







Call for Papers

FIG Working Week 2024 Accra, Ghana

19-24 May

Your World, Our World: Resilient Environment and Sustainable Resource Management for All





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

Contents

INVITATION	3
THE THEME	4
SPECIFIC TOPICS OF FIG WORKING WEEK	5
SUBMIT YOUR ABSTRACT	9
PRIZES	10
SURVEY REVIEW PRIZE	10
NAVXPERIENCE AWARD	10
BECOME AN AUTHOR	11
SUBMISSION OF ABSTRACT	12
How to submit	12
Before you begin - To submit your abstract you will need to have the following items re	ady: 12
Submitting your abstract	12
SUBMISSION OF FULL PAPERS	13
PEER REVIEW PAPER	13
SCIENTIFIC COMMITTEE	14
The Scientific Committee of the Technical Programme:	14
The Scientific Committee of the Peer Review Papers:	14
IMPORTANT DEADLINES	15
FURTHER INFORMATION	16





19-24 May Accra, Ghan

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

INVITATION

The Call for Papers is announced both for peer review papers and non-peer review papers.

It is our pleasure to invite you to the largest and most prestigious conference of surveying and geospatial professionals in 2024, held in Accra, Ghana. We expect around 1,200-1,500 surveying and geospatial experts from all over the world.

The International Federation of Surveyors (FIG) is a United Nations and World Bank recognised non-governmental international professional organisation. FIG was founded in 1878 and represents national associations of surveying, cadastre, valuation, national mapping professionals, geospatial experts and quantity surveyors working in both the public and private sectors, in the scientific, research and academic community, as well as from technology innovators and industry from more than 120 countries around the world.

Our member organizations measure, position, map, locate, appraise and value, estimate and cost, plan, construct, develop and manage the land, the seas and any man-made structures with a vision to extend the usefulness of surveying for the benefit of society, environment and economy.

Each year, FIG convenes a conference in cooperation with a national member association. The coming Working Week will be held in cooperation with our two members from Ghana Ghana Institution of Surveyors (GhIS) and Licenced Surveyors of Ghana (LISAG)

One of the characteristics and a distinctive feature of FIG conferences are that experts from all the different areas of surveying – interpreted in the broadest sense including land surveyors, geospatial experts, valuers, quantity surveyors, hydrography surveyors etc. – are all represented. FIG brings these different surveying professions and professionals together to enhance the cooperation and understanding of each other's fields.

The FIG Working Week 2024 gives passionate professionals the opportunity to:

- Learn and share globally with participation from around 80-90 countries
- Network across silos, from other countries, sectors and professional roles with sessions and representation from the broad range of surveyors and geospatial experts
- Make impacts on careers, organizations and communities
- Ensure undisturbed on-site time to focus and concentrate





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

THE THEME

Your World, Our World: Resilient Environment and Sustainable Resource Management for all

We invite you to submit abstract for FIG Working Week 2024 in Accra, Ghana. The overall focus will be on Resilient Environment and Sustainable Resource Management, hereunder the role of geospatial technologies, innovations, and connectivity. Share your research and insights on how these tools become major assets in ensuring a resilient environment and sustainable natural resource management for all. Join us in exploring the intersection of technology and sustainability. Submit your abstracts and contribute to the global dialogue on building a sustainable future.

The 2030 Agenda for sustainable development adopted by all United Nation as Member States in 2015 provides a shared blue print, that at its heart has five key dimensions: people, planet, partnership, peace and prosperity.

With less than ten years left to achieve the Sustainable Development Goals, world leaders have called for a decade of action and delivery for sustainable development, and pledged to achieve the Goals by the target date of 2030, leaving no one behind.

FIG Working Week 2024 will build on the FIG vision to 'Serve society, benefitting people and the planet' will focus on tackling the global challenges as these specifically relate to the wellbeing of our Planet and natural resources.

Natural resource use relate to all three internationally accepted dimensions of sustainability, which are social justice, environmental health and economic development. Poorest countries suffer directly from an increasing polluted and degraded environment and the result of global politics on resource ownership, use and extraction.

Taking the lead from Agenda 2023 "We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change so that it can support the needs of the present and future generations. Sustainable development and climate action are inextricably linked and both are vital to achieving the SDG's.

Further, the importance of education, capacity building and above all the involvement of the youth will be a key feature of our diversity and inclusion of all. That geospatial technology and policies plays a key role in connectivity and sustainability which with adequate regulations and continuing innovation is becoming a major tool to ensure resilient environment and sustainable natural resource management.





