



InterPore

2024 Annual Report

CONTENTS

President's Letter	3
Annual Meeting	4
<i>Conference in Numbers</i>	5
<i>Conference Highlights</i>	6
<i>Sponsors</i>	10
National Chapters	11
Academy	12
InterPore Foundation	15
InterPore Journal	16
Awards	17
Council's Corner	19
Other Society Activities	20
<i>Committees</i>	20
<i>2024 Elections</i>	21
<i>Institutional Members</i>	21
<i>Time Capsule</i>	21
Sustainability, Strategy & Support	22
Organizational Chart	23

PRESIDENT'S LETTER

Dear InterPore Community,

It is a privilege to serve as the President of InterPore, a society that continues to grow in depth, breadth, and global relevance, especially as we navigate an increasingly complex and dynamic research environment.

This past year has made it ever more apparent that scientific progress is deeply intertwined with broader societal and political forces. From global energy transitions to geopolitical shifts, research priorities and funding landscapes are increasingly shaped by national agendas. At times, this raises concerns about the independence of academic inquiry. In such times, we must remain committed to preserving academic freedom, supporting one another across disciplines and borders, and staying grounded in shared scientific values.

InterPore was founded on the principle of interdisciplinarity, and today we have the responsibility to expand our scope even further. While porous media research has historically been rooted in hydrogeology and reservoir engineering, our field has much to offer and to gain from disciplines such as bioengineering, environmental remediation, electrochemical systems, materials science, and tissue engineering.

To realise these potentials:

- We are actively promoting greater diversity in minisymposia topics at our annual meetings, expanding beyond traditional themes to include emerging and interdisciplinary areas such as energy storage materials, porous media in health sciences, and digital manufacturing. Notably, this year marked the first time we hosted a dedicated mini symposium on molecular dynamics in porous systems. We also continued our support for the well-received mini symposium on industrial porous materials, reflecting our commitment to engaging both academic and industry-oriented communities.
- We are strengthening our engagement with other research societies to raise broader awareness of porous media science and to build enduring interdisciplinary collaborations. Exciting developments are already emerging through the dedicated efforts of our colleague, Tannaz Pak, in collaboration with the International Science Council (ISC), which exemplifies how such partnerships can expand InterPore's global visibility and impact.
- We are learning from the focus areas and successes of our national chapters, whose grassroots engagement and local leadership often pioneer new collaborations and topics
- And we continue to champion early career researchers.

Our strength lies in connecting fields that have traditionally lacked shared language or common platforms. As President, I am committed to broadening the intellectual and demographic reach of InterPore and invite every member to contribute to this mission, whether by proposing new thematic sessions, mentoring colleagues from emerging areas, or simply sharing our work with adjacent communities.

My goal is to ensure that porous media science remains at the forefront of addressing some of the world's most urgent and interdisciplinary challenges.

Best regards,

Prof. Vahid Niasar
President, InterPore



ANNUAL MEETING

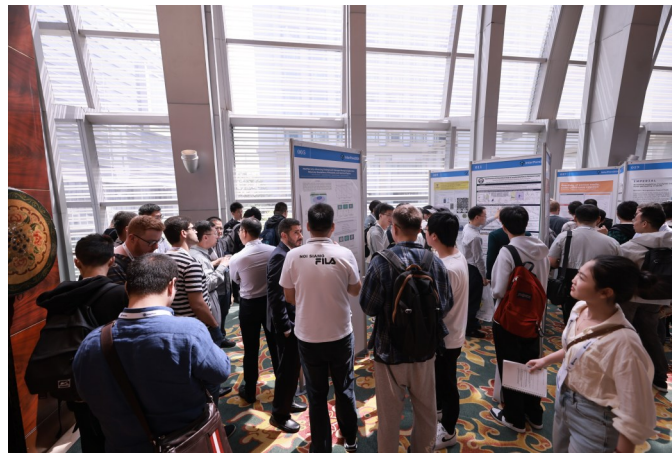
InterPore2024 was the 16th annual meeting of the International Society for Porous Media. Following two pandemic-postponed events, the conference was held over four days at the Shangri-La Hotel in Qingdao, China. The event was organized in conjunction with the Local Organizing Committee from China University of Petroleum (East China) and chaired by Professor Jun Yao and Professor Yongfei Yang. Five conference courses were also held immediately preceding and following the conference.

A total of 841 participants from 34 countries attended the meeting. 728 of those participants attended in-person in Qingdao with the remaining 113 joining online through Whova, the conference's online platform. In addition to live streaming the scientific portions of the event, all plenary and invited lectures and parallel sessions were recorded and made available for any-time viewing on Whova.

Throughout the course of the conference, 391 oral presentations from 24 minisymposia were given during 94 parallel sessions. 226 posters were also presented during 8 sessions held simultaneously with a coffee break in the exhibition hall, giving participants the chance to visit the exhibition booths, view posters and network with other attendees. 99 online presentations were viewable in digital form through pdfs and/or recorded presentations in Whova. Fourteen exhibitors, plus the InterPore Society, had booths in the exhibition area.

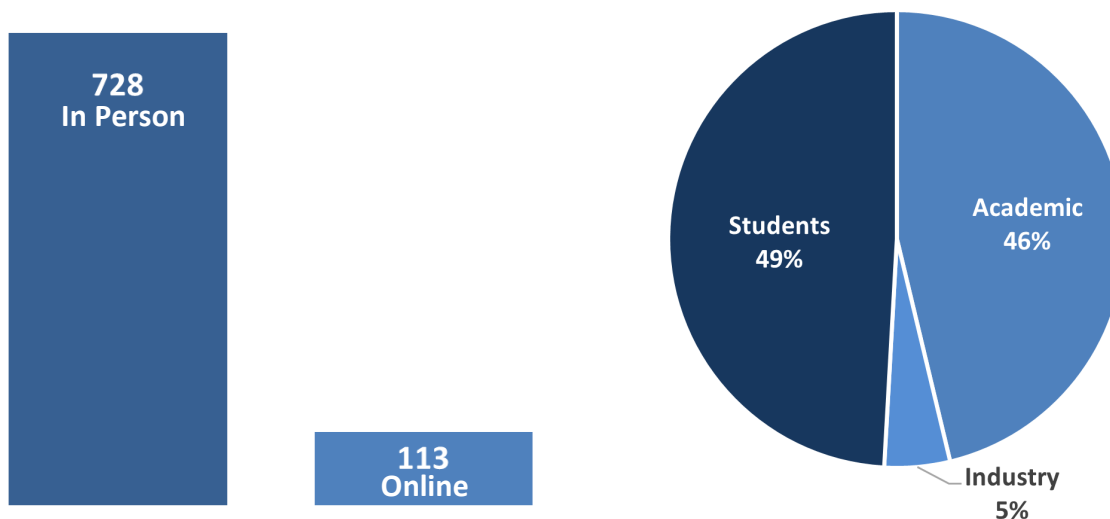
In addition to the scientific portion of the conference, social and networking events were held and included a Gala Dinner with local entertainment, laboratory tours at the University of Petroleum (East China) campus, a seaside walk to enjoy the city light show, a Diversity, Equality & Inclusiveness lecture, and the first EquiPore event. Furthermore, the Student Affairs Committee also organized the annual Career Event, a team building game night at a local bar, a grant writing workshop, and an evening of Chinese art.

