

Highlights

The **SIPS 2024 - Sustainable Industrial Processing Summit & Exhibition** was held in Greece from 20 – 24 Oct. 2024 at the Out of the Blue 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 2024 STARS of sustainable science, technology, and innovation. In alphabetical order, they are:

- **Abe International Symposium (4th Intl. Symp. on Oxidative Stress for Sustainable Development of Human Beings)**
- **Anastassakis International Symposium (10th Intl. Symp. on Sustainable Mineral Processing)**
- **Dibra International Symposium (4th Intl Symp on Laws & their Applications for Sustainable Development)**
- **Kanatidis International Symposium (4th Intl. Symp. on Materials/Solid State Chemistry and Nanoscience for Sustainable Development)**
- **Leite International Symposium (10th Intl. Symp. on Advanced Sustainable Iron & Steel Making)**
- **Leuenberger International Symposium on Pharmaceutical Sciences and Industrial Applications for Sustainable Development**
- **Lipkowski International Symposium (4th Intl. Symp. on Physical Chemistry & Its Applications for Sustainable Development)**
- **Monteiro International Symposium on Composite, Ceramic & Nano Materials Processing, Characterization & Applications (10th Intl. Symp.)**
- **Oktik International Symposium (2nd Intl. Symp. on Sustainable Glass and Polymers Processing and Applications)**
- **Ross International Symposium (3rd Intl. Symp. on Geochemistry for Sustainable Development)**
- **Rowlands International Symposium (7th Intl. Symp. on Sustainable Mathematics Applications)**
- **Schultz International Symposium (8th Intl. Symp. on Science of Intelligent & Sustainable Advanced Ferromagnetic and Superconducting Magnets (SISAM))**
- **Stelter International Symposium (10th Intl. Symp. on Sustainable Non-ferrous Smelting & Hydro/Electrochemical Processing)**

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; agroforestry; batteries; bio-extraction; biochar, cement; coal; coatings; composites; ceramics; construction materials; carbon & biocoke; 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 10 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.



Out of the Blue Resort, Crete, Greece



Sea view from the Out of the blue Resort

OPENING EVENT

The Opening Event was held on Sunday evening in the red pepper restaurant. This informal welcoming dinner involved international delicacies and Entertainment dance shows.



Opening Event Dinner & Cocktail at the Red pepper restaurant



SIPS 2024 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
Montreal, Canada



Mr. Nikolaos Xylouris
Deputy Governor for Environment of Crete
Crete, Greece



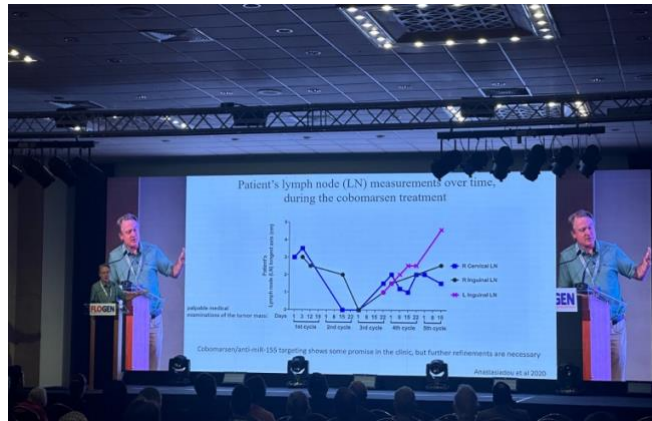
Prof. Gregg L. Semenza
2019 Nobel Laureate - Medicine
Johns Hopkins School of Medicine, USA



Prof. Haruhiko Inufusa
MD, CEO
TIMA, Japan



Mr. Davis Joseph
McGill University
Montreal, Canada



Dr. Frank J. Slack
BIDMC/Harvard Medical School, USA



Dr. Avram Hershko
2004 Nobel Laureate in Chemistry
Technion Institute of Technology, Israel



Honorable Judge Louise Otis
NATO and OECD
Montreal, Canada



Mr. Yavuzhan Kaya
Yilmaden Holding A.Ş., Turkey



Mr. Burak Büyükfirat
Şişecam, Turkey

Summit Plenary II:



Dr. Florian Kongoli
FLOGEN Chairman
Montreal, Canada



Dr. Arturo A. Ayón
U.S. Office of Naval Research Global (ONRG)
Sao Paulo, Brazil



Dr. Harvey J. Alter
2020 Nobel Laureate – Medicine
National Institutes of Health, USA



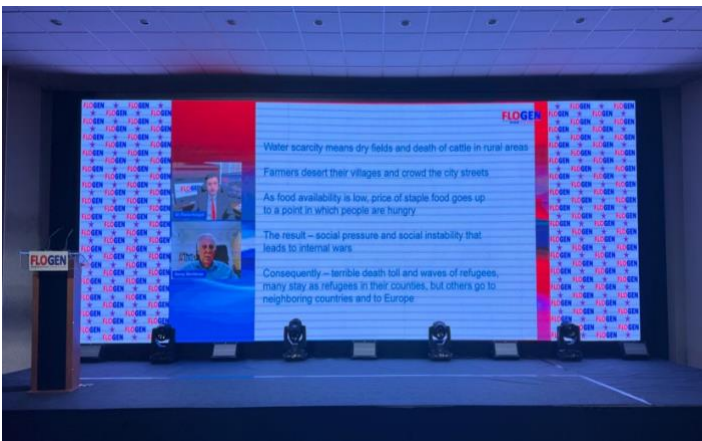
Professor Pierre da Silva Moraes
Câmara Municipal de Nova Friburgo
Nova Friburgo, Brazil



