY

Biblioteca -TOTEN 2

I01 - Energy Generation Sector, Advances in New Nuclear Power Plants Deployment and Technology Innovations & trends

I02 - Plant Operation Strategies, costs and capacity factors in the Nuclear Generation of Large Utilities

I04 - Public Awareness, sustainability and social impact of nuclear technologies

I05 - Nuclear Safety & Security, non-Proliferation, Safeguards and Nuclear Forensics, Radioprotection and Safety Culture

| Time | Paper ID | Title / Authors |
|---------------|----------------------------------|---|
| 14:30 - 14:45 | I01_ 23858 | Comparison of ion exchange methods for lithium-7 isotopic enrichment for application in PWR reactors. <i>Juliana Ikebe Otomo, Juliana Ikebe Otomo, Daniela da Costa Gonçalves Santos, João Ferreira Coutinho, Vanderlei Sérgio Bergamaschi, José Oscar William Vega Bustillos</i> |
| 14:45 - 15:00 | I01_ 23923 | Electrochemical properties of activated carbon supercapacitors prepared with electrolytes based on solid and liquid eutectic solvents <i>Bianca Duarte da Costa, Pedro Vitor Duarte da Cruz, Rubens Nunes de Faria Junior</i> |
| 15:00 - 15:15 | I01_ 24151 | Comparative analysis between provided values and measured values on photovoltaic modules <i>Vinicius de Melo Puglia, Thadeu Das Neves Conti</i> |
| 15:15 - 15:30 | I01_ 24185 | Purification of lithium ions from lithium hydroxide solution by ion exchange method using cationic resin AG 50W-X8 e HPR 1200 <i>Daniela da Costa Gonçalves Santos, Juliana Ikebe Otomo, Vanderlei Sérgio Bergamaschi, José Oscar Vega Bustillos</i> |
| 15:30 - 15:45 | I01_ 24438 | Comparative analysis between provided values and measured values on photovoltaic modules <i>Vinicius de Melo Puglia, Thadeu das Neves Conti</i> |
| 15:45 - 16:00 | I02_ 23616 | Techniques in detect selective leaching in metal components <i>Maritza Rodríguez Gual, Bruno Vieira Lopes, Rennan de Souza da Silva</i> |
| 16:00 - 16:15 | I04_ 23771 | Scientific Outreach and The Museum of Nuclear Knowledge <i>Júlia Wagner Pereira, Letícia Antunes Ferreira Alves, Robson Bruno Fernandes da Silva Amador, Gabriel Mello dos Santos Abreu Mol, Hilary da Silva Lima, Raphael Rodrigo Pereira, Ana Paula Legey de Siqueira, André Cotelli do Espírito Santo, Sara Isnardo Fernandes, Eugenio Rangel Marins</i> |
| 16:15 - 16:30 | I04_ 23846 | Research Collaboration Dynamics at the National Nuclear Energy Commission (CNEN): Pathways to Enhance Economic and Social Impact <i>Alessandro Augusto Jordão, Valter Arthur</i> |
| 16:30 - | Coffee Break (Biblioteca) | |
| 17:00 - 17:15 | I04_ 23644 | Utilization of Multimedia Resources in Nuclear Sciences Communication within the Brazilian School Environment <i>Vitor Fernandes de Almeida, Amir Zacarias Mesquita, Alexandre Soares Leal, Fernando Soares Santos, Rodrigo Vieira, Valéria Emiliana Alcântara e Alves, Adriano de Almeida Massaud Felipe, Ana Rosa Baliza Maia, Leonardo Yago Zwetsch Varella, Walewska Gouveia Silva</i> |
| 17:15 - 17:30 | I04_ 24182 | Study of gamma radiation in the degradation of high-density polyethylene (HDPE) plastic bags. <i>Weslei Marcos da Silva Teixeira, Aneuri Souza de Amorim, Luciana Carvalheira</i> |
| 17:30 - 17:45 | I04_ 23835 | A proposal of criteria to improve the quality of scientific divulgation in the nuclear area <i>Cássio Feitosa Trajano da Silva, Cláudio Henrique dos Santos Grecco, Cláudio Márcio do Nascimento Abreu Pereira</i> |
| 17:45 - 18:00 | I04_ 23843 | Nuclear Energy as a Clean Alternative: Analyzing Citizens' Perception on 'X' through NLP <i>Gabriella Amorim, Adriana Lourenço D'Avila</i> |

