

Highlights

The **SIPS 2023** - **Sustainable Industrial Processing Summit & Exhibition** was held in Panama from 27 Nov -1 Dec 2023 at the Dreams Playa Bonita Resort. Following the rich tradition of previous years, the summit covered three actors of sustainability: (1) Science, Technology, and Industry (2) Governance and Management, and (3) Education and Civil Society.

This time, the summit honored the 2023 STARS of sustainable science, technology, and innovation. In alphabetical order, they are:

- Assis International Symposium (9th Intl. Symp. on Advanced Sustainable Iron & Steel Making)
- Carter International Symposium (3rd Intl Symp on Laws & their Applications for Sustainable Development)
- Durán International Symposium on Sustainable Glass Processing and Applications
- Echegoyen International Symposium (8th Intl. Symp. on Synthesis & Properties of Nanomaterials for Future Energy Demands)
- Guerrant International Symposium (2nd Intl Symp. on COVID-19/Infectious Diseases & their implications on Sustainable Development)
- Kumar international Symposium (8th Intl. Symp. on Sustainable Secondary Battery Manufacturing & Recycling)
- Navrotsky International Symposium (2nd Intl. symp. on Geochemistry for Sustainable Development)
- **Poeppelmeier International Symposium** (3rd Intl Symp on Solid State Chemistry for Applications & Sustainable Development)
- Torem International Symposium (8th Intl. Symp. on Sustainable Mineral Processing)
- Ozawa International Symposium (3rd Intl. Symp. on Oxidative Stress for Sustainable Development of Human Beings)

The honorees cover areas of materials sciences that appear distinct but are all mutually related and share a common theme of sustainability.

In this context, in their honor, the summit incorporated numerous International Symposia covering the fields of: iron and steel making; electrochemistry; molten salt and ionic liquids; advanced materials; advanced manufacturing; advanced technologies; aluminum; batteries; bio-extraction; biochar, cement; coal; coatings; composites; ceramics; ecosystems; education; energy production; environment; ferro-alloys; mathematics; metallic systems; metals and alloys; minerals; mining; multiscale materials; nanomaterials; non-ferrous smelting and hydro/electrochemical processing; quasi-crystals; rare earth and platinum group metals; recycling; and rotary kiln operations. The topics within each symposium span across scientific, technological, environmental, health, legal, management, financial, policy, taxation, social, and pedagogy issues.

The summit had an Opening Event, three Summit Plenary sessions, and a Summit Gala that combined with 8 Nobel Prize Winners along with:

- CEOs/entrepreneurs of major industrial companies who reflected on the role of applied technology, management, and entrepreneurship.
- Academics and research institutes that reflected on the importance of research and education in creating pathways for innovation and change.
- Politicians and public figures who reflected on the role of governance and political frameworks.

In other words, SIPS elevated its own bar toward higher levers of collaboration across multiple sectors and domains.



Dreams Ballroom



View from the Hyatt Dreams Playa Bonita

OPENING EVENT

The Opening Event was held on Monday evening in the Plaza Space. This informal welcoming dinner involved international delicacies and Entertainment dance shows.



Opening Event Dinner & Cocktail on Seafarer Pool





SIPS 2023 guests at the Opening Event

SUMMIT PLENARIES

The three summit plenary sessions were held under the theme of Science and Sustainability.

Summit Plenary I:



Dr. Florian Kongoli FLOGEN Chairman



Prof. Stanley Whittingham 2019 Nobel Laureate - Chemistry Binghamton University, USA



Prof. Dan Shechtman 2011 Nobel Laureate – Chemistry Technion, Israel





Dr. Cristovam Paes de Oliveira Gorceix Foundation, Ouro Preto, Brazil



Prof. Subra Suresh Former Director of NFS, USA

Summit Plenary II:



Prof. Joachim Frank 2017 Nobel Laureate – Chemistry Columbia Univ Irving Medical Center, USA