Mr. Mario Linhares
Atlantica Green Tech
Rio de Janeiro, Brazil



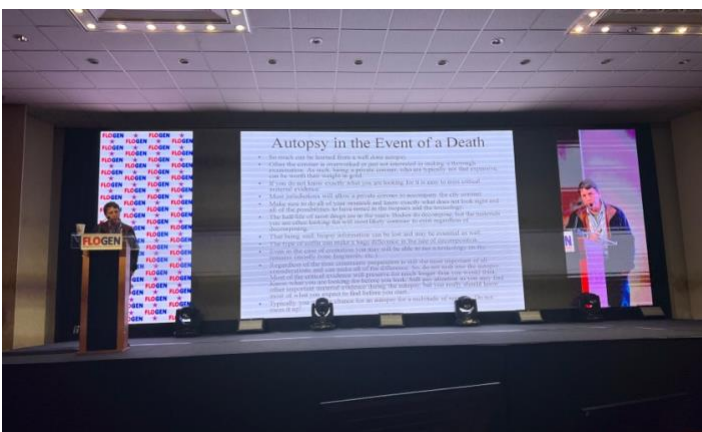
Mr. Alexandre Meyohas
Secretary at the Civil House of the State of Rio de Janeiro, Representing the Governor of Rio de Janeiro, Brazil



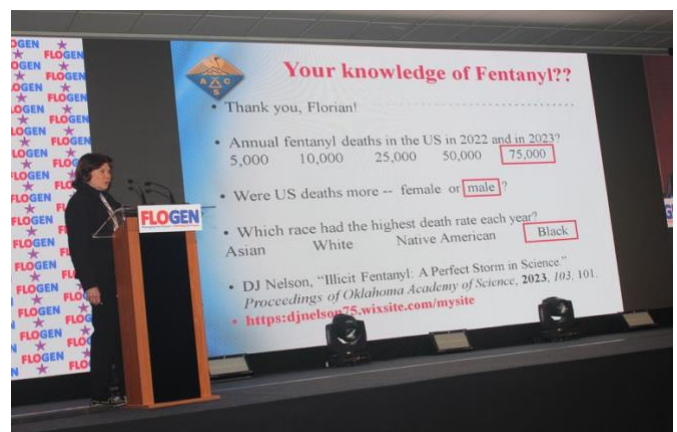
Dr. Dan Shechtman
2011 Nobel Laureate – Chemistry
Technion Institute of Technology, Israel



Dr. Jean-Marie Lehn
1987 Nobel Laureate – Chemistry
University of Strasbourg, France



Mr. Samuel Berger
Data Scientist and Consultant, USA



Dr. Donna Nelson
2016 American Chemical Society President
University of Oklahoma, USA

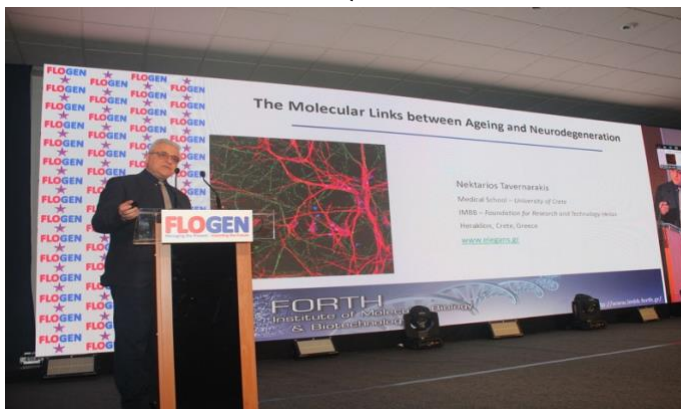
Summit Plenary III:



Dr. Florian Kongoli
FLOGEN Chairman
Montreal, Canada



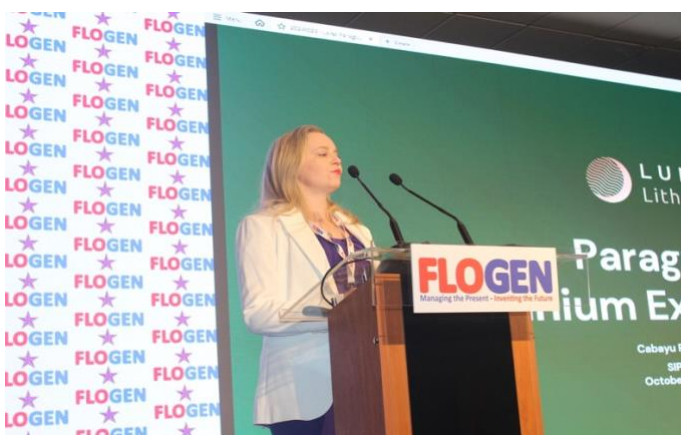
Dr. Rudy Marcus
1992 Nobel Laureate – Chemistry
California Institute of Technology, USA



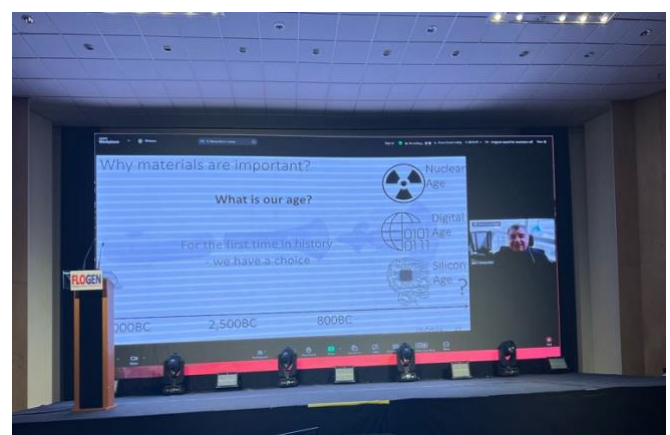
Dr. Nektarios Tavernarakis
EIT Governing Board, Greece