Post-conference survey results indicate that the majority of participants (91%) were satisfied or very satisfied overall with the event. Among the positive feedback received was the return of lunches and the gala dinner. 93% indicated the scientific portions of the conference were good or very good. About 57% of the respondents indicated that this was their first InterPore event; almost 20% have attended for 4 or more years.



CONFERENCE IN NUMBERS

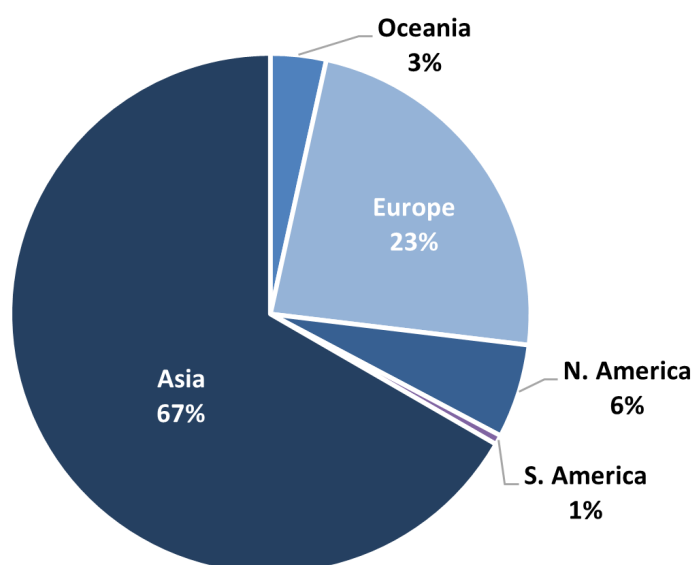
Participation



Total number of participants: 841

24 Minisymposia
94 Oral Sessions
4 Sponsors
391 Oral Presentations
8 Invited Speakers
99 Online Presentations
226 Posters
4 Plenary Speakers
13 Exhibitors

Attendance by Region



Top 10 Countries in Attendance

1	China	511	6	Norway	19
2	UK	49	7	Netherlands	18
3	Germany	38	8	France	17
4	USA	37	8	Russia	17
5	Australia	29	8	Saudi Arabia	17

Total number of countries represented: 34

CONFERENCE HIGHLIGHTS

- InterPore2024 kicked-off with three **satellite short-courses** which were offered on Sunday: **Multiphase Flow in Permeable Media: A Pore-Scale Perspective** with **Martin Blunt** (Imperial College London, *UK*), **Capillarity in Porous Media at Different Scales** with **Majid Hassanizadeh** (Utrecht University, *The Netherlands*), and **Microscale flow and multiphysical transport in porous media** with **Moran Wang** (Tsinghua University, *China*).
- On two separate days, the Local Organizing Committee organized **lab tours at the China University of Petroleum (East China)**. Participants were able to tour 9 different laboratory facilities including: Lab of Rock Mechanics, Reservoir Characterization Laboratory, Lab of Intelligent Oilfield Simulation, Nuclear Magnetic Resonance Lab and Lab of Foam Fluid.
- **Jun Yao** (School of Petroleum Engineering, *China*) was presented with the **2024 InterPore Meritorious Service Medal**.
- **Zhangxing (John) Chen** (Eastern Institute of Technology, *China*/University of Calgary, *Canada*) gave his plenary lecture entitled: “**Reservoir Simulator Development: The Past, Present and Future.**”



- **Hang Deng** (Peking University, *China*) gave the lunch-time lecture “**Be Part of the Conversation**” as part of the annual **Diversity, Equality & Inclusiveness Event**. Following the lecture, an open discussion was led by DEI Committee Chair **Wang Yuhang** (China University of Geosciences (Wuhan), *China*).
- **Alex Hansen** (NTNU-UiO Porous Media Laboratory, *Norway*) presented his lecture, “**A New Kind of Thermodynamics for Two-Phase Flow in Porous Media**” and **Xiaofan Yang** (Beijing Normal University, *China*) presented “**Simulating flow and solute transport in subsurface environments: From pore-scale to beyond**” as part of the invited lecture series.
- The **Gala Dinner** was a festive highlight, featuring a warm welcome and speech by **Yongfei Yang** from the Local Organizing Committee. The evening included special entertainment, with performances by a traditional storyteller, an opera singer, and a live band. Several conference participants also took to the stage, including InterPore Managing Director **Majid Hassanizadeh** and LOC Chair **Jun Yao**, who both contributed memorable musical performances.