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

Partnership relationships and working models will be explored. Our deliberations and outcomes will be underpinned by working in partnership with and between FIG members as well as revitalising our global partners to mobilize the means and action required to tackle this Agenda as led by FIG commission technical sessions.

We invite your engagement and submission of papers that provide insights for debate and action in topics that contribute to the advancement of a greener and more resilient world and encourage high quality contributions of researchers and practitioners in the following overall topics:

- Land And Mineral Resources
- Water, Oceans
- Land Management and Governance incl. Urbanisation/Rural
- Geospatial Technology and Ethics

SPECIFIC TOPICS OF FIG WORKING WEEK 2024

FIG Working Week is the main event of the year, and it covers themes within all ten FIG technical Commissions, Networks and Permanent Institutions. Many topics are multi-disciplinary and relevant in both developing and developed world contexts. We encourage submissions of cross-disciplinary nature cutting across many disciplines/subject areas. Proposals for papers **non-peer review** and **peer review** are requested in all topics of interest of the following:

Professional Standards and Practice – FIG Commission 1 Geospatial Data infrastructure; Policy, Standards and Practices

- The Aging Profession/Renewal of the profession (and also the profession itself) make the profession younger.
- Diversity/inclusion within surveying, and also in the provision of surveying services to the community
- Ethics of protecting our planet and the role of surveyors regarding the collection of data, analysis and dissemination of information to decision-makers and stakeholders
- Defining and assessing what the big global carbon, biodiversity and land policy issues are that are relevant for surveyors
- Gaps and opportunities for the development of the future of the surveying profession, including technical opportunities.

Professional Education – FIG Commission 2

Frontiers in Education and Training: Keeping pace with the radically changing technological landscape through targeted professional educational interventions.

- Innovations in surveying education
- Blended learning: good practices and lessons learned
- Alternative teaching methodologies, activate students in the classroom





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

- Surveying Education and Environment in Sustainable Development
- Jointly with other Commissions, identification and documentation of existing areas of work
 where surveyors are already contributing their professional expertise through actions and
 studies that address the global climate agenda by using the radically changing technology
 landscape.

Spatial Information Management – FIG Commission 3 Big Data applications and emerging challenges

- Spatial data collection and management, including contributed, crowdsourced and usergenerated geodata, ubiquities and emerging technologies
- Standards and ethics related to the use and dissemination of spatial data
- Spatial data handling and processing, including data-mining and knowledge recovery, AI and ML models
- Spatial data usage, including nD cadaster, smart cities, land and city planning, and environmental knowledge, also for the prediction and prevention of disasters
- Spatial intelligence / Space technologies / Digital transformation / Innovation
- Empowering communities through geospatial data know-how and best practice
- Geospatial data linking cadastre, land tenure and land use, including for SDG reporting.
- Linking earth systems science approaches to global mapping with surveying national mapping approaches to strengthen the implementation of in-country climate actions.
- Integrating cloud computing services with geospatial technologies, tools, and innovations such
 as UAV photogrammetry, LiDAR, and InSAR as well as GIS to provide real-time information to
 stakeholders and investors to assess the benefits and risks of sustainable natural resource
 management.
- Measurement of earth systems, including through the use of big land use data, for the management of competition over land and natural resources from global to local scales.

Hydrography – FIG Commission 4 Safeguarding the Blue Economy in the face of changing climate and environmental degradation

- Strengthening water governance, administration, management and data to ensure sustainability
- The surveying and Fit for Purpose land administration of wetlands, rivers, lakes, peatlands.
- The surveying and Fit for Purpose land administration of coastal erosion and sea level rise and
- Conquering new frontiers of Hydrography
- Hydrographic applications in blooming the blue economy
- Hydrographic datums and reference framework
- Hydrographic education and continual professional development
- Marine environment protection and marine space administration





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

- Understanding and planning prevention and mitigation strategies for the impact of hurricanes and cyclones
- Assessment of the plastic pollution in the water bodies
- Hydrospatial domain and marine administration.
- Hydrographic standards and guidelines.
- Sustainable oceans and hydrography

Positioning and Measurement – FIG Commission 5 Datum and Reference systems modernization

- Dynamic Datums and working with resultant data (for both surveyors and geospatial experts)
- Novel Low-Cost Positioning Sensor Systems and their Applications
- GNSS Reference Stations and Networks
- Scanning the World around us
- Combining Positioning and Measurement Systems
- Linking earth systems science approaches to global mapping with national mapping approaches to strengthen the implementation of climate actions at the local level