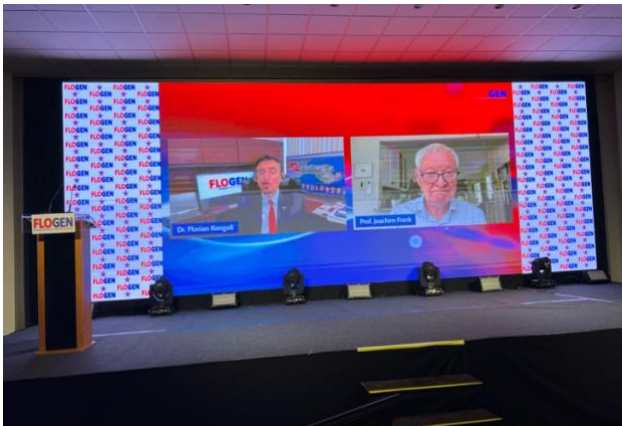
Mr. Samuel Berger
Data Scientist and Consultant, USA



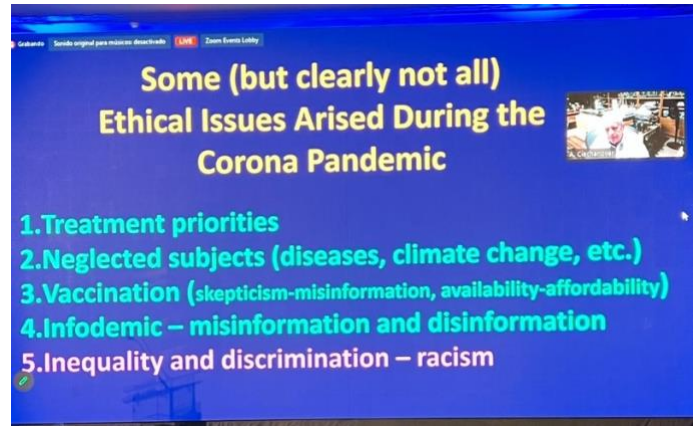
Ms. Emily Hersh
CEO
Luna Energy Ltd., Nevada, USA



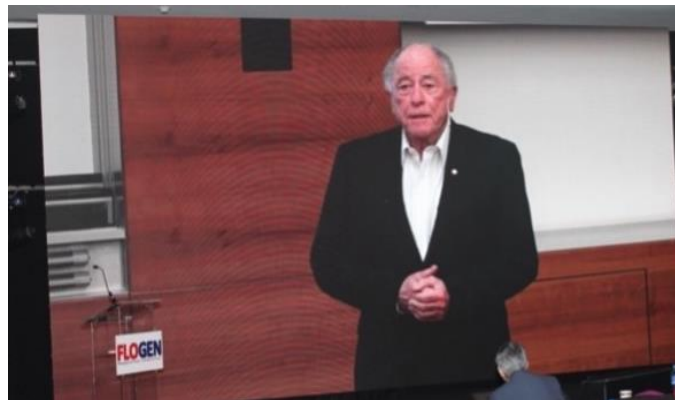
Dr. Konstantin Novoselov
2010 Nobel Laureate – Physics
National University of Singapore, Singapore



Dr. Joachim Frank
 2017 Nobel Laureate - Chemistry
 Columbia University Irving Medical Center, USA



Dr. Aaron Ciechanover
 2004 Nobel Laureate - Chemistry
 Technion Integrated Cancer Center, Israel



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

AWARDS CEREMONY

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 2024 Fray International Sustainability Award and corresponding World Crystal Trophy, adding their name to the distinguished list of previous award winners. (<https://www.flogen.org/?p=20>). The 2024 winners in each category were the following:

Politics

" For Leadership in developing new advanced public policy frameworks related to the efficiency of mineral and metal resources for a global sustainable development."

- **Mr. Alexandre Mendes Meyohas, Secretary of the Civil House, State of Rio de Janeiro, Brazil**
- **Mr. Marcos Paulo Barrias, Government of the State of Rio de Janeiro, Brazil**



Mr. Alexandre Mendes Meyohas
Secretary of the Civil House, State of Rio de Janeiro, Brazil



Mr. Marcos Paulo Barrias
Government of the State of Rio de Janeiro, Brazil

Corporations

" For Leadership in developing and applying new innovative business plans and operation technologies for a sustainable development of the company in the environment, economy and social points of view."

- **Mr. Mario Linhares, Atlantica Green Tech, Brazil**



Mr. Mario Linhares, Atlantica Green Tech, Brazil

Academia

"For Leadership in developing new technologies that contribute to a global sustainable development as per FLOGEN Sustainability Framework in the environment, economy and social points of view."