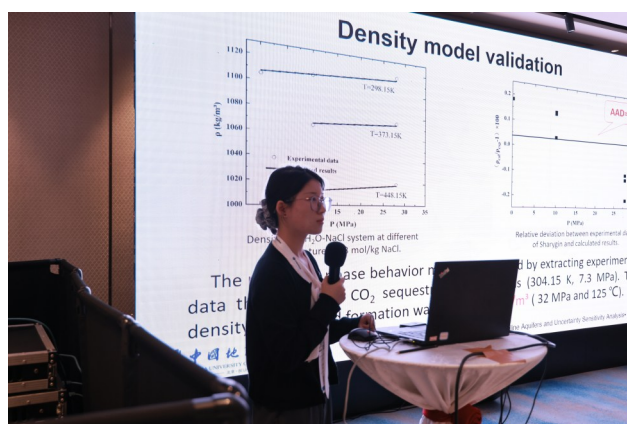
CONFERENCE HIGHLIGHTS

- **Sally Benson** (Stanford University, *USA*) was awarded the **2024 Honorary Lifetime Achievement Award**.
- **Rainer Helmig** (University of Stuttgart, *Germany*) was named the **2025 Kimberly-Clark Distinguished Lecturer**.
- **Susumu Kitagawa** (Kyoto University, *Japan*) gave his plenary lecture “**Chemistry and Application of Soft Porous Crystals.**”
- The **Student Affairs Committee** hosted their annual **Career Development Event**. During the event, three panelists, **Alex Hansen** (Norwegian University of Science and Technology, *Norway*), **Marijn Boone** (TESCAN, *Belgium*) and **Lin Ma** (University of Manchester, *UK*) shared their professional journeys and gave young researchers the opportunity to learn more about varied career options.
- **Shuyu Sun** (KAUST, *Saudi Arabia*) and **Catherine Peters** (Princeton University, *USA*) presented their respective lectures, “**Property-Preserving Schemes for Porous Media Flow: Phase-Wise Conservation, Bound Preservation, and Energy Stability**” and “Orthogonally different mineral reactions, same outcome of permeability reduction: How can this be?” during the invited lecture series.
- The **student members of the Local Organizing Committee** organized a **Chinese Art: Journey through Calligraphy and Paper Cutting event**. Participants explored traditional Chinese arts through a hands-on workshop featuring guided instruction in brush calligraphy and folk paper cutting. Under expert guidance, attendees practiced rhythmic brush strokes and crafted intricate paper-cut designs, immersing themselves in over 3,000 years of cultural heritage.
- Students and young researchers met at a local pub for a **fun night of networking and games**, organized by the **Student Affairs Committee** and the **student members of the Local Organizing Committee**.



CONFERENCE HIGHLIGHTS

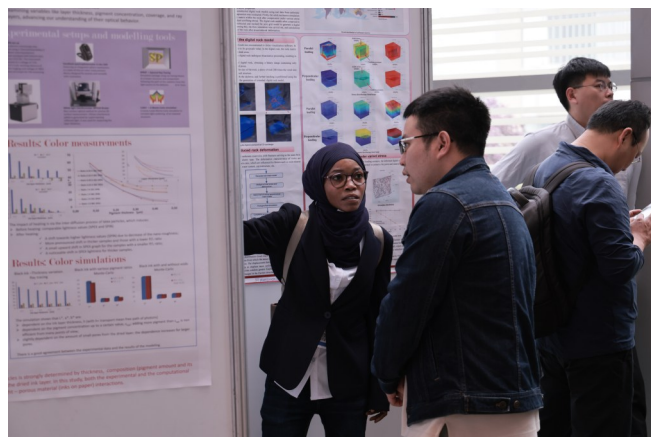
- The **2024 InterPore Medal for Porous Media Research** was awarded to **Alberto Guadagnini** (Politecnico de Milano, *Italy*).
- **Ryan Armstrong** (University of New South Wales, *Australia*) was presented with the **2024 InterPore Award for Porous Media Research**.
- **Svetlana Mintova** (Normandy University, *France*) presented her plenary lecture, “**Nanosized Zeolites with Exceptional Adsorption Properties.**”
- During the invited lecture series, **Ivan Lunati** (EMPA, *Switzerland*) presented his lecture “**Inertia, non-equilibrium, and momentum conservation in porous media**” and **Lucia Mancini** (ZAG—Slovenian National Building and Civil Engineering Institute, *Slovenia*) presented her lecture “**Advanced multi-scale and multi-modal 3D imaging and modelling of porous anode microarchitecture and shape changes in rechargeable zinc-based batteries.**”
- EquiPore, whose mission is “**Furthering Diversity and Inclusion in Porous Media Research through Connections and Events**” held their first ever event, The **EquiPore Happy Hour**. The event included an open forum for discussion and mentoring to address issues of diversity, equity, and inclusion in the workplace.



- Several hundred participants joined the Local Organizing Committee for a scenic **evening walk along the Qingdao sea-shore**. The one-hour stroll featured iconic landmarks such as May Fourth Square, the Olympic Sailing Center, Lover Dam, and Yeer Island, and concluded with a spectacular **waterfront light show**.
- **Jan Nordbotten** (University of Bergen, Norway) presented his lecture, “**Validating computational models for carbon storage**” and **TieJun (TJ) Zhang** (Khalifa University, *UAE*) presented his lecture, “**Physical Insights into Phase Transition and Capillary Transport in Porous Media with In-situ NMR-MRI Characterization**” during the invited lecture series.
- The Student Affairs Committee hosted the “**Embark on Your Funding Journey**” **Grant Writing Workshop**, led by **Nima Shokri**. Aimed at students and early-career researchers, the session provided practical guidance on crafting persuasive proposals, designing impactful projects, and navigating the grant application process.