Prof. Avram Hershko 2004 Nobel Laureate – Chemistry Technion Institute of Technology, Israel





Mr. Rodrigo Alvarenga Vilela CEO- Samarco Belo Horizonte, Brazil





Prof. Rudy Marcus 1992 Nobel Laureate- Chemistry CALTECH, USA



Prof. Barry James Marshall 2005 Nobel Laureate- Medicine The Univ.of Western Australia, Australia



Sir. Dr. Ruggero Maria Santilli Hadronic Technologies Corporation, USA

Summit Plenary III:



Dr. Florian Kongoli FLOGEN Chairman



Prof. Aaron Ciechanover 2004 Nobel Laureate – Chemistry Technion Integrated Cancer Center, Israel



Prof. Fernand Marquis Integrated Materials Technologies & Systems, USA



Prof. Nektarios Tavernarakis EIT Governing Board, Greece



Prof. Donna Nelson Univ. of Oklahoma, USA



Prof. Luis Echegoyen Univ. of Texas El-Paso, USA



Prof. Kurt Wüthrich 2002 Nobel Laureate - Chemistry ETH Zürich, Switzerland



Dr. Manisha Rane -Fondacaro Soul-Led Solutions LLC, USA



Mr. Samuel Berger NFSD, USA

AWARDS CEREMONY

THE STAR OUTREAD

Dr. Florian Kongoli, FLOGEN Chairman, opened the gala to all participants, STAR honorees and VIP guests.

Dr. Florian Kongoli, FLOGEN Chairman

Fray International Sustainability Award

During the Award Ceremony and Gala Dinner, several personalities were honored with the <u>2023 Fray International</u> <u>Sustainability Award</u> and corresponding <u>World Crystal Trophy</u>, adding their name to the distinguished list of previous award winners. (<u>https://www.flogen.org/?p=38</u>). The 2023 winners in each category were the following:

Academia

"For Leadership in developing new technologies that contribute to a global sustainable development in the environmental, economic, and social points of view."

- Prof. M. Stanley Whittingham, Binghamton University (USA)
- Prof. Alicia Durán, Spanish Research Council CSIC (Spain)
- Prof. Kenneth Poeppelmeier, Northwestern University (USA)
- Prof. Mauricio Leonardo Torem, PCU (Rio de Janeiro, Brazil)
- Prof. Joachim Frank, Columbia University (USA)
- Prof. Barry James Marshall, University of Western Australia (Australia)



Prof. M. Stanley Whittingham, Binghamton Univ. USA



Prof. Alicia Durán, Spanish Research Council, Spain



Prof. Kenneth Poeppelmeier, Northwestern Univ., USA



Prof. Joachim Frank, Columbia University, USA



Prof. Mauricio L. Torem, PCU, Brazil

Sustainable Industrial Processing Summit 2023 STARS:



Barry Marshall Professor University of Western Australia, Australia Field: Life Sciences

FRAY INTERNATIONAL SUSTAINABILITY AWARD FLOGEN STARS OUTREACH

Prof. Barry James Marshall, Univ. of Western Australia

Lee-McNeil International Law Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Lee-McNeil International Law Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=63</u>).

The citation of this Award reads:

"For Leadership in applying law with a scientific logic within the framework of sustainable development."

The 2023 winner in this category was:

Hunter T. Carter, Arent Fox Schiff LLP (USA)



Stoddart International Scientific Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Stoddart International Scientific Award and corresponding Star Crystal Trophy, her name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=45</u>).

The citation of this Award reads:

"For extraordinary scientific achievements within the framework of sustainable development."

The 2023 winner in this category was:

• Prof. Paulo Santos Assis, UFOP, (Ouro Preto, Brazil)



Geim International Innovation Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Geim International Innovation Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=47</u>).

The citation of this Award reads:

"For extraordinary scientific innovation that enables a successful business and contributes to shaping a sustainable future."