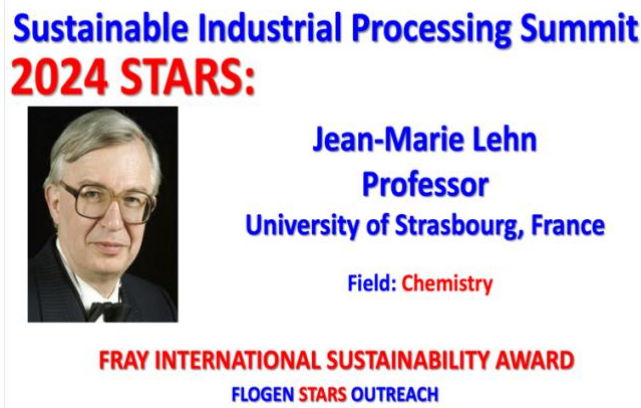
- Dr. Gregg L. Semenza, Johns Hopkins University, USA
- Dr. Harvey J. Alter, National Institutes of Health, USA
- Dr. Jean-Marie Lehn, University of Strasbourg, France
- Dr. Hans Leuenberger, University of Florida, USA
- Dr. Sérgio Neves Monteiro, Military Institute of Engineering, Brazil
- Dr. Şener Oktik, Sisecam, Turkey
- Dr. Peter Rowlands, University of Liverpool, UK
- Dr. Michael Stelter, TU Bergakademie Freiberg, Germany



Dr. Gregg L. Semenza, Johns Hopkins University, USA



Dr. Harvey J. Alter, National Institutes of Health, USA



Dr. Jean-Marie Lehn, University of Strasbourg, France



Dr. Hans Leuenberger, University of Florida, USA



Dr. Sérgio Neves Monteiro, Military Inst. of Engineering, Brazil



Dr. Şener Oktik, Sisecam, Turkey



Dr. Peter Rowlands, University of Liverpool, UK



Dr. Michael Stelter, TU Bergakademie Freiberg, Germany

Otis International Judicial and Mediation Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Otis International Judicial and Mediation Award and corresponding Star Crystal Trophy, her name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=196>).

The citation of this Award reads:

"For Leadership in developing and applying new judicial and mediation standards as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Me. Migen Dibra, Migen Dibra Law Office, Canada**



Me. Migen Dibra, Migen Dibra Law Office, Canada

Yildirim International Entrepreneurship Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Yildirim International Entrepreneurship Award and corresponding Star Crystal Trophy, her name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=44>).

The citation of this Award reads:

" For innovative leadership in establishing, developing and/or growing, against all challenges, odds and risks, a sustainable business as per FLOGEN Sustainability Framework in the environment, economic, and social point of view."

The 2024 winner in this category was:

- **Ms. Emily Hersh, Luna Energy Ltd., USA**



Ms. Emily Hersh, Luna Energy Ltd., USA

Stoddart International Scientific Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Stoddart International Scientific Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=52>).

The citation of this Award reads:

" For extraordinary scientific achievements as per FLOGEN Sustainability framework."

The 2024 winner in this category was:

- **Dr. Mercouri Kanatzidis, Northwestern University, USA**



Dr. Mercouri Kanatzidis, Northwestern University, USA

Novoselov International Materials Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Novoselov International Materials Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=177>).

The citation of this Award reads:

"For Leadership in developing and applying new materials methods and technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Ludwig Schultz, TU Dresden, Germany**



Dr. Ludwig Schultz, TU Dresden, Germany

Murad International Life Improvement Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Murad International Life Improvement Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=61>).

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 2024 winner in this category was:

- **Dr. Koji Abe, National Center of Neurology & Psychiatry, Tokyo, Japan**



Dr. Koji Abe, National Center of Neurology & Psychiatry, Tokyo, Japan

International Life in Universe Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 International Life in Universe Award and corresponding Star Crystal Trophy, her name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=174>).

The citation of this Award reads:

" For Leadership in scientific understanding of the evolution of life on earth and in universe as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Nancy Ross, Virginia Tech, United States**



Dr. Nancy Ross, Virginia Tech, United States

Geim International Innovation Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Geim International Innovation Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=54>).

The citation of this Award reads:

" For extraordinary scientific innovation that enables a successful business and contributes to shaping a sustainable future as per FLOGEN Sustainability Framework."

The 2024 winner in this category was:

- **Dr. Georgios N. Anastassakis, National Technical University of Athens, Greece**



Dr. Georgios N. Anastassakis, National Technical University of Athens, Greece

Shechtman International Leadership Award

During the Award Ceremony and Gala Dinner, two personalities were honored with the 2024 Shechtman International Leadership Award and corresponding Star Crystal Trophy, their name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=19>).

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 as per FLOGEN Sustainability Framework in the environment, economy and social points of view."

The 2024 winner in this category were:

Corporation

- **Mr. Andrzej Szydło, KGHM, Poland**



Sustainable Industrial Processing Summit
2024 STARS:



Andrzej Szydło
President & CEO
KGHM, Poland

Field: Entrepreneurship

SHECHTMAN INTERNATIONAL LEADERSHIP AWARD
FLOGEN STARS OUTREACH

Mr. Andrzej Szydło, KGHM, Poland

Academics

- **Mr. Sergio Leite de Andrade, Usiminas, Brazil**



Mr. Sergio Leite de Andrade, Usiminas, Brazil

Lee International Law Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Lee International Law Award and corresponding Star Crystal Trophy, her name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=59>).

The citation of this Award reads:

"For Leadership in applying law with a scientific logic as per FLOGEN Sustainability Framework."

The 2024 winner in this category was:

- **Honorable Louise Otis, International Judge, Mediator and Arbitrator, Montreal, Canada**



Honorable Louise Otis, International Judge, Mediator and Arbitrator, Montreal, Canada

Marshall International Life Sciences Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Marshall International Life Sciences Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=192>).

The citation of this Award reads:

"For Leadership and Scientific Achievements in Life Sciences as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view"

The 2024 winner in this category was:

- **Dr. Michael Makanga, Global Health EDCTP3, Belgium**



Dr. Michael Makanga, Global Health EDCTP3, Belgium

Whittingham International Energy Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Whittingham International Energy Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=172>).