CONFERENCE HIGHLIGHTS

- **Changying Zhao** (Shanghai Jiao Tong University, *China*) gave the plenary lecture “**Multiscale Considerations on Porous Media Heat Transfer.**”
- 110 posters were entered into and evaluated for the MDPI Energies Student Poster Award. The posters were judged on their scientific content and novelty, the presentation and appearance of the poster, the impact of the research and their performance in the poster session. The recipients of the **InterPore2024 MDPI Student Poster Award** were **Feihu Ke** (University of Hong Kong, *Hong Kong*) for his poster on “**Two-Phase Flow Displacement Morphologies in Cohesive Granular Materials**” and **Yang Meng** (Eastern Institute of Technology Ningbo, *China*) for his poster on “**PoreBoostGAN: AI-Supercharged Swin Transformer for Unprecedented Detail**”
- **Bauyrzhan Primkulov** (Massachusetts Institute of Technology, *USA*) was awarded the 2024 InterPore – PoreLab Award for Young Researchers.
- The **2024 Rien van Genuchten Early-Career Award of Porous Media for a Green World** was awarded to **Serveh Kamrava** (Colorado School of Mines, *USA*).
- Tao Zhang, on behalf of the Saudi Arabia Chapter, accepted the **2024 National Chapter Award**.
- **InterPore Rosettes** were bestowed upon: **Wendong Wang** (China University of Petroleum (East China), *China*), **Shuaishi Fu** (China University of Petroleum (East China), *China*), **Zhuocheng Hu** (China University of Petroleum (East China), *China*), **Mohammad Nooraiepour** (University of Oslo, *Norway*), **Hamid Nick** (Technical University of Denmark, *Denmark*), **Branko Bijeljic** (Imperial College London, *UK*), **Gabriel Wittum** (KAUST, *Saudi Arabia*), and **Mozhdeh Sajjadi** (University of Tehran, *Iran*).
- Two **satellite short-courses** were offered on Friday: **Machine learning integration with pore-scale studies: concepts and applications** with **Saeid Sadeghnejad** from Friedrich-Schiller-University Jena, *Germany* and **Advances in CO2 Sequestration in Reactive Basaltic Rocks through Mineral Carbonation** with **Helge Hellevang**, **Mohammad Nooraiepour** & **Mohammad Masoudi**, all from University of Oslo, *Norway*.



PLATINUM



GOLD



SILVER



NATIONAL CHAPTERS

- 22 January** **The Northeast-Midwest US InterPore Chapter**
 The Northeast-Midwest US InterPore Chapter kick-off meeting was held virtually on Monday, 22 January 2024, featuring two distinguished speakers: Prof. Ruben Juanes (Massachusetts Institute of Technology) and Prof. David Cole (Ohio State University). The meeting was organized by the chapter's founding committee. Approximately 40 participants attended the event.
- 7-8 March** **Annual Mexico National Chapter Meeting**
 The 10th Annual Meeting of the Mexico Chapter of InterPore was held at the Engineering School of the National Autonomous University of Mexico on 7-8 March 2024 and included 22 talks, including a plenary lecture by Ruben Juanes (Massachusetts Institute of Technology, USA) and a guest lecture from Tito Bonagamba (University of Sao Paulo, Brazil).
- 18-20 March** **Groundwater Technical Week – Colombia InterPore Chapter**
 The Groundwater Technical Week 2024 was the result of the joint effort and alliance between three of the country's main universities, and it was free and open- access for all students in Colombia as well as for professional associates of the Colombian Association of Hydrogeologists – ACH, IAHR, InterPore, and NGWA, associations that actively collaborated with the event organization.
- 11-12 April** **BeNeLux InterPore Chapter Meeting**
 The sixth InterPore BeNeLux Chapter Meeting was held for the first time in Luxembourg, hosted by the University of Luxembourg and was organized by Anas Obeidat, Stephane Urcun, Sorin Pop and Fred Vermolen. The meeting focused on "Porous Media in Computational Biology and Soft Tissue" and included the annual chapter committee meeting.
- 27-28 July** **West Africa InterPore Chapter Meeting**
 The second annual meeting and symposium of the West Africa InterPore Chapter (WAIC) was held in virtual format with the participation of over 20 academic researchers for this second event. The meeting was opened by Dr Adu SAKYI from Kwame Nkrumah University of Science and Technology (Ghana), Chair of the Steering Committee.
- 12-14 August** **7th Brazil InterPore Chapter Meeting**
 The 7th Brazil InterPore Chapter Conference on Porous Media was held at the Casa da Cultura, part of the Federal University of Pará (UFPA) in Salinópolis, Pará, Brazil. This event marked a significant milestone as it was the first time the InterPore conference took place in the northern region of Brazil. In addition to the seven international attendees were 92 participants from all across Brazil at the conference, representing several regions (north, northeast, south, and southeast).
- 9-10 September** **7th UK InterPore Chapter Meeting**
 The 7th InterPore UK Chapter Conference was hosted by the Subsurface Energy Engineering Group in Department of Chemical Engineering in collaboration with the Henry Royce Institute. The conference was organized by Dr. Lin Ma, Dr. Masoud Babaei, and Prof. Vahid Niasar, and welcomed around 70 attendees, both from the UK and abroad, with participants from countries such as Italy, Portugal, and Brazil. The event highlighted a broad spectrum of research on porous media, fostering a collaborative atmosphere aimed at advancing the field through knowledge exchange and international cooperation.
- 24-25 September** **1st Iran Conference on Porous Media**
 The Iran InterPore Chapter hosted the first Iran Conference on Porous Media at the School of Mechanical Engineering, College of Engineering, University of Tehran. The topics included diverse applications of porous media in: geosciences, energy, medicine, biology and environmental engineering, and industry. The event included keynote lectures, workshops, technical panels, over 70 poster and oral presentations, and a student competition.

NATIONAL CHAPTERS

- 18 November** **5th Annual meeting and Porous Media Workshop of the Spanish Chapter**
 The event was held at the Red Cube of the Polytechnic City of Innovation, Technical University of Valencia. The Meeting program had three invited speakers, four contributed talks and 13 poster presenters. The workshop provided a forum for knowledge exchange and creating new links between researchers in different porous media disciplines from academia and industry for over 30 attendees.
- 5 December** **InterPore Norway 2024**
 The 7th meeting of the Norwegian Chapter of InterPore was held in Stavanger. The meeting was organized by Siv Marie Åsen, Johan O. Helland, Lisa Watson, Sarah Gasda, and Aksel Hiorth (Chair). It was hosted by NCS2030 and the University of Stavanger. About 40 participants attended the annual workshop, with a balance between university, industry, and research institutes, both in terms of participants and speakers.
- 15-16 December** **Saudi Chapter Annual Meeting**
 The 3rd Interpore Saudi Chapter Annual Meeting was successfully held online over two days. The event featured four keynote speeches and seven minisymposium sessions, attracting an average of 25 attendees per session, with a total of 63 registered participants. The meeting brought together experts and professionals from various geographical regions, including Saudi Arabia, Europe, the United States, China, and India. Attendees represented a diverse range of professional roles, including professors, assistant professors, researchers, consultants, and students.

