

Edinburgh, UK

June 27-30, 2023

ISMOS⁹

Closing of ISMOS-9



ISMOS ethos:

ISMOS⁹

*'To bring together **academia & industry** in molecular microbiological research into the **deleterious activities of microorganisms** to help resolve potential problems faced by **industry**, as well as encourage **beneficial microbial activities**'.*



9TH INTERNATIONAL SYMPOSIUM ON APPLIED
MICROBIOLOGY AND MOLECULAR BIOLOGY IN OIL
SYSTEMS (ISMOS)

June 27-30th, 2023

ISMOS-9

ISMOS⁹

- ISMOS is the **largest global event** discussing microbiology and molecular biology in the oil and gas industry.
- It explores **emerging microbial and molecular tools** to help resolve challenges and develop opportunities that can be **exploited by the industry**.
- The meeting is **multidisciplinary**, linking biogeochemists, engineers, molecular biologists and microbiologists from industry and academia.

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The core of ISMOS is the role of **microbes in energy systems**

- Technology **leaders and SMEs** in the field are in this room
- We jointly **lead technology development** in this field
- We jointly **lead education** for the next generation
- We jointly **lead improved standards** and the regulatory framework

Wrap-up of ISMOS-9

ISMOS⁹

125 registrants - Global Audience →

5 Travel grants supported young researchers

2 Workshops: **How2Store- Hydrogen storage**, Early Careers

2 new sessions: **Energy Storage and Transitioning; Monitoring, control, diagnostics and new methods for the energy sector – to reflect a changing energy sector**

1 keynote & 5 invited speakers

39 offered talks; 23 % students

51 posters

- Argentina
- Austria
- Brazil
- Canada
- Denmark
- France
- Germany
- India
- Italy
- Japan
- Malaysia
- Mexico
- Netherlands
- Norway
- Saudi Arabia
- Singapore
- Turkey
- UK
- USA

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Other Events...

- RMF
- IBBS-19
- Euro-MIC.org

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**29th Reservoir
Microbiology Forum (RMF)**

Submit your
abstract by
21 July 2023

Hybrid conference, 15-16 November 2023
Learn more: energy-inst.org/rmf



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Contact | [@ibbs_online](#) | [#ibbs19](#)

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International Biodeterioration and Biodegradation Symposium

9 - 12 September 2024 | Berlin, Germany

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ISMOS-9 post-conference survey



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'HOW2STORE' – A WORKSHOP ON HYDROGEN STORAGE

June 27th, 2023

1st ISMOS workshop on hydrogen storage!

*2 hours of exciting and insightful discussions
with our amazing panellists:*

Microbiology, reservoir engineering, reservoir
modelling, geoenery engineering, geochemistry...

Academia & Industry



**Nicole
Dopffel**
NORCE
Norway

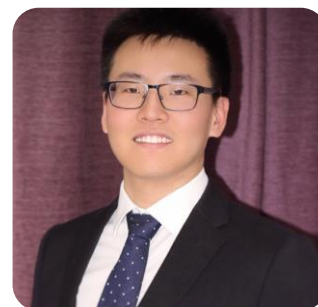


Markus Pichler
RAG
Austria



Kamaljit Singh
Heriot-Watt
University
UK

Schlumberger-Private



Gang Wang
Heriot-Watt
University
UK



**Lubica
Slabon**
University
of Edinburgh
UK



Bart Lomans
Shell
Netherlands

- What are the greatest research needs in the field of UHS?
- How about practical & implementation challenges?
- What knowledge from a different discipline than yours would be particularly helpful for UHS research and implementation?
- Transitioning into UHS from oil and gas: similarities and differences?
- How can academia and industry work together in the field of UHS? What does the academia need from the industry? And vice-versa?
- In your opinion what is the greatest “competitor” or obstacle to making UHS a game-changer in the energy landscape?