The 2023 winner in this category was:

• Prof. Fernand Marquis, Materials Technologies & Systems, USA



Wuthrich International Young Star Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Wuthrich International Young Star Award and corresponding Star Crystal Trophy, her name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=46</u>).

The citation of this Award reads:

" For outstanding scientific performance during the early career stages, within the framework of sustainable development."

The 2023 winner in this category was:

• Assistant Professor, Dimas Coura, IFMG (Brazil)



Von Klitzing International Engineering Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Von Klitzing International Engineering Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=64</u>).

The citation of this Award reads:

"For leadership in developing and applying new engineering methods and technologies for a sustainable development of the company in the environmental, economic, and social points of view."

The 2023 winner in this category was:

Mr. Erik Muijsenberg, Glass Service Inc. (Czech Republic)



Shechtman International Leadership Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Shechtman International Leadership Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=42</u>).

The citation of this Award reads:

"For leadership through courage, conviction, persistence and willingness to break with the taboos and stereotypes in pioneering new ways of thinking that shape the future for a global sustainable development in the environment, economy and social points of view."

The 2023 winner in this category were:

Mr. Cristovam Paes de Oliveira, Gorceix Foundation (Brazil)



• Mr. Eduardo Ortega-Barria, SENACYT (Panama)

Murad International Life Improvement Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Murad International Life Improvement Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=65</u>).

The citation of this Award reads:

"For leadership in developing and applying new medical methods and technologies for a sustainable development in the environmental, economic, and social points of view."

The 2023 winner in this category was:

• Prof. Toshihiko Ozawa, Pharmaceutical University (Japan)

Yildirim International Entrepreneurship Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Yildirim International Entrepreneurship Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (https://www.flogen.org/?p=44).

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The citation of this Award reads:

"For innovative leadership in establishing, developing and/or growing, against all challenges, odds and risks, a sustainable business in environment, economy and social point of view."

The 2023 winner in this category was:

• Mr. Rodrigo Alvarenga Vilela, Samarco (Brazil)



Novoselov International Materials Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Novoselov International Materials Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=184</u>).

The citation of this Award reads:

"For Leadership in developing and applying new materials methods and technologies for a sustainable development in the environmental, economic, and social points of view."

The 2023 winner in this category was:

Prof. Luis Echegoyen, University of Texas El-Paso (USA)



Marcus International Managing Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Marcus International Managing Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=66</u>).

The citation of this Award reads:

"For innovative leadership in stablishing, developing and/or growing, against all challenges, odds and risks, a sustainable business in environment, economy and social point of view."

The 2023 winner in this category was:

• Mr. Claudio Capiglia, Reliance Industries Limited (India)



Hershko International Biochemistry Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Hershko International Biochemistry Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=176</u>).

The citation of this Award reads:

"For Leadership in developing and applying new biochemical methods and technologies for a sustainable development in the environmental, economic, and social points of view."

The 2023 winner in this category was:

• Prof. Gregory Knipp, Purdue University (USA)



Ciechanover International Biology Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Ciechanover International Biology Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=175</u>).

The citation of this Award reads:

"For Leadership in developing and applying new biological methods and technologies for a sustainable development in the environmental, economic, and social points of view."

The 2023 winner in this category was:

• Prof. Eugenia Trushina, Mayo Clinic (USA)



Whittingham International Energy Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Whittingham International Energy Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=179</u>).

The citation of this Award reads:

"For Leadership in developing new energy technologies for a sustainable development in the environmental, economic, and social points of view"

The 2023 winner in this category was:

• Prof. Vasant Kumar, University of Cambridge (United Kingdom)



Dr. Athan Fox receiving the Whittingham International Energy Award from Dr. Florian Kongoli & Prof. Stanley Whittingham on behalf of Prof. Vasant Kumar

International Life in Universe Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 International Life in Universe Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=181</u>).