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| 18:00 - 18:15 | I05_ 23748 | Safety and Security issues during the return of contaminated scrap metal to Brazil <i>Madison Coelho de Almeida, Patrick Rodrigues Perrotta, Raul dos Santos, Delvonei Alves de Andrade, Maria Angelica Vergara Wasserman</i> |
| 18:15 - 18:30 | I05_ 23776 | Methodology to estimate Effective Doses from 137Cs Gaussian Plume using MCNP6 <i>Juliana Sanchez, Juliana de Sá Sanchez, Andressa dos Santos Nicolau, César Marques Salgado, Claudio Marcio N. A. Pereira</i> |
| 18:30 - 18:45 | I01_ 23941 | River Propulsion by Nuclear Microreactors with Nuclear Security Design <i>João Claudio Batista Fiel, André Luiz Leal Beviciori</i> |
| 18:45 - 19:00 | I04_ 24169 | A structure of gamifiable criteria to improve the evaluation of postgraduate courses in the nuclear area <i>Rafael Fernandes Rodrigues, Cláudio Henrique dos Santos Grecco, Cláudio Márcio do Nascimento Abreu Pereira</i> |

MAY 8, WEDNESDAY

Biblioteca -TOTEN 2

I05 - Nuclear Safety & Security, non-Proliferation, Safeguards and Nuclear Forensics, Radioprotection and Safety Culture

I06 - Human Resources and Professional Development

| Time | Paper ID | Title / Authors |
|---------------|---------------------------|---|
| 14:30 - 14:45 | I05_ 23782 | Development of an Epoxy/Carbon Fiber Composite for Radiation Attenuation with a Dispersion of Micro Particles of Bismuth Trioxide (Bi ₂ O ₃) <i>Pedro Munhoz, Fernando Codeko Nascimento, Orlando Rodrigues Junior, Maria da Penha Albuquerque Potiens, Wilson Aparecido Parejo Calvo</i> |
| 14:45 - 15:00 | I05_ 24186 | Nuclear Security and Cybersecurity: Two Fields with Gender Gap <i>Tania Mara Muguet Haisman</i> |
| 15:00 - 15:15 | I05_ 23663 | Innovative Deposition of Platinum-Graphene on Alumina for Passive Autocatalytic Recombiners to Improve Nuclear Safety <i>Lorenzo De Micheli, Claudia Giovedi Motta, Rodrigo Fernando Brambilla Souza, Gabriel de Almeida Silvestrin, Almir de Oliveira Neto</i> |
| 15:15 - 15:30 | I05_ 24025 | Analytical Approach to Public Radiological Protection in Controlled Areas <i>Lucinda Fernandes da Silva, Eara de Souza Luz Oliveira, João Carlos Silva, Gustavo Claassen, Francisco José de Oliveira Ferreira</i> |
| 15:30 - 15:45 | I05_ 24055 | Strategies for awareness and promotion of nuclear security and safety for professionals through social networks: a case study in Brazil <i>Camila Moreira Araujo, Francisco Cesar Augusto Da Silva Davi Ferreira De Oliveira</i> |
| 15:45 - 16:00 | I05_ 23671 | Soft Systems Methodology (SSM) as an approach to the safety management of nuclear facilities: a case report <i>Sabine Neusatz Guillhen, Iara Maria Carneiro de Camargo, Júlio Takehiro Marumo, Teresinha de Moraes da Silva, Gerson Antonio Rubin, Antonio Souza Vieira Neto</i> |
| 16:00 - 16:15 | I05_ 23790 | Evaluation of Multidosimetry Results during Angra 1 Refueling Outage <i>Fernando Mendonça Soares Filho</i> |
| 16:15 - 16:30 | I05_ 24192 | Efficiency of a Multilayered Radiation Shielding for Photons Containing 4 Materials <i>João Vitor da Silva, Inayá Corrêa Barbosa Lima, Domingos de Oliveira Cardoso, Marcos Paulo Cavaliere de Medeiros, Rudnei Karam Morales, Sergio Gavazza, Thomaz Jacintho Lopes</i> |
| 16:30 - | Coffee Break (Biblioteca) | |

- 17:00 - 17:15** I06_ 23695 Study of Organizational Management through measures of implicit and explicit associations to demonstrate the need and possibilities for innovation in public and private management
Maria P. S. Martins
- 17:15 - 17:30** I06_ 24045 Entrepreneurial Innovation in Nuclear Science: Accelerating Research Through the LCAA Supercomputing Initiative
Guilherme Dutra Gonzaga Jaime, Adriana Lourenço D'Avila