Hydrogen value chain: **supply** & demand
 Successful demonstration pilots & **field trials**
 Cost
 Social acceptance



STRATEGIC RESEARCH AND
 INNOVATION AGENDA (SRIA)
 ON CIRCULAR ECONOMY



Hydrogen
 Europe™



Hydrogen Europe
 Research

Multidisciplinary
EARLY collaborative efforts
 between academia & industry

Edinburgh, UK

June 27-30, 2023

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**CAREERS WORKSHOP FOR PHD,
EARLY CAREER POSTDOCS/
RESEARCHERS**



Early Careers Workshop – Friday morning

- Interactive workshop tailored for early stage researchers to hear about and discuss career paths with experienced professionals
- Four panelists:
 - [Andrea Koerdt](#) Federal Institute for Materials Research and Testing (BAM), Senior Scientist in Microbiology
 - [Tanmay Chaturvedi](#) Aalborg University, Associate Professor
 - [Renato DePaula](#) Solvay Oil and Gas Solutions, Business Development Manager & Technical Lead Advisor for Biocides
 - [Danika Nicoletti](#) LuminUltra Technologies Ltd., Applications Scientist

Moderated by Torben Lund Skovhus and Lisa Gieg

Early Careers Workshop – Friday morning



Early Careers Workshop – Friday morning

- Develop a ‘generic’ soft skills toolbox that you can apply to any position
- Be flexible and adaptable to doing different tasks
- Ensure to set aside personal time in your day, regardless of career choice
- Academic researchers – talk to industry before starting any work!
 - Realistic expectations; transparency; open communication
 - Understand barriers, e.g., time for student training, and have a plan in place to work on industry projects
- Seek outside opportunities for professional and personal development

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- **Keynote Speaker Maxine Akhurst** (British Geological Survey)

“Addressing the challenges for the energy transition, assessing synergies and minimising conflicts of use of the UK offshore subsurface and seabed”.



**SYMPOSIUM ON APPLIED
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June 27-30th, 2023

Wrap-up of ISMOS-9

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- Publish your ISMOS work with us (Conference proceedings-CRC Press)



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June 27-30th, 2023

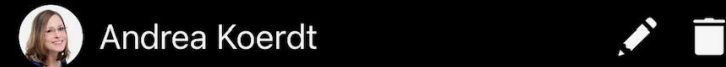
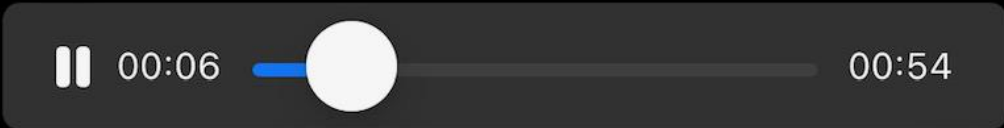
Awards

- Photo competition
- Leaderboard
- Best posters (x3)
- Best presentation (GV Award)



Award – Photo Competition

ISMOS⁹



10 Likes • 1 Comment

Like

Comment



CRC Press
Taylor & Francis Group

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B
Ms (ISMOS)

PLIED
GY IN OIL

June 27-30th, 2023

Award – Leaderboard

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Rank	Name	Score	Items
1	Haleigh Jorgeson	118400 pts	(14)
2	Andre Abilio	101900 pts	(18)
3	Markus Pichler	43900 pts	(10)
4	Alexander Grigoryan	34400 pts	(12)
5	Rick Eckert	16900 pts	(13)
6	Nadia Samak	8600 pts	(9)