The citation of this Award reads:

“For Leadership in developing new energy technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view”

The 2024 winner in this category was:

- **Mr. Branislav Klocok, OFZ, Slovakia**



Mr. Branislav Klocok, OFZ, Slovakia

Robert's International Medicine Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Robert's International Medicine Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=173>).

The citation of this Award reads:

" For leadership in developing new basic medical principles as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view”

The 2024 winner in this category was:

- **Dr. Yoichiro Sugiyama, Saga University, Japan**



Dr. Yoichiro Sugiyama, Saga University, Japan

Wüthrich International Young Star Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Wüthrich International Young Star Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=53>).

The citation of this Award reads:

"For outstanding scientific performance during the early career stages, as per FLOGEN Sustainability Framework."

The 2024 winner in this category was:

- **Dr. Tomaž Tomše, Jožef Stefan Institute, Slovenia**



Dr. Tomaž Tomše, Jožef Stefan Institute, Slovenia

Ciechanover International Biology Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Ciechanover International Biology Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=175>).

The citation of this Award reads:

"For Leadership in developing and applying new biological methods and technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Go Kimura, Shionogi & Co, Ltd., Japan**



Dr. Go Kimura, Shionogi & Co, Ltd., Japan

Frank International Biophysics Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Frank International Biophysics Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=187>).

The citation of this Award reads:

" For Leadership in applying physical principles in biological phenomena as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Norbert Schwarzer, Saxonian Institute of Surface Mechanics, Germany**



Dr. Norbert Schwarzer, Saxonian Institute of Surface Mechanics, Germany

Hershko International Biochemistry Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Hershko International Biochemistry Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=176>).

The citation of this Award reads:

" For Leadership in developing and applying new biochemical methods and technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Martin Bultmann, University of Heidelberg, Germany**



Dr. Martin Bultmann, University of Heidelberg, Germany

Marcus International Managing Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Marcus International Managing Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=62>).

The citation of this Award reads:

" For Leadership in developing and applying new managing methods and technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Mr. Mehmet Şevket Erol, Yilmaden Holding, Turkey**



Mr. Mehmet Şevket Erol, Yilmaden Holding, Turkey

Von Klitzing International Engineering Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Von Klitzing International Engineering Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=64>).

The citation of this Award reads:

" For Leadership in developing and applying new engineering methods and technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Mr. Burak Büyükfırat, Şişecam, Turkey**



Mr. Burak Büyükfırat, Şişecam, Turkey

Dibra International Justice and Ethics Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Dibra International Justice and Ethics Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=198>).

The citation of this Award reads:

"For Leadership in developing and applying new justice and ethical standards as per FLOGEN Sustainability Framework in the environmental, economic and social points of view."

The 2024 winner in this category was:

- **Dr. Pierre da Silva Moraes, Câmara Municipal de Nova Friburgo, Brazil**



Dr. Pierre da Silva Moraes, Câmara Municipal de Nova Friburgo, Brazil

Semenza International Cell Engineering in Medicine Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Semenza International Cell Engineering in Medicine Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=194>).

The citation of this Award reads:

" For Leadership in developing and applying cell engineering methods and technologies in medicine as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Mr. Davis Joseph, McGill University, Montreal, Canada**



Mr. Davis Joseph, McGill University, Montreal, Canada

Alter International Biomedicine and Public Health Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Alter International Biomedicine and Public Health Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=200>).

The citation of this Award reads:

"For Leadership in developing and applying new scientific biomedical and public health standards as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Frank J. Slack, Harvard Medical School, Boston, USA**



Dr. Frank J. Slack, Harvard Medical School, Boston, USA

Lehn International Chemistry Award

During the Award Ceremony and Gala Dinner, one personality was honored with the 2024 Lehn International Chemistry Award and corresponding Star Crystal Trophy, his name marking the first of many distinguished award winners to come. (<https://www.flogen.org/?p=202>).

The citation of this Award reads:

"For Leadership in developing and applying new chemical methods and technologies as per FLOGEN Sustainability Framework in the environmental, economic, and social points of view."

The 2024 winner in this category was:

- **Dr. Janusz Lipkowski, Cardinal Stefan Wyszyński University, Poland**



Dr. Janusz Lipkowski, Cardinal Stefan Wyszyński University, Poland

THEMATIC SYMPOSIA

The summit had a strong number of technical and thematic symposia, with special emphasis on the sustainable developments of the 22nd century. The overwhelming response from the international professional community was reflected in about 550 contributions received from authors and co-authors from more than 50 countries throughout the world. The countries of principal authors given alphabetically were: Albania, Algeria, Australia, Austria, Bangladesh, Brazil, Bulgaria, Canada, China, Colombia, Cyprus, Czech Republic, Denmark, Egypt, Ethiopia, France, Georgia, Germany, Greece, Hong Kong, India, Ireland, Israel, Italy, Japan, Kazakhstan, Kosovo, New Zealand, Norway, Pakistan, Poland, Portugal, Russian Federation, Serbia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Tanzania, Turkey, Ukraine, United Arab Emirates, United Kingdom, United States and Zimbabwe. The biggest contributor countries were Austria, Canada, Brazil, Japan, China, Poland, France, Germany, Greece, Italy, India, Kazakhstan, Russian Federation, Slovenia, Switzerland and USA.