The citation of this Award reads:

"For innovative leadership in establishing, developing and/or growing, against all challenges, odds and risks, a sustainable business in environment, economy and social point of view"

The 2023 winner in this category was:

• Prof. Alexandra Navrotsky, Arizona State University (USA)



Robert's International Medicine Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Robert's International Medicine Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=180</u>).

The citation of this Award reads:

"For leadership in developing new basic medical principles in the framework of sustainable development in the environmental, economic, and social points of view"

The 2023 winner in this category was:

• Dr. Fuhua Yang, Gifu University (Japan)



Frank International Biophysics Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Frank International Biophysics Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=190</u>).

The citation of this Award reads:

"For Leadership in applying physical principles in biological phenomena in the framework of a sustainable development in the environmental, economic, and social points of view."

The 2023 winner in this category was:

• Prof. Hans Levenberger, University of Basel (Switzerland)



Prof. Joachim Frank presenting the award to Prof. Hans Levenberger, University of Basel (Switzerland)

Marshall International Life Sciences Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 Marshall International Life Sciences Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=192</u>).

The citation of this Award reads:

"For Leadership and Scientific Achievements in Life Sciences in the Framework of a Sustainable Development in the Environmental, Economic, and Social Points of View"

The 2023 winner in this category was:

• Prof. Richard L. Guerrant, University of Virginia (USA)



FLOGEN 100 Life Achievements Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2023 FLOGEN 100 Life Achievements Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<u>https://www.flogen.org/?p=191</u>).

The citation of this Award reads:

"For continuous leadership and lifetime achievements in science and technology in the framework of sustainable development in the environment, economy, and social points of view."

The 2023 winner in this category was:

• Prof. Rudy Marcus, California Institute of Technology (USA)



THEMATIC SYMPOSIA

The summit had a strong number of technical and thematic symposia, with special emphasis on the sustainable developments of the 21st century. The overwhelming response from the international professional community was reflected in about 600 contributions received from authors and co-authors from more than 60 countries throughout the world. The countries of principal authors given alphabetically were: Algeria, Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Croatia, Czech Republic, Ethiopia, France, Georgia, Germany, Greece, Hong Kong, India, Iran, Israel, Italy, Japan, Kazakhstan, Kuwait, Lithuania, Luxembourg, Mexico, Mongolia, Nepal, Netherlands, Norway, Oman, Pakistan, Peru, Philippines, Poland, Republic of South Korea, Romania, Russian Federation, Saint Helena, Saudi Arabia, Serbia and Montenegro, Singapore, Slovakia, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Ukraine, United Arab Emirates, United Kingdom, United States, Venezuela and Vietnam. The biggest contributor countries were Canada, Brazil, Japan, China, Poland, Czech Republic, France, Germany, Greece, Kazakhstan, Russian Federation and USA.

The papers were presented in a lot of sessions divided in the following thematic symposia:

- Assis International Symposium (9th Intl. Symp. on Advanced Sustainable Iron & Steel Making)
- Carter International Symposium (3rd Intl Symp on Laws & their Applications for Sustainable Development)
- Durán International Symposium on Sustainable Glass Processing and Applications
- Echegoyen International Symposium (8th Intl. Symp. on Synthesis & Properties of Nanomaterials for Future Energy Demands)
- Guerrant International Symposium (2nd Intl Symp. on COVID-19/Infectious Diseases & their implications on Sustainable Development)