Haleigh Jorgenson

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Awards and Prizes

ISMOS⁹

3 best posters

Jury in TSC

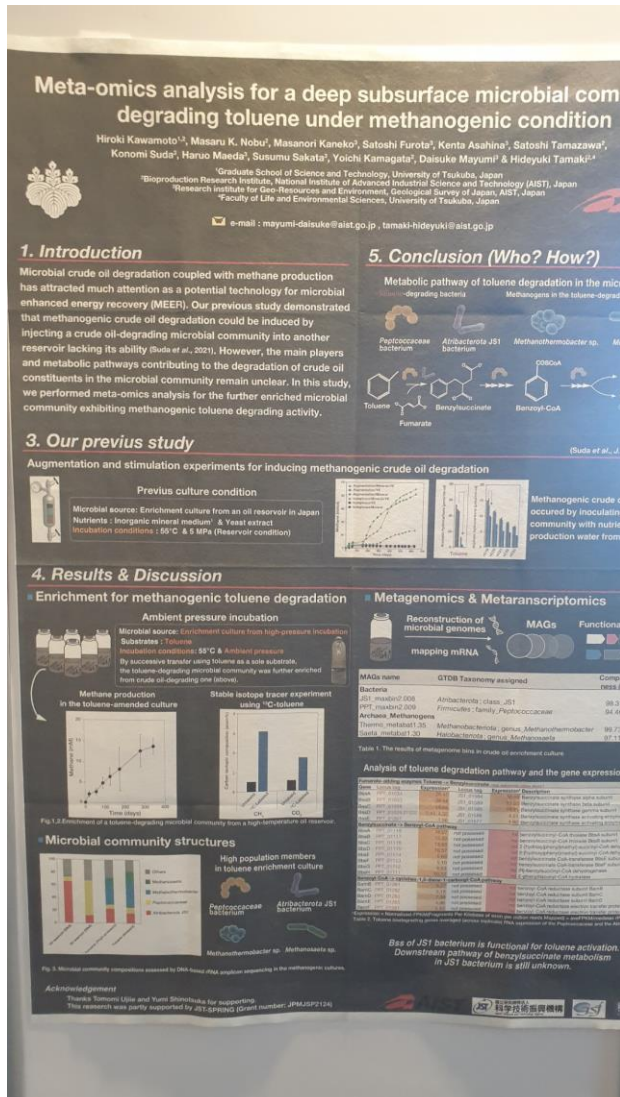


Awards and Prizes

ISMOS⁹

3 best posters

Hiroki Kawamoto and co-authors



SPRINGER NATURE

MIC E-Learning Academy

Awards and Prizes

ISMOS⁹

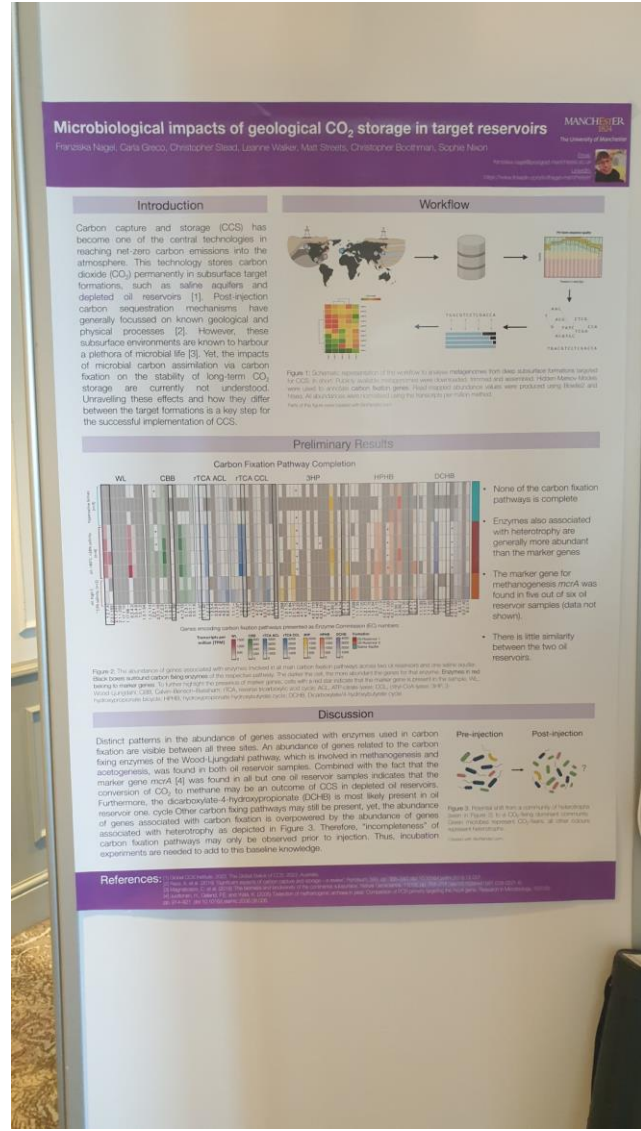
3 best posters



Awards and Prizes

ISMOS⁹

3 best posters



Franziska Nagel and co-authors

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Awards and Prizes

ISMOS⁹

3 best posters