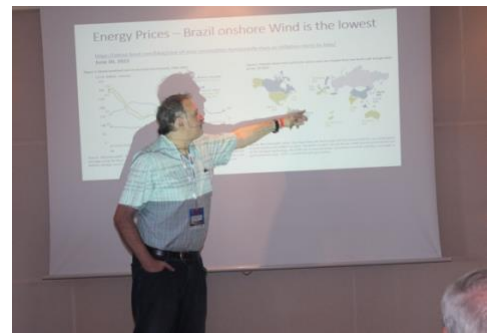
The papers were presented in a lot of sessions divided in the following thematic symposia:

- **Abe International Symposium** (4th Intl. Symp. on **Oxidative Stress** for Sustainable Development of Human Beings)
- **Anastassakis International Symposium** (10th Intl. Symp. on Sustainable **Mineral Processing**)
- **Dibra International Symposium** (4th Intl Symp on **Laws** & their Applications for Sustainable Development)
- **Kanatzidis International Symposium** (4th Intl. Symp. on Materials/Solid State Chemistry and Nanoscience for Sustainable Development)
- **Leite International Symposium** (10th Intl. Symp. on Advanced Sustainable **Iron & Steel Making**)
- **Leuenberger International Symposium on Pharmaceutical Sciences** and Industrial Applications for Sustainable Development
- **Lipkowski International Symposium** (4th Intl. Symp. on **Physical Chemistry** & Its Applications for Sustainable Development)
- **Monteiro International Symposium on Composite, Ceramic & Nano Materials Processing, Characterization & Applications** (10th Intl. Symp.)
- **Oktik International Symposium** (2nd Intl. Symp. on Sustainable **Glass and Polymers Processing** and Applications)
- **Ross International Symposium** (3rd Intl. Symp. on **Geochemistry** for Sustainable Development)
- **Rowlands International Symposium** (7th Intl. Symp. on Sustainable **Mathematics Applications**)
- **Schultz International Symposium** (8th Intl. Symp. on **Science of Intelligent & Sustainable Advanced Ferromagnetic and Superconducting Magnets (SISAM)**)
- **Stelter International Symposium** (10th Intl. Symp. on Sustainable **Non-ferrous Smelting & Hydro/Electrochemical Processing**)
- 8th Intl Symposium on **New & Advanced Materials** and Technologies for Energy, Environment, Health and Sustainable Development
- International Symposium on **Agroforestry** for Sustainable Development
- 7th Intl. Symp. on Sustainable **Aluminum** Extraction & Processing
- 9th Intl. Symp. on Sustainable **Secondary Battery** Manufacturing & Recycling
- 2nd International Symposium on Sustainable **Biochar**
- 9th Intl. Symp. on Sustainable Base-metal **Bio-extraction**
- 7th Intl. Symp. on Sustainable **Carbon and Biocoke** and their Industrial Application
- 9th Intl. Symp. on Sustainable Surface & Interface Engineering: **Coatings** for Extreme Environments
- 9th International Symposium on Sustainable **Construction Materials**
- 3rd Intl Symp. on **Corrosion** for Sustainable Development
- 3rd Intl Symp. on **COVID-19/Infectious Diseases** & their implications on Sustainable Development
- 6th Intl. Symp. on Sustainability of World **Ecosystems** in Anthropocene Era

- 5th Intl. Symp. on **Educational** Strategies for Achieving a Sustainable Future
- 5th Intl. Symp. on **Electrochemistry** for Sustainable Development
- International Symposium on **Endourology**: Innovations, Technology, and Sustainability in Advancing Urological Practices
- 9th Intl. Symp. on Sustainable **Energy Production**: Fossil; Renewables; Nuclear; Waste handling, processing, & storage for all energy production technologies; Energy conservation
- 11th Intl. Symp. on **Environmental**, Policy, Management, Health, Economic, Financial, Social Issues Related to Technology & Scientific Innovation
- 9th Intl. Symp. on Sustainable Production of **Ferro-alloys**
- 4th Intl Symp on **Geomechanics** & Applications for Sustainable Development
- 4th Intl Symp. on **Magnesium Alloys** & Their Applications for Sustainable Development
- 5th Intl. Symp. on Advanced **Manufacturing** for Sustainable Development
- 3rd Intl. Symp. on **Technological Innovations in Medicine** for Sustainable Development
- 7th Intl Symp. on Sustainable Complex **Metallic** Systems
- 8th Intl. Symp. on Sustainable **Metals & Alloys** Processing
- 9th Intl. Symp. on Sustainable **Mining** Operations
- 19th Intl. Symp. on **Multiscale & Multiphysics Modelling** of 'Complex' Material
- 2nd Intl Symp. on **Modelling, Materials** & Processes Interdisciplinary Symposium for Sustainable Development
- 10th Intl. Symp. on Sustainable **Molten Salt**, Ionic & Glass-forming Liquids & Powdered Materials
- 9th Intl. Symp. on **Multiscale Material Mechanics** & Sustainable Applications
- 9th Intl. Symp. on Synthesis & Properties of **Nanomaterials** for Future Energy Demands
- 3rd Intl Symp. on **Nanotechnology** for Sustainable Development
- 3rd Intl Symp on **Physics**, Technology & Interdisciplinary Research for Sustainable Development
- 4th Intl Symp on **Green Chemistry & Polymers** & their Application for Sustainable Development
- 10th Intl. Symp. on **Quasi-crystals**, Metallic Alloys, Composites, Ceramics & Nano Materials
- 9th Intl. Symp. on **Rare Earth** & Platinum Group Metals: Managing & Processing
- 10th Intl. Symp. on Sustainable Materials **Recycling** Processes & Products
- 7th Intl. Symp. on **Rotary Kiln** Operations for Sustainable Products
- 3rd Intl. Symp. on **Solution Chemistry** for Sustainable Development