- Kumar international Symposium (8th Intl. Symp. on Sustainable Secondary Battery Manufacturing & Recycling)
- Navrotsky International Symposium (2nd Intl. symp. on Geochemistry for Sustainable Development)
- **Poeppelmeier International Symposium** (3rd Intl Symp on **Solid State Chemistry** for Applications & Sustainable Development)
- Torem International Symposium (8th Intl. Symp. on Sustainable Mineral Processing)
- Ozawa International Symposium (3rd Intl. Symp. on Oxidative Stress for Sustainable Development of Human Beings)
- 7th Intl Symposium on New & **Advanced Materials** and Technologies for Energy, Environment, Health and Sustainable Development
- 6th Intl. Symp. on Sustainable Aluminum Extraction & Processing
- 8th International Symposium on Sustainable Biochar, Cement and Concrete Production and Utilization
- 8th Intl. Symp. on Sustainable Base-metal **Bio-extraction**
- 6th Intl. Symp. on Sustainable Carbon and Biocoke and their Industrial Application
- 8th Intl. Symp. on Sustainable Surface & Interface Engineering: Coatings for Extreme Environments
- 9th Intl. Symp. on Composite, Ceramic & Nano Materials Processing, Characterization & Applications
- 2nd Intl Symp. on Corrosion for Sustainable Development
- 5th Intl. Symp. on Sustainability of World **Ecosystems** in Anthropocene Era
- 4th Intl. Symp. on Educational Strategies for Achieving a Sustainable Future
- 4th Intl. Symp. on **Electrochemistry** for Sustainable Development
- 8th Intl. Symp. on Sustainable **Energy Production**: Fossil; Renewables; Nuclear; Waste handling, processing, & storage for all energy production technologies; Energy conservation
- 10th Intl. Symp. on **Environmental**, Policy, Management, Health, Economic, Financial, Social Issues Related to Technology & Scientific Innovation
- 8th Intl. Symp. on Sustainable Production of Ferroalloys
- 3rd Intl Symp on Geomechanics & Applications for Sustainable Development
- 3rd Intl Symp. on Magnesium Alloys & Their Applications for Sustainable Development
- 4th Intl. Symp. on Advanced Manufacturing for Sustainable Development
- 6th Intl. Symp. on Sustainable Mathematics Applications
- 2nd Intl. Symp. on Technological Innovations in Medicine for Sustainable Development
- 6th Intl Symp. on Sustainable Complex Metallic Systems
- 7th Intl. Symp. on Sustainable Metals & Alloys Processing
- 8th Intl. Symp. on Sustainable Mining Operations
- 18th Intl. Symp. on Multiscale & Multiphysics **Modelling** of 'Complex' Material
- Modelling, Materials & Processes Interdisciplinary symposium for sustainable development
- 9th Intl. Symp. on Sustainable Molten Salt, Ionic & Glass-forming Liquids & Powdered Materials
- 8th Intl. Symp. on Multiscale Material Mechanics & Sustainable Applications
- 2nd Intl Symp. on Nanotechnology for Sustainable Development
- 9th Intl. Symp. on Sustainable Non-ferrous Smelting & Hydro/Electrochemical Processing
- 3rd Intl. Symp. on Physical Chemistry & Its Applications for Sustainable Development
- 2nd Intl Symp on Physics, Technology & Interdisciplinary Research for Sustainable Development
- 3rd Intl Symp on Green Chemistry & **Polymers** & their Application for Sustainable Development
- 9th Intl. Symp. on Quasi-crystals, Metallic Alloys, Composites, Ceramics & Nano Materials
- 8th Intl. Symp. on Rare Earth & Platinum Group Metals: Managing & Processing
- 9th Intl. Symp. on Sustainable Materials **Recycling** Processes & Products
- 6th Intl. Symp. on Rotary Kiln Operations for Sustainable Products

- 7th Intl. Symp. on Science of Intelligent & Sustainable Advanced Materials (SISAM)
- 2nd Intl. Symp. on Solution Chemistry Sustainable Development

Some thematic symposia and their speakers are shown in the pictures below while the others are in the summit web site at Post Symposium/Pictures tab.



POSTERS

Numerous poster presentations were given during the summit. Below are some of the posters featured:



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ROUND TABLES

Several round tables were organized in order to discuss different perspectives on the ideas presented during oral sessions.









AFTER SESSIONS







PANAMA CANAL SCIENCE TOUR







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SOCIAL PROGRAM

The participants enjoyed several outstanding social functions:

Monday Dinner and Show was held in the Plaza Space, and guests enjoyed a buffet dinner and drinks, followed by a dazzling International dancing show exclusively organized for SIPS 2023 participants.