ACADEMY

- 8-29 January** **Study Plan in Porous Media (SP-PM)**
Pore 1-3 Multiphase Flow & Transport in Porous Media
Sibani Lisa Biswal (*Rice University, USA*), **Maja Rücker** (*TU Eindhoven, The Netherlands*), **Cyprien Soullaine** (*CNRS, France*). This course introduced students to basic principles in multiphase flow in porous media.
- 23 January** **Porous Media Tea Time Talks**
Silvia De Simone (*IDAEA/CSIC, Spain*), "The impact of heterogeneities on the Biot and Skempton coefficients of fractured rocks"
Aurelia Bucciarelli (*University of Bern, Switzerland*), "Biomechanics of Red Blood Cells in Capillary Networks"
- 30 January** **Webinar**
Vahid Niasar (*University of Manchester, UK*), "Leveraging Pore-Scale Physics for Enhanced Understanding of Darcy-Scale Multiphase flow and Transport through Porous Materials."
- 8-29 February** **Study Plan in Porous Media (SP-PM)**
PORE 1-6: Interfacial chemistry/Geochemistry and reactive transport in porous media
Hang Deng (*Peking University, China*), **Sergi Molins** (*Lawrence Berkeley National Laboratory, USA*), **Maja Rücker** (*TU Eindhoven, The Netherlands*), and **Christophe Tournassat** (*University of Orléans, France*).
 The goal of the course was to introduce to the students to tools available and to prepare them for developing simple reactive transport models for their chosen problems.

ACADEMY

- 13 February** **Porous Media Tea Time Talks**
Negar Shahsavari (*McMaster University, Canada*), "Experimental Precipitation flow in a confined geometry: Mixing, fingering, and deposition"
Milad Naderloo (*TU Delft, Netherlands*), "Experimental and numerical investigation of sandstone deformation under cycling loading relevant for underground energy storage"
- 12 March** **Porous Media Tea Time Talks**
Tomás Aquino (*IDAEA/CSIC, Spain*), "Interface shear controls surface reaction efficiency in chaotic flow through porous media"
Wenhai Lei, (*KTH Royal Institute of Technology, Sweden*), "Triggering interfacial instabilities during forced imbibition in depth-variable microfluidic porous media"
- 2 April** **Webinar**
Lindsay Beevers (*University of Edinburgh, UK*), "Hydrological extremes: changing hazards as a result of climate change"
- 7-28 April** **Study Plan in Porous Media (SP-PM)**
Pore 1-8: Microfluidics for Flow and Transport in Porous Media
Wen Song (*University of Texas at Austin, USA*). This course provided an overview of microfluidics in the context of understanding the pore- and interfacial-scale processes that control multiphase flow and reactions in porous media.
- 16 April** **Porous Media Tea Time Talks**
Yifan Li (*China University of Petroleum (East China), China*) "Distribution characteristics of hydrocarbons in nanopores"
Zijie Wang (*China University of Petroleum (East China), China*) "Coupled THMC model for simulating in-situ conversion process in low-medium maturity shale oil reservoir"
- 23 April** **Webinar**
Catherine Noiriell (*University Paul Sabatier, France*), "Challenging reactive transport modeling from pore-scale observations."
- 9 May** **Porous Media Tea Time Talks**
Saeid Ataie (*University of Edinburgh, UK*) "Cyclic flow characteristics of sandstones during geological hydrogen storage in saline aquifers"
Yao Xu (*PoreLab, University of Oslo, Norway*) "Spatial and temporal pH and carbon concentration during density-driven convection of CO₂ in water"
- 11 June** **Porous Media Tea Time Talks**
Riccardo Sprocati (*Technical University of Denmark, Denmark*) "Enhancing solute transport in porous media with electrokinetics"
Negar Nazari (*Harvard University, USA*) "Geological hydrogen production in basalt in response to hydrothermal reactions"
- 25 June** **Webinar**
Robin Gerlach (*Montana State University, USA*), "Biotechnology, biomineralization and biofilms in porous media."

ACADEMY

- 9 July** **Porous Media Tea Time Talks**
Ali Fathiganjehlou (Eindhoven University of Technology (TU/e), The Netherlands) "Pore network modeling and magnetic resonance imaging of packed bed reactors"
Eleni Stavropoulou (*Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland*) "CO₂ storage in basalts: Impact of mineralisation on the flow properties of the material"
- 20 August** **Porous Media Tea Time Talks**
Sabrina Volponi (*Washington State University, USA*) "Interception history drives colloid transport variance in porous media"
Mohammad Hossein Khosravi (*University of Toronto, Canada*) "Quantitative characterization of carbonate pore systems using seismic and well data"
- 17 September** **Porous Media Tea Time Talks**
Sajjad Foroughi (Imperial College London, UK) "Multiscale pore network modeling of complex microporous carbonates and dolomite: Incorporating subresolution porosity"
Tobias Forslund (*Luleå University of Technology, Sweden*) "GPU-accelerated methods for transitional flows in porous media"
- 3 October** **Study Plan in Porous Media (SP-PM)**
Pore 2-4: Capillarity in porous media at different scales
S. Majid Hassanizadeh (*Utrecht University, The Netherlands*) In this course, a systematic approach was taken to the understanding of capillarity in porous media on different scales. Current definitions of capillary pressure, which have mainly an empirical character, are revisited and it is shown that they are special cases of a more general theory of capillarity.
- 15 October** **Webinar**
Tom Bultreys (*Ghent University, Belgium*), "X-ray imaging of flow and transport in rocks: from particle velocimetry to hydrogen-brine dynamics"
- 15 October** **Porous Media Tea Time Talks**
Aronne Dell'Oca (*Milan Polytechnic University, Italy*) "Mixing in porous media: Reconnecting with spreading"
Mahsa Shirazi (*Sharif University of Technology, Iran*) "How to control surface characteristics in microfluidic experiments for fluid flow studies in porous media?"
- 29 October—19 November** **Study Plan in Porous Media (SP-PM)**
PORE 1-2: Introduction to Single Phase Flow and Transport in Porous Media
Davide Picchi (*University of Brescia, Italy*).
This course aimed to provide a foundational understanding of flow and transport in porous media, emphasizing its broad applications across various fields, including energy, hydrology, geothermal systems, and the emerging areas of carbon sequestration and hydrogen storage.
- 12 November** **Porous Media Tea Time Talks**
Hao Shi (*Harbin Institute of Technology, China*) "Dynamic water flow in asphalt pavement"
Happiness Imuetinyan (*University of Pau, France*) "Convective plume spreading in model transparent porous media"
- 10 December** **Porous Media Tea Time Talks**
Xinyu Yao (*KAUST, Saudi Arabia*) "Interfacial properties of the hydrogen-brine system in the presence of hydrophilic silica"
Ronghao Cui (*KAUST, Saudi Arabia*) "Thermodynamic effects of multi-component two phase fluids in porous media: Pore-network modeling"

ACADEMY

NEW WEBINAR COMMITTEE CHAIR

Maartje Boone (*University of Stuttgart, Germany*) was appointed chair of the Webinar Committee, succeeding Sebastian Geiger.