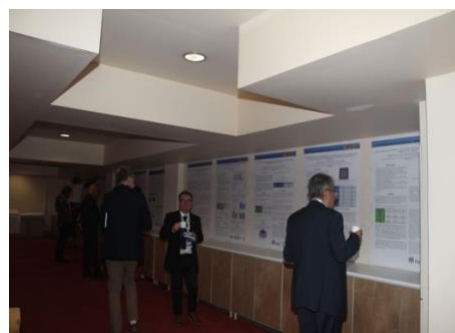
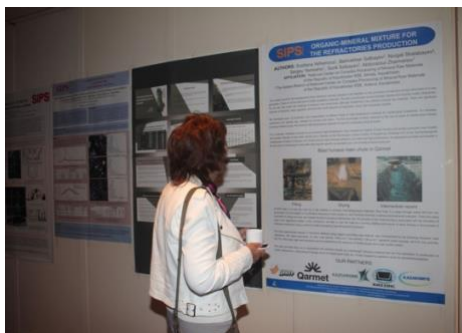
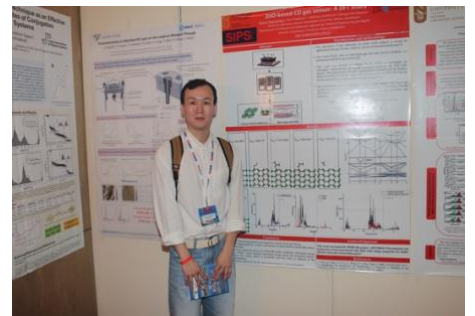
Some thematic symposia and their speakers are shown in the pictures below while the others are in the summit web site at Post Symposium/Pictures tab.





POSTERS

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



ROUND TABLES

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



AFTER SESSIONS





SOCIAL PROGRAM

The participants enjoyed several outstanding social functions:

Sunday Dinner and Show was held in the Red Pepper, and guests enjoyed a buffet dinner and drinks, followed by a dazzling show exclusively organized for SIPS 2024 participants.



Monday Dinner and Show was held in Secret Garden, and guests enjoyed a buffet dinner and drinks, followed by a dazzling Cretan dancing show exclusively organized for SIPS 2024 participants.



Tuesday Gala Dinner and Show was held in the Marika Ballroom and included an elegant set menu dinner and exclusive show organized for SIPS 2024 participants.





PUBLICATIONS

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

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 1: Abe Intl. Symp. / Oxidative Stress and Technological Innovations in Medicine

Edited by: F. Kongoli, H. Inufusa, T. Yoshikawa, C.A. Amatore, H-Y. Chen, W-H. Huang

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-04-4](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 2: Anastassakis Intl. Symp / Mineral Processing

Edited by: F. Kongoli, L. Andric, K. Aravossis, V. Chanturiya, I. Chatjigeorgiou, D. Fuerstenau, C. Kavalopoulos, C. O'Connor, V. Panayotov, J. Rubinstein

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-06-8](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 3: Dibra Intl. Symp / Laws & Their Applications

Edited by: F. Kongoli, H. Carter, Y. Hayakawa, B. Jedlickova, M. McNeil, M. Nolan, E.S. Pana, D. Shanley

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-08-2](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 4: Kanatzidis Intl. Symp / Solid State Chemistry and Materials

Edited by: F. Kongoli, M.A. Alario-Franco, I. Chung, M. Delferro, O. Farha, H. Kageyama, F. Marquis, A. Navrotsky, A. Tressaud, P. Trikalitis

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-10-5](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 5: Leite Intl. Symp / Iron and Steel

Edited by: F. Kongoli, P. Assis, R. Alvarenga Vilela, J.A. de Castro, B. Deo, W. Ferreira Santos Jr., GS. Mahobia, T. Usui

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-12-9](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 6: Leuenberger Intl. Symp / Pharmaceutical Sciences and Applications

Edited by: F. Kongoli, S. Buchmann, G. Imanidis, I. Karim, G. Kimura, G. Knipp, M. Makanga, N. Menshutina, P. Swaan, M. Tanner, H. Tarabishi

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-14-3](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 7: Lipkowski Intl. Symp / Physical Chemistry

Edited by: F. Kongoli, J. Atwood, L. Barbour, G. Duca, R. Kuroda, A. Legocki, M. Zaworotko

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-16-7](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 8: Monteiro Intl. Symp / Composite, Ceramic and Nano Materials Processing

Edited by: F. Kongoli, P. Assis, H.A.C. Lopera, S. Diaz, V. Scarpini Candido

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-18-1](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 9: Oktik Intl. Symp / Glass and Polymers Processing and Applications

Edited by: F. Kongoli, B. Büyükfirat, V. Kapur, S. Tanabe

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-20-4](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 10: Ross Intl. Symp / Geochemistry

Edited by: F. Kongoli, M. Alvaro, G. Artioli, M. Asta, S. Hayun, A. Navrotsky, R. Riedel, S. Webb

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-22-8](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 11: Rowlands Intl. Symp / Mathematics

Edited by: F. Kongoli, A. Bountis, M. Johnson, S. Karam, L. Kauffman, P. Mandell, M. Mikalajunas, W. Miller, G. Ord, R.M. Santilli, E. Suhir, E. Trell, T. Vougiouklis

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-24-2](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 12: Schultz Intl. Symp / Science of Intelligent & Sustainable Materials / Ferromagnetic & Superconducting Magnets

Edited by: F. Kongoli, J-M. Dubois, M. Calin, S. Kobe

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-26-6](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 13: Stelter Intl. Symp / Non-ferrous Smelting & Hydro/Electrochemical Processing

Edited by: F. Kongoli, J. Antrekowitsch, A. Charitos, C. Oosterhof, Z. Wang

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-28-0](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 14: Intl. Symp on Advanced Materials, Manufacturing, Magnesium and Aluminum