Awards and Prizes

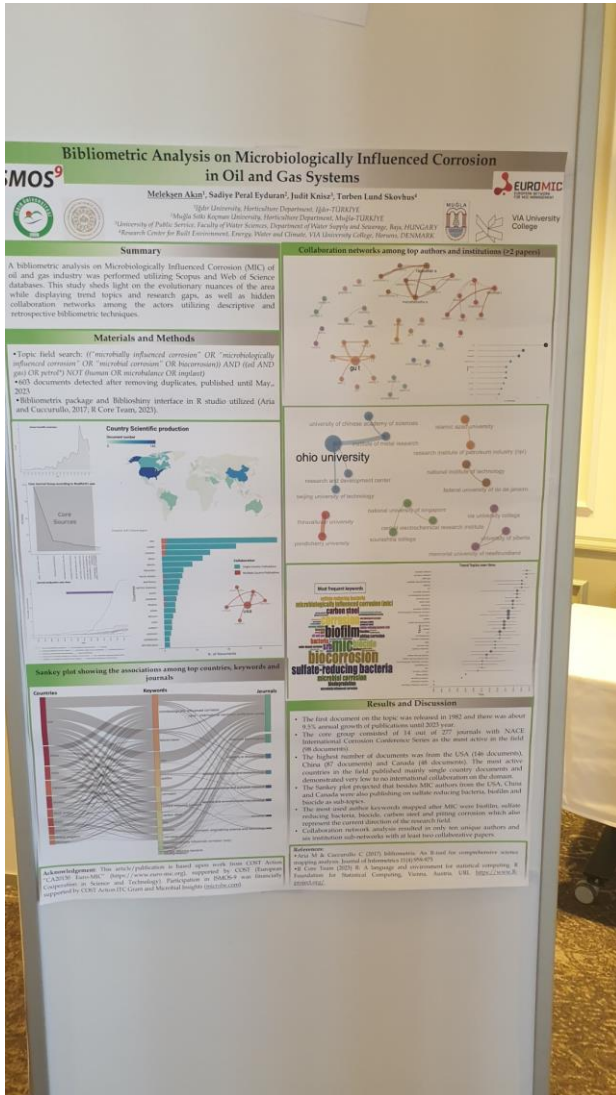
ISMOS⁹

3 best posters

Meleksen Akin and co-authors

SPRINGER NATURE

MIC E-Learning Academy



Wrap-up of ISMOS-9

ISMOS⁹

We had 39 offered orals! Your vote...!

Prof. Gerrit Voordouw

Best Presentation Award goes to...

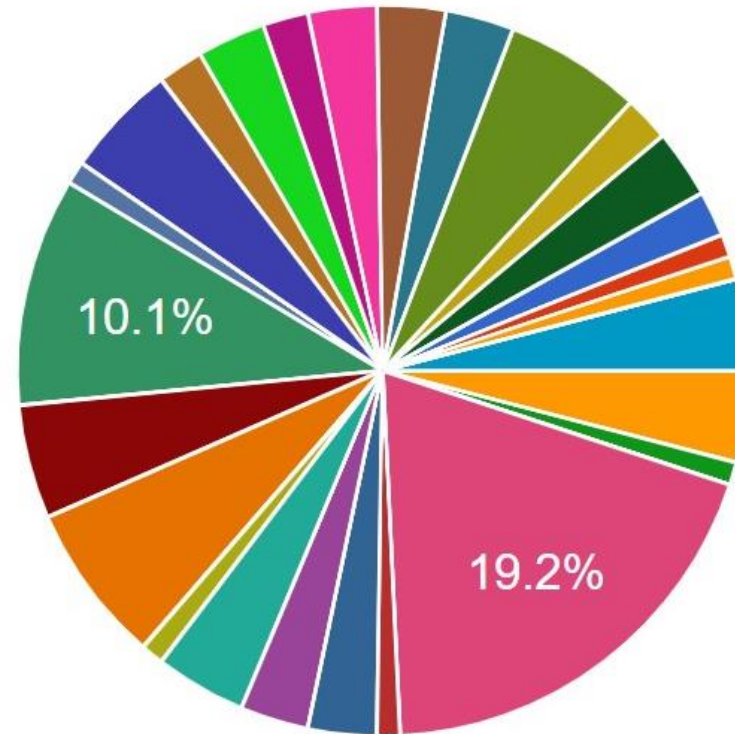
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Vote for the best presentation award

99 responses

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**Prof. Gerrit
Voordouw
Best Presentation
Award goes to...**