FOUNDATION

ACTIVITIES

- Conference Grants for the 2024 InterPore Annual Meeting: 12 participants were offered a grant which included registration fees and contributions towards travel costs for in-person attendees.
- Eight individual grants for Academy Short Courses were awarded.
- Handling of the following InterPore awards:
 - ◊ Honorary Lifetime Membership Award
 - ◊ Kimberly-Clark Distinguished Lectureship Award
 - ◊ InterPore Medal for Porous Media Research
 - ◊ InterPore Award for Porous Media Research
 - ◊ InterPore – PoreLab Award for Young Researchers
 - ◊ Rien van Genuchten Early-Career Award of Porous Media for a Green World
 - ◊ MDPI Energies Student Poster Award
- Update of the Foundation bylaws to include an article on the handling of awards and grants.
- Following the summer of 2024, the Board of Directors was renewed with several new appointments. **Andrew Baker** (*Kimberly-Clark, USA*) was appointed Chair, **Afshin Goharzadeh** (*Khalifa University, UAE*) Vice-Chair, **Steffen Berg** (*Shell, The Netherlands*) Treasurer, and **Yongfei Yang** (*China University of Petroleum, China*) Communications Officer. New members include **Anne Hansen** (*Mexican Institute of Water Technology, Mexico*) as Communications Officer, **Kamaljit Singh** (*Heriot Watt University, UK*) as Fundraising Officer, and **Hannelore Derluyn** (*University of Pau, France*) as Secretary and DEI Liaison, replacing departing members Azita Ahmadi, Noushine Shahidzadeh, and Andrea Peri.

[View the InterPore Foundation 2024 Annual Report](#)

INTERPORE JOURNAL

Since its launch in April 2024, the InterPore Journal has made significant strides in its mission to highlight high-quality research in the porous media community. The inaugural issue was published online on 26 April 2024, with printed copies distributed at the Annual Meeting in Qingdao. This was followed by two more issues in August and November, concluding a successful first year with three published volumes.

Now in its second year, two issues have already been published:

- Issue 1 appeared online in February, with printed copies handed out during the May Annual Meeting.
- Issue 2 was published in June.

Work is actively underway on Issue 3, expected in late August, and Issue 4, planned for November/December.

The journal has achieved several important milestones:

- Obtained an ISSN
- Registered with CrossRef to assign DOIs
- Indexed in Google Scholar, Scilit, and Shibata (Yubetsu) — boosting article visibility

All articles are promoted on social media, particularly on LinkedIn, which has proven to be the most effective platform in terms of engagement. In addition, articles by InterPore members are highlighted in the InJournals section of the InterPore Newsletter.

In 2024, the InterPore Journal Invited Student Paper Award was introduced. Students presenting at the Annual Conference are eligible, and nominations are made by MS chairs based on presentation quality. Up to nine of the nominees are then selected by the Board of Editors and invited to submit papers. At the 2025 Annual Conference, three winners were announced, and two more winners have since been selected, with one additional paper currently under review. This year's Annual Conference marked the 2nd year for this award, and nominees have already been contacted.

The Editorial Board has also seen some turnover: three editors retired, four new members joined, and one more is set to retire by year's end; 1–3 new editors are expected to be added. Two Board of Editors meetings have been held so far, and these will occur annually with a separate annual in-person meeting between the Editor-in-Chief and the Managing Editor.

Looking ahead, the journal is:

- Preparing applications for indexing in the Directory of Open Access Journals (DOAJ) and Scopus
- Initiating steps toward Web of Science Core Collection inclusion and obtaining an impact factor
- Developing standardized LaTeX and Word templates to streamline submissions and production
- Awaiting assignment of an ISSN for print, given that 1 issue per year will be printed and distributed at the annual conference.

AWARDS

InterPore Meritorious Service Award

Jun Yao, *China University of Petroleum (East China), China*

In recognition of his outstanding commitment to service and outreach, including the establishment of the China InterPore Chapter in 2017 and six years of dedicated leadership that significantly expanded InterPore's presence and impact in China.

Honorary Lifetime Achievement Award

Sally M. Benson, *Stanford University, USA*

For her exceptional professional achievements and global impact, serving as a role model in the porous media community and beyond through steadfast leadership, adventurous and rigorous scholarship, and dedicated mentorship.

Kimberly-Clark Distinguished Lectureship Award

Rainer Helmig, *University of Stuttgart, Germany*

A pioneer and visionary in developing numerical modelling concepts in the fields of groundwater hydrology, subsurface energy storage, and coupled processes at the interface between porous media and free-flow compartments, Rainer has consistently produced groundbreaking research that has pushed the boundaries of knowledge in the field of porous-media research. His lecture series can be hosted by member and non-member organizations in 2024.

InterPore Medal for Porous Media Research

Alberto Guadagnini, *Politecnico di Milano, Italy*

For his repeated advancements on the frontiers of porous media science through the delineation, development, and application of quantitative, process-based flow and chemical transport models in natural porous geomaterials.

InterPore Award for Porous Media Research

Ryan Armstrong, *University of New South Wales, Australia*

For pioneering novel methods for the analysis and interpretation of multiphase flow in porous media, including the first measurements of interfacial curvature and topology, while leading the development of novel machine learning techniques.

InterPore – PoreLab Award for Young Researchers

Bauyrzhan K. Primkulov, *Massachusetts Institute of Technology, USA*

In recognition of outstanding contributions to clean energy technologies.