Edited by: F. Kongoli, F. Marquis, N. Chikhradze, T. Prikhna, E. Suhir, Y. Yang

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-30-3](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 15: Intl. Symp on Energy, Biochar, Cement, Carbon, Construction Materials, Agroforestry and Environmental

Edited by: F. Kongoli, S.M. Atnaw, H. Dodds, M. Mauntz, T. Turna, H.W. Kua, M. Giorcelli, J. Antrekowitsch, G. Hanke, O. Adiguzel

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

ISBN: [978-1-998384-32-7](#) (CD)

2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

Volume 16: Intl. Symp on Electrochemistry, Molten Salts, Corrosion, Recycling and Battery

Edited by: F. Kongoli, C.A. Amatore, R. Fehrmann, G. Kipouros, I. Paspaliaris, G. Saevarsdottir, R. Singh, R. Gupta, M. Halama, D. Macdonald, F. Wang, M. Barinova, F. Ahmed, C. Gaidau, X. Guo, K. Kolomaznik, H. Ozgunay, K. Tang, N.N. Thanh, S. Yefremova, K. Aifantis, Z. Bakenov, C. Capiglia, V. Kumar, A. U. H. Qurashi, A. Tressaud, R. Yazami

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

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2024 SUSTAINABLE INDUSTRIAL PROCESSING SUMMIT AND EXHIBITION

16-Volume Package

Editor-in-Chief: Florian Kongoli

Publisher: FLOGEN STARS OUTREACH

Publishing date: December 2024

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Other sponsors included multiple airlines

<https://www.flogen.org/sips2024/sponsors.php?p=31>

ATTENDEES' SATISFACTORY RATE

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

Dr. Florian Kongoli
President
Sustainable Industrial Processing Summit
20 -24 Oct. 2024
Chairman
FLOGEN STARS OUTREACH
www.flogen.org
fkongoli@flogen.org



APPENDIX: SOME WRITTEN IMPRESSIONS

It was a remarkable conference. I learned a lot from the guest scientists. I will keep in touch with some of them (sustainable use of water resources and legislative innovation).

Honorable Louise Otis
NATO and OECD
Canada

Dear Florian Thanks for the opportunity to participate in SIPS2024 in Crete. Laura and I had a memorable week.

Prof. Gregg L. Semenza
Johns Hopkins University
United States

Thank you very much for the outstanding symposium in Crete. It was a real big pleasure for me and my wife to be with you and to be part of the international community of Scientist and experts. I was deeply moved from the words of the chairmen (and women) in the symposium. It was a honor and on the other side much impressing for me. Thank you a lot for this honor and time together with you.

Prof. Michael Stelter

TU Bergakademie Freiberg
Germany

SIPS 2024 was very well organized. The comments reached me from the Greek participants are excellent and the overall view extremely positive.

Prof. Georgios N. Anastassakis

National Technical University of Athens
Greece

First, let me thank you for the outstanding SIPS2024 conference last month in Agia Pelagia, Crete. It was a wonderful and moving event, I greatly enjoyed the symposium in my honor, which brought together so many friends, colleagues, and former group members from the four corners of the planet. It was a fantastic convergence, and I'm grateful to you and your team for organizing such a memorable occasion. The hotel and location were both excellent, and I appreciated the thoughtful arrangements for the banquet and the lively Greek night. It truly added a special touch to an already meaningful event.

Prof. Mercouri G. Kanatzidis

Northwestern University
United States

Dear Dr. Kongoli, we are safely back home after the excellent FLOGEN Symposium in Crete, and I am thanking you and your team for having organized it perfectly and so friendly. It is appreciated very much indeed.

Prof. Janusz Lipkowski

Cardinal Stefan Wyszyński University in Warsaw
Poland

It was a privilege to represent the NWU Faculty of Engineering during the SIPS2024 Sustainable Industrial Processing Summit, held at the Out of the Blue Resort, Crete, Greece. I had the opportunity to present two papers on behalf of the faculty and was honored to chair the "7th International Symposium on Sustainable Carbon and Biocoke and their Industrial Application". The conference, attended by 10 Nobel Laureates and many other distinguished guests, was a fantastic platform for engaging discussions and collaboration on sustainable industrial solutions. I'm excited about the future innovations and the incredible network of professionals contributing to a more sustainable future.

Dr. Naldo J.A. Meyer

North-West University
South Africa

I thoroughly enjoyed the conference, and I think it is a great idea to mix academic cultures with the objective of promoting sustainability ideas. Thanks again for running the conference. It was very informative, enjoyable and will hopefully promote good causes!

Dr. Garnet Ord

Toronto Metropolitan University
Canada

Thank you for the brilliant organization of the magnificent demonstration of the achievements of modern science. I am confident that your organizational activity will serve the cause of further progress of modern civilization.

Prof. Alexander Brodt

Metal-Tech,
Israel

Excellent conference. The format of the Conference is probably unique in the world.

Prof. Marcos de Campos

Federal Fluminense University
Brazil

I am pleased to attend this conference and have an opportunity to communicate with many researchers. SIPS was the most outstanding conference I have ever attended. I am privileged to present my work in person.

Prof. Yoichiro Sugiyama

Saga University
Japan

Dear Florian and FLOGEN Team, I would like to express my gratitude for this superb SIPS-2024 in Crete. I found that the setting was superb and perfectly suited to the organization of a congress with parallel sessions. As usual, the evenings were very pleasant, and it is a rare pleasure to be able to discuss cordially with great names in science.

Prof. Alain Tressaud

EurASc Vice-President
France

The whole FLOGEN Team certainly did a great job, and I am proud to have been able to contribute.

Prof. Tolga Yarman

Istanbul Okan University
Istanbul, Turkey

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