Andre Abilio

***Expert system for
screening of MIC***



News from ISMOS Technical Scientific Committee

ISMOS⁹



Julia de Rezende
incoming TSC member



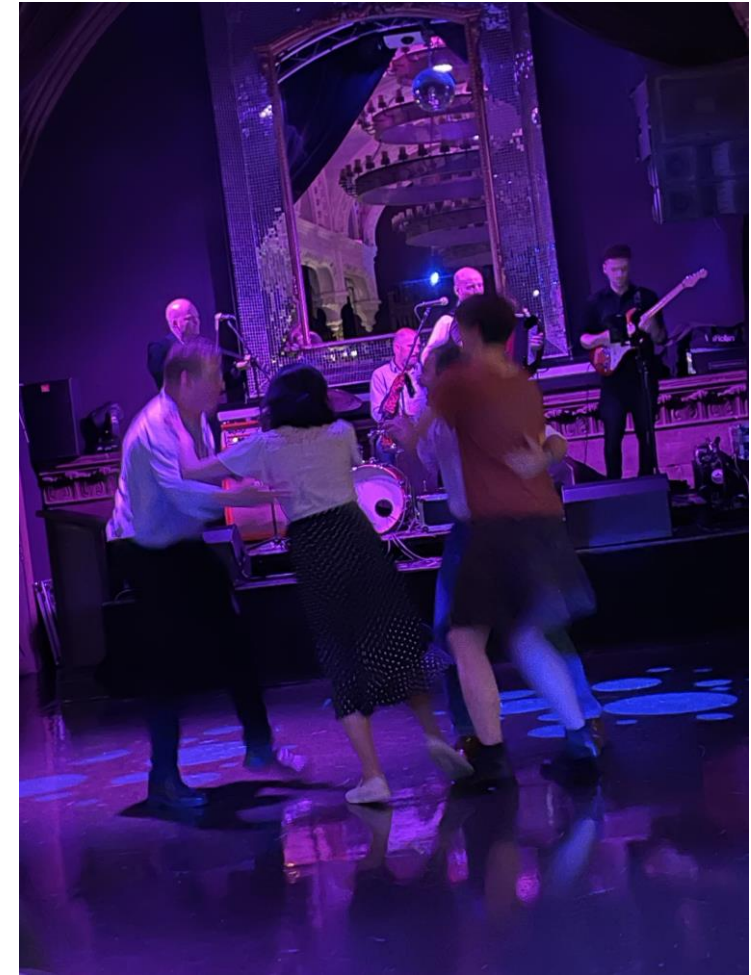
Big thanks to
Sean Caffrey

Outgoing TSC member

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Thanks to...

**9TH INTERNATIONAL SYMPOSIUM ON APPLIED
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➤ **Key Note: Maxine Akhurst (BGS)**

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➤ **Invited Speakers:** Lisa Gieg (University of Calgary),
Tony Gutierrez (Heriot-Watt University),
Sophie Nixon (University of Manchester),
Markus Pichler (RAG, Austria),
Mehrddad Hajibabaei (University of Guelph)

➤ **Offered Oral Presenters**

➤ **Poster Presenters**

➤ **Panelists**

➤ **Chairs**

➤ **Delegates**

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**AWARD SPONSORS FOR BEST POSTERS &
GERRIT VOORDOUW AWARD FOR BEST PRESENTATION**



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A special thanks go to... **ISMOS⁹**



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June 27-30th, 2023

ISMOS **10**

**Presented by
Dr Kerry Sublette**

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June 2025

Nashville, TN USA

Hosted by:

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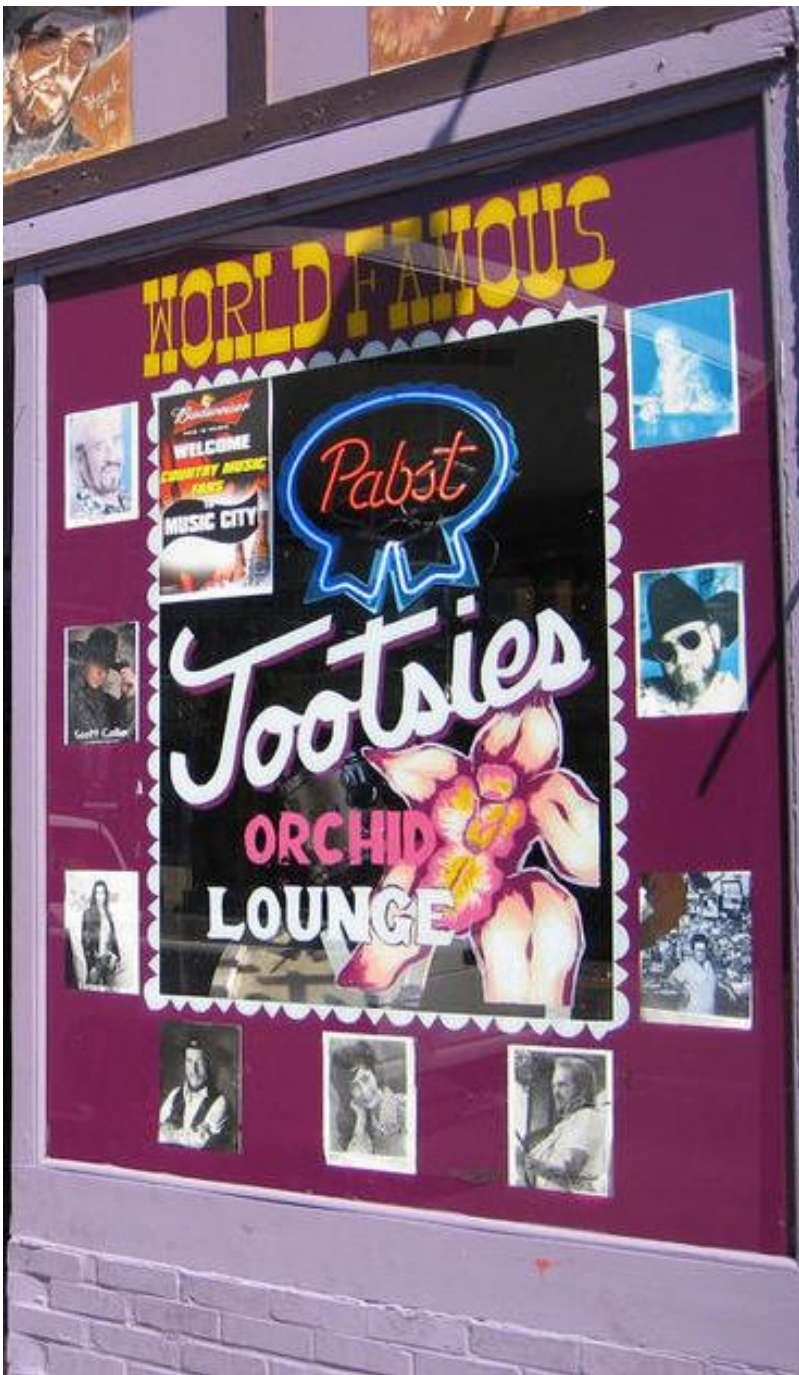


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70TH YEAR...
WORLD WI...

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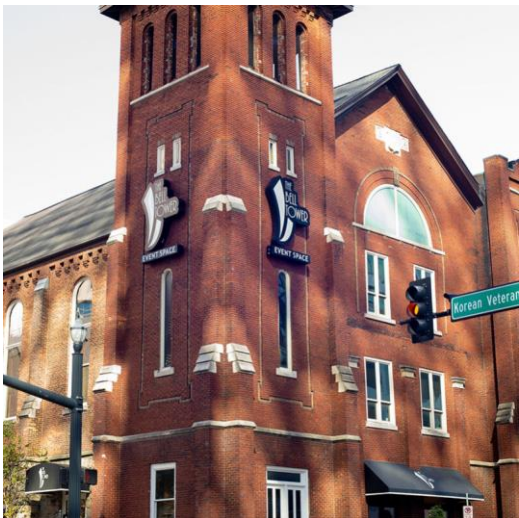