Tuesday Dinner and Show was held in Sand Court, and guests enjoyed a buffet dinner and drinks, followed by a dazzling Panamanian dancing show exclusively organized for SIPS 2023 participants.



Wednesday Gala Dinner and Show was held in the Dreams Ballroom and included an elegant set menu dinner and exclusive show organized for SIPS 2023 participants.



PUBLICATIONS

The final Submitted papers are published in the Summit Official Publication volumes which add up to previous similar publications (<u>http://www.flogen.org/books/index.php?spage=2</u>).

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 1</u>: Assis Intl. Symp/ Advanced Iron & Steel Making Edited by: F. Kongoli, T. Usui, R.A. Vilela, J. A. de Castro, W. F. Santos, J. Poveromo, GS. Mahobia, B. Deo Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 ISBN: 978-1-989820-72-8 (CD)

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 2</u>: Carter Intl. Symp / Laws & Their Applications Edited by: F. Kongoli, M. McNeil, M. Dibra, M. Nolan, E. Pana, D. Shanley, B. Jedlickova Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 ISBN: 978-1-989820-74-2 (CD)

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 3</u>: Durán Intl. Symp / Glass Processing & Applications Edited by: F. Kongoli, S. Oktik, E. Muijsenberg, L. Belmonte, D. Brauer, B. Cazes, J. Parker, S. Tanabe, K. Ward, U. Jokhu-Sowell, V. Kapur Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-76-6 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 4:</u> Echegoyen Intl. Symp / Nanomaterials for Future Energy Demands Edited by: F. Kongoli, M.P. Brzezinska, M.A. Alario-Franco, F. Marquis, M.S. Noufal, E.Palomares, J.M. Poblet, D.M. Guldi, A.A. Popov, A.R. Puente Santiago, B. Raveau, D. G. Rodriguez, S. Stevenson, T. Torres, A. Tressaud, M. de Campos Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-78-0 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 5</u>: Guerrant Intl. Symp /Covid-19 and Infectious Diseases Edited by: F. Kongoli, F. Murad, W. Petri, H. Inufusa, S. Heysell, J. Yedoyan Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-80-3 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 6:</u> Kumar Intl. Symp. / Secondary Battery Manufacturing & Recycling Edited by: F. Kongoli, K. Aifantis, C. Capiglia, A. Fox, R. Yazami, A. U. H. Qurashi Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-82-7 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 7</u>: Ozawa Intl. Symp. / Oxidative Stress of Human Beings Edited by: F. Kongoli, T. Yoshikawa, H. Inufusa, C. A. Amatore, H-Y. Chen, W-H. Huang, H. Van Goor Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 ISBN: 978-1-989820-84-1 (CD)

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 8:</u> Poeppelmeier Intl. Symp. / Solid State Chemistry Edited by: F. Kongoli, M. Delferro, P. S. Halasyamani, M. A. Alario-Franco, F. Marquis, A. Tressaud, H. Kageyama Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 ISBN: 978-1-989820-86-5 (CD)

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 9</u>: Navrotsky Intl. Symp. / Geochemistry Edited by: F. Kongoli, M. Asta, C. Drouet, S.Hayun, R. Riedel, W. Sun Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 ISBN: 978-1-989820-88-9 (CD)

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 10</u>: Torem Intl. Symp/ Mineral Processing Edited by: F. Kongoli, G. N. Anastassakis, A. Abhilash, H. R. Kota, A. G. Merma, E. Souza, C.H. Sampaio, R. Souza, M.M. Vellasco, F. Zeballos, J. Sokolovic Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 ISBN: 978-1-989820-90-2 (CD)