Rien van Genuchten Early-Career Award of Porous Media for a Green World

Serveh Kamrava, *Colorado School of Mines, USA*

For significant advancements in the application and development of machine learning in the study of fluid flow in porous materials.

MDPI Energies Student Poster Award

Feihu Ke, *University of Hong Kong*, for the poster entitled “Two-Phase Flow Displacement Morphologies In Cohesive Granular Materials”

Yang Meng, *Eastern Institute of Technology Ningbo, China*, for the poster entitled “PoreBoostGAN: AI-Supercharged Swin Transformer for Unprecedented Detail”

AWARDS

InterPore Rosettes

Mozhdeh Sajjadi, *University of Tehran, Iran*

For her contributions to Minisymposia (08) for the last 4 years, her engagement with the Iran National Chapter and for excellent services provided to the Editorial Board of the InterPore Journal.

Mohammad Nooraiepour, *University of Oslo, Norway*

For excellent services provided as chair of the Student Affairs Committee, facilitating the Porous Media Tea Time Talks and overall direction of the Young Academy, and for his contributions to the Minisymposia and Conference Course Programs at InterPore2024.

Hamid Nick, *Technical University of Denmark, Denmark*

Outstanding leading work on the organization of Minisymposia since 2019 and his efforts in establishing Denmark InterPore Chapter.

Branko Bijeljic, *Imperial College London, UK*

In recognition for his long-time contributions to the Honors and Awards Committee both as chair and co-chair, and Editor of InterPore Journal.

Gabriel Wittum, *King Abdullah University of Science and Technology (KAUST), Saudi Arabia*

In recognition for his participation in InterPore since day one and almost perfect meeting attendance, strong support for Institutional Membership since 2009 even into retirement, and for his excellent work chairing the Election Committee since 2020.

Wendong Wang, *China University of Petroleum (East China), China*

For all of his efforts in organizing special issues since 2020 in addition to valuable work as part of the Local Organizing Committee for InterPore2024.

Shuaishi Fu, *China University of Petroleum (East China), China*

For skillfully managing the InterPore WeChat account and preparing frequent updates via the “And now... Qingdao” stories in the InterPore newsletter and for his contributions as part of the Local Organizing Committee for InterPore2024.

Zhuocheng Hu, *China University of Petroleum (East China), China*

For important contributions in the area of Student Affairs and Events and as part of the Local Organizing Committee for InterPore2024.

National Chapter Award

Saudi Arabia Chapter

COUNCIL'S CORNER

- During the 14 May meeting, Michel Quintard, chair of the Nomination Committee, updated the Council on the activities of his Committee in preparation for the upcoming InterPore elections. This was followed by Azita Ahmadi-Senichault, our treasurer, who provided a report on the financial status of InterPore. The Council was pleased to note that the society's financial situation is sound. We have requested further details on potential financial options in preparation for our upcoming events and activities. Karsten Thompson, InterPore's president, gave a presentation on the ongoing strategic planning efforts. Under his leadership, the Strategic Planning Committee will refine and finalise these plans later this year and will share them with the Council. Majid Hassanizadeh, our Managing Director, updated us on the status and plans for the InterPore Journal. We discussed accelerating the DOI assignment process for papers, the journal's impact factor and review process, and future directions. Majid also provided updates on the key discussions in the Executive Committee, including the locations of the future annual meetings, and how the Council can aid in different aspects of reaching Society's goals. We explored how the InterPore Academy can further support young researchers in their research efforts and professional development. We are planning to support the preparation of resources on various porous media subjects that will be available upon request. Additionally, there was a discussion on how we can encourage greater involvement from industry delegates in our events and society activities.
- Topics discussed during the 04 September meeting included the upcoming elections, InterPore finances, strategic planning, our journal and the InterPore2025 conference. We were happy to hear about planned special issues for the InterPore journal and the introduction of solicited speakers at InterPore2025. The solicited speakers can be invited by the mini-symposia organizers, providing an opportunity to attract specialists and early- to mid-career researchers to our conference. We also discussed how we can foster diversity in our elections, ensuring representation from both industry and academia, as well as global participation across cultures, genders, and more.
- On December 12th, the InterPore Council convened under the chairmanship of Peyman Mostaghimi. Key topics included the InterPore Foundation, finances, Academy activities, the InterPore journal, elections, awards, membership, National Chapters, strategic planning, and InterPore2025.

Much attention was given to the InterPore Foundation Report, where achievements included enhanced donation facilitation, a rise in grant applications, and a successful board rotation. There are plans for better clarity in bylaws concerning fundraising and grant handling. Challenges in visa processing for grant recipients were discussed.

The financial report indicated stability. The Council emphasized the importance of a structured investment approach and will interact more closely with the Financial Committee.

The Academy reported successful Webinar participation but a decline in short course attendance. Ideas for student engagement and the promotion of course recordings were proposed.

Related to the InterPore Journal, future strategies were discussed, including maintaining the Article Processing Charge (APC) waiver until the journal's impact is better established and enhancing student publication engagement.

The results of the InterPore 2024 Elections were approved and will be officially published in the newsletter of December 20th, 2024. New Award titles were proposed and concerns about diversity in nominations will be addressed. Membership conditions were reviewed, highlighting benefits for retired members. National chapter developments were addressed.

Related to the Strategic Planning, upcoming feedback opportunities for a new strategic draft in January 2025 were noted. Updates on IP2025 were provided, alongside discussions on future conference locations.

OTHER SOCIETY ACTIVITIES

COMMITTEES

Communications Committee

Ipsita Gupta (*Louisiana State University, USA*) has taken over chair duties from Alberto Guadagnini (*Politecnico di Milano, Italy*).



Nomination Committee

The Nomination Committee for the 2024 InterPore elections was chaired by **Michel Quintard** (*CNRS, Institut de Mécanique des Fluides de Toulouse, France*). Additional members included: **Eduardo Abreu** (*University of Campinas, Brazil*), **Lauren Beckingham** (*Auburn University, USA*), **Reza Soltanian** (*University of Cincinnati, USA*), **Ruina XU** (*Tsinghua University, China*)



Diversity, Equity and Inclusion (DEI)

Jian (Antonio) Wu (*University of Sydney, Australia*) and **Nihal Darraj** (*Imperial College London, UK*) joined the committee.