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BY HILTON™




**THE
BRIDGE
BUILDING**
EVENT SPACES

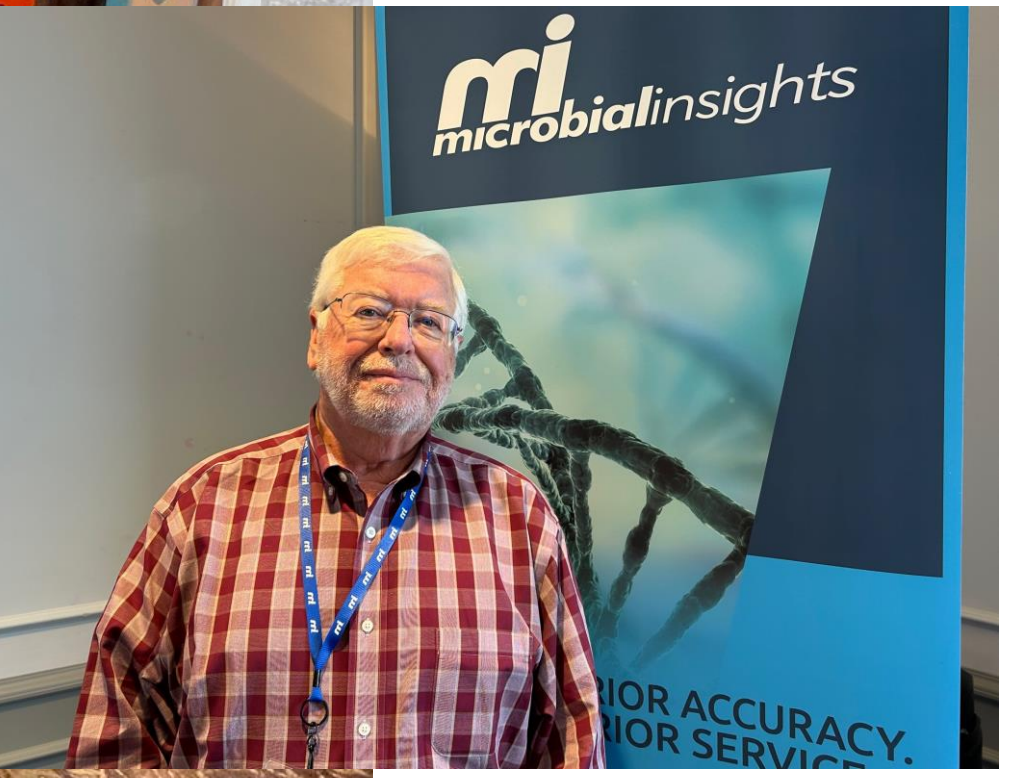
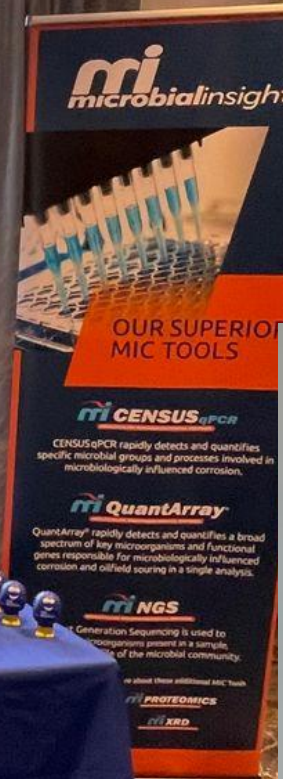
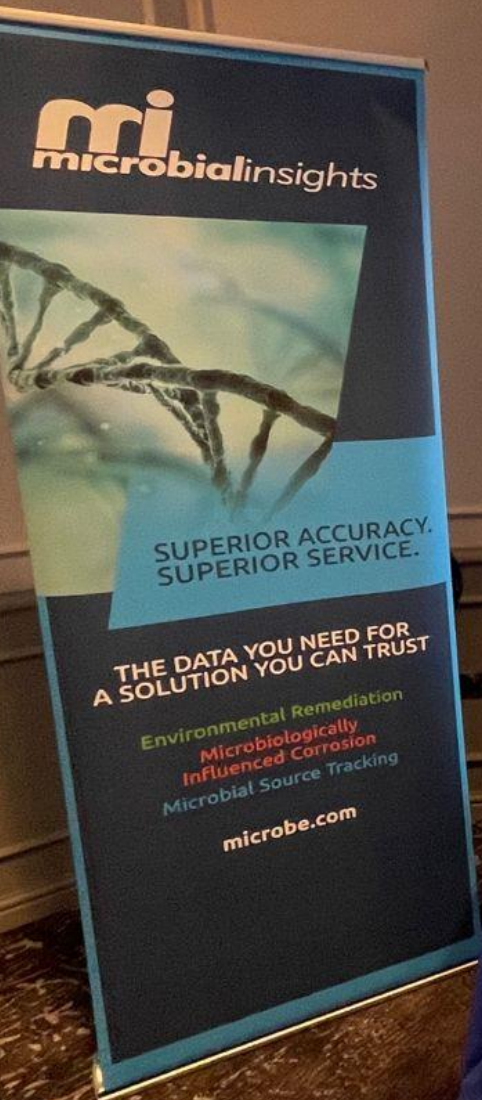

**THE
BELL
TOWER**



Potential Venues

CONRAD
NASHVILLE





See you at...

ISMOS **10**

..safe travels