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 11</u>: Intl. Symp on Technological Innovations in Medicine Edited by: F. Kongoli, F. Murad, T. Yoshikawa, J.R. Ribas, D. Joseph, N. Tran, S. Hirano Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-92-6 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 12:</u> Intl. Symp on Energy, Carbon, Biochar and Cement Edited by: F. Kongoli, S.M. Atnaw, H. Dodds, M. Mauntz, T. Turna, A. Faaij, J. Antrekowitsch, G. Hanke, H.W. Kua, M. Giorcelli Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-94-0 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 13:</u> Intl. Symp on Physics, Mathematics and Multiscale Mechanics Edited by: F. Kongoli, A. B. Bhattacharya, A.C. Pandey, G. Sandhu, F. Quattrocchi, L. Sajo-Bohus, S. Singh, H.S. Virk, R.M. Santilli, M. Mikalajunas, E. Aifantis, T. Vougiouklis, P. Mandell, E. Suhir, D. Bammann, J. Baumgardner, M. Horstemeyer, N. Morgan, R. Prabhu, A. Rajendran Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-96-4 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 14:</u> Intl. Symp on Electrochemistry, Molten Salts, Corrosion and Recycling Edited by: F. Kongoli, R. Fehrmann, V. Papangelakis, I. Paspaliaris, G. Saevarsdottir, G. Kipouros, R. Singh, F. Wang, D. Macdonald, R. Gupta, M. Barinova, F. Ahmed, H. Ozgunay, K. Tang, N.N. Thanh, C. Gaidau, K. Kolomaznik Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-989820-98-8 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

<u>Volume 15:</u> Intl. Symp on Advanced Materials and Modelling of Complex Materials Edited by: F. Kongoli, F. Marquis, N. Chikhradze, T. Prikhna, O. Adiguzel, E. Aifantis, R. Das, P. Trovalusci Publisher: FLOGEN STARS OUTREACH Publishing date: December 2023 **ISBN: 978-1-998384-00-6 (CD)**

2023 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

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ATTENDEES' SATISFACTORY RATE

A poll among the attendees after the summit showed an overall satisfactory rate of 98%.



APPENDIX: SOME WRITTEN IMPRESSIONS

Congratulations again for this excellent SIPS and for the quality of your present team members Warmest wishes. **Prof. Christian Andre Amatore** CNRS & PSL France

Nice event with a lot of opportunities to enhance network. **Prof. Andreas Diegeler** Fraunhofe ISC(Wertheim), Germany Germany l am impressed by the organization, the level of the reports presented and the wonderful setting. **Prof. Rositca Nikolova** University of Sofia Bulgaria

Congratulations to Dr. Florian and the other organizers of this integrative event, corroborating with a wealth of information, benefits, and opportunities for companies, with applicability in their industrial, commercial processes and services, based on knowledge, technology, and innovations.

Wilson Ferreira Santos Jr.

Masonic Court of Justice of the Grand Orient of Minas Gerais Brazil

It was a good opportunity for network and share information. **Prof. Jesus Cruz Guzman** Universidad Nacional Autonoma de Mexico Mexico

SIPS 2023 was perfect! The symposium was incredible with high-level work that will contribute to everyone's success! **Prof. Dimas Coura** Federal U. of Ouro Preto Brazil

It was an honor and pleasure to be invited. The numerous exchanges with the scientific community and gathered engineers were enlightening.

Eric Muijsenberg Glass Service Inc, Zlin, Czechia

Very interesting conference, lots of knowledgeable participants. Enjoyed the Awards night. **Prof. Pierre Collignon** PD2-I Paris, France

Scientific Merit: after a one-week stay at Dreams Hyatt Playa Bonita resort in Panamá City, where the Echegoyen International Symposium was held in the SIPS 2023 Meeting between Tuesday-Friday. Many thanks to all my friends and collaborators who came to participate in the symposium in my honor, I am truly honored by the presence and excellent scientific contributions. It was an excellent symposium due to their presence and contribution.

Luis Echegoyen University of Texas El-Paso USA

More impressions can be found here: <u>https://www.flogen.org/?p=110#toop</u>