Election Committee

The Election Committee for the 2024 InterPore elections was chaired by **Gabriel Wittum** (*KAUST, Saudi Arabia*), and the following committee members: **Marios Valavanides** (*University of West Attica, Greece*), **Yu Jing** (*University of New South Wales, Australia*), **Mozhdeh Sajjadi** (*University of Tehran, Iran*), and **Jiahui You** (*University of Houston, USA*).



Rien van Genuchten Early Career Award For Porous Media Research focusing on a Green World Award Sub-Committee

Lauren Beckingham (*Auburn University, USA*) has joined the Rien van Genuchten Early Career Award for Porous Media Research focusing on a Green World Sub-Committee, succeeding Rien van Genuchten, who served on the committee since its establishment in 2020.

Website Task Force Team

Lin Ma, *University of Manchester (UK)*, has been appointed as the new chair of the Website Task Force Team.



Kimberly-Clark Distinguished Lectureship Award Sub-Committee

Dwayne Jackson (*Kimberly-Clark Corporation, USA*) is named the new chair.

Honors & Awards Committee

Alex Hansen (*Norwegian University of Science & Technology, Norway*) and **Shaina Kelly** (*Columbia University, USA*) joined the committee.

OTHER SOCIETY ACTIVITIES

COMMITTEES, CONT.

Financial Committee

[Tissa Illangasekare](#) (Colorado School of Mines, USA) and [Denis O'Caroll](#) (University of New South Wales, Australia) were appointed as members.

2024 ELECTIONS

The 2024 InterPore elections were held from 1–30 November, with all current members eligible to vote via a secure online platform. [Ann Muggeridge](#) was elected as President-Elect and will begin her two-year term in May 2025, after which she will assume the role of President. Four Council members were elected for the 2025–2029 term: returning members [Maja Rücker](#) and [Masa Prodanovic](#), and new members [Linda Luquot](#) and [Marijn Boone](#).

Five new members were also elected to the Student Affairs Committee (SAC): [Mehdi Ghasemi](#), [Raymond Mushabe](#), [Rima Manik](#), [Sina Omrani](#), and [Xiaoxing Li](#). They will begin their terms in May 2025, joining the current SAC members. A new SAC chair will be selected from within the committee and will serve as the student representative on the Council.

NEW INSTITUTIONAL MEMBERS

- **Peking University (China)**
Point of Contact: [Ke Xu](#)
- **Louisiana State University Institute for Energy Innovation (USA)**
Point of Contact: [Karsten Thompson](#)

TIME CAPSULE

Professor emeritus [Dick Bedeaux](#) and Professor emerita [Signe Kjelstrup](#), who are interviewed by Professor Alex [Hansen](#), all at *PoreLab – Centre of Excellence (SFF), Norwegian University of Science and Technology*. Bedeaux and Kjelstrup are presently active members of PoreLab. They have both served as Principal Investigators since the start of the Center, where Hansen is the director. In the video, both scientists discuss their childhoods, how they got into science, and the development of their career. The Time Capsule interview can be viewed on the InterPore YouTube Channel.

SUSTAINABILITY, STRATEGY & SUPPORT

In 2024, InterPore maintained a strong and stable financial position. As reported by Treasurer Azita Ahmadi-Senichault during the May Council meeting, the Society is in good fiscal health and well-positioned to invest strategically in its future activities and infrastructure.

STRATEGIC PRIORITIES AND INVESTMENTS

Grants & Support via the InterPore Foundation

InterPore Society continues to provide essential administrative and financial support to the InterPore Foundation, which plays a critical role in supporting researchers through grants and outreach. In 2024, the Foundation provided support to 20 researchers from low- and middle-income (LMI) countries and students to attend InterPore events. The Society aims to sustain and grow this support over the coming years, working closely with the Foundation to ensure continued access and equity for members around the globe.

Support for National Chapters

InterPore remains committed to supporting its National Chapters. While there is no dedicated budget line for chapter funding, financial support is possible and has been offered in recent years. Support is generally targeted toward LMI countries and includes sponsoring keynote speakers for local chapter meetings and providing administrative assistance. This remains a priority, although funding is evaluated on a case-by-case basis given the variability in demand from year to year.

IT Infrastructure & InterPore Journal Development

To improve performance, flexibility, and security across our digital platforms, InterPore is planning a transition to a larger and more secure server by September 2025. This upgrade will better support the growing needs of the Society's online services, including the conference platform, Academy events, and the InterPore Journal. While final costs are still being confirmed, the aim is to maintain or reduce current hosting costs. Longer term, this infrastructure will allow us to streamline services and reduce reliance on third-party systems.

InterPore Journal Expansion

The InterPore Journal continues to gain momentum in 2024, marking several important milestones that strengthen its academic standing and community reach. Notably, the journal is now registered with CrossRef and indexed with Google Scholar and Scilit, improving both discoverability and credibility.

Looking ahead, preparations are well underway for applications to the Directory of Open Access Journals (DOAJ), Scopus, and eventually the Web of Science Core Collection. These applications are targeted for Q3 or Q4 of 2025, as part of the journal's long-term strategy to achieve indexing and, ultimately, an impact factor.

Additional plans include:

- Improving review and production workflows to enhance turnaround times and publishing efficiency
- Launching special issues to attract diverse, high-impact submissions
- Expanding community engagement, particularly through increased visibility and collaboration

A key focus moving forward is increasing submissions from within the InterPore community. To support this, there are plans to collaborate more closely with national chapters and their annual meetings, encouraging researchers to submit their work to the journal and helping establish it as a leading forum for porous media research.

SUSTAINABILITY, STRATEGY & SUPPORT

Strategic Planning

Under the leadership of Past-President Karsten Thompson, the Strategic Planning Committee is refining a long-term plan for InterPore's future. The draft plan will be finalized later this year and shared with Council and members. Strategic focus areas include community engagement, service to early-career researchers, and long-term financial sustainability.

New Initiatives Under Consideration

Looking forward, InterPore is exploring additional investments to enhance the member experience and accessibility of its events. One option under discussion is the provision of child care services during the annual conference to support broader participation. Additional initiatives will be evaluated in alignment with the Society's mission and available resources.

ORGANIZATIONAL CHART