Engineering Surveys – FIG Commission 6 Structural Digital Twinning frameworks, applications and technologies in Engineering Surveying

- New sensing technologies in surveying: Image assisted and scanning total stations, IoT Sensors, Laser scanners; Radar/SAR; Unmanned aerial or underwater vehicles (UAV & UUV) etc.
- Applications of augmented (AR), virtual reality (VR), and extended reality (XR) in Engineering Geodesy
- Deformation monitoring and analysis of engineering structures and environment; Mines and other geo-resources (including energy); Landslides and other geohazards and other disasters also for disaster management
- Dynamic monitoring of civil engineering structures: bridges, high-rise buildings, towers, wind turbines etc.
- The use of geospatial technologies, tools, and innovations such as UAV photogrammetry, LiDAR, and InSAR as well as GIS to provide real-time information to stakeholders and investors to assess the benefits and risks of sustainable natural resource management.

Cadastre and Land Management – FIG Commission 7 Sustainable land administration for inclusive development

- Framework for Effective Land Administration, Fit-for-Purpose Land Administration and linkages to the Sustainable Development Goals (SDGs), 3D and for increasing security of tenure for land restoration, carbon (e.g. preventing deforestation), and protecting biodiversity.
- Implementing the Framework for Effective Land Administration (FELA)





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

- Digital transformation of cadastre and land registries, including issues of data quality and cybersecurity concerns
- 3D/4D Land administration including technical aspects on data capture and boundary issues
- Land Administration Domain Model (LADM), BIM and Standards including marine cadastres
- Women and vulnerable groups access to land, and participation in land administration systems (linked to other FIG initiatives)
- Capacity building and awareness raising for cadastres and land management
- Legal, policy, financing and institutional issues in land administration
- Defining and assessing what the big global carbon, biodiversity and land policy issues are that are relevant for surveyors
- The surveying of wetlands, rivers, lakes, peatlands using Fit for Purpose land administration approaches.
- Ways to link national cadastre, tenure, valuation systems more closely to national climate plans to cut emissions and adapt to climate impacts, such as Nationally Determined Contribution (NDC) plans, National Biodiversity Strategies and Action Plans (NBSAPS).
- Strengthen land administration and management systems for climate actions

Spatial Planning and Development – FIG Commission 8 Leveraging land and marine spatial planning for greater resilience

- The surveying of wetlands, rivers, lakes, peatlands
- The surveying of coastal erosion and sea level rise
- The involvement of surveyors in climate crisis prevention.
- Ways to link national cadastre, tenure, valuation systems more closely to national climate plans to cut emissions and adapt to climate impacts.
- Participation and Bottom-Up Implementation of Spatial and Land Use Planning Objectives
- Digital Transformation and Spatial Intelligence including Digital Twins, Smart solutions, Digitising change intervention processes of spatial decisions
- Land Management Tools for Spatial Governance Evaluation of land management tools such as expropriation/compulsory purchase, land banking, land consolidation, land readjustment, pre-emption rights and others
- Land value change and spatial interventions including for climate actions

Valuation and the Management of Real Estate – FIG Commission 9 Financing Local Government services through mass appraisal and land-based taxation

- Definition and measurement of transparency in the real estate market, good cases
- How to valuate sustainable development actions on real estate
- Valuation and taxes an important partnership and how it works well
- Automated Valuation Modelling, Demystifying the unknown, Approaches und Cases





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

- Regulations and standards for good valuations, prerequisites for good mass valuations
- Acces of real estate market data via the internet for use by professionals and citizens

Construction Economics and Management – FIG Commission 10 Scaling up Smart construction approaches

- Digital twins and building information model: what is the difference?
- What is the role of Construction Economics and Management as we build back better after a disaster?
- Green buildings and construction and management

FIG Task Forces

All task forces are cooperating with the commissions and are seeking contributions which align with all 10 commissions in the following areas:

- FIG Climate Compass Task Force
- Task Force on FIG and the SDGs
- Diversity and Inclusion Task Force
- Task Force on the Role of FIG in international Trends and Future Geospatial Information **Ecosystem**

FIG Permanent Institutions

The Permanent Institution of History for Surveying and Measurement invites contributions on the history of surveying and measurement, and the techniques and instrumentation involved.

FIG Networks

FIG Young Surveyors Network would like to see contributions from young surveyors in all 10 Commissions.

Papers are also invited on the areas of the FIG Networks:

- **FIG Standards Network**
- Regional Capacity Development Network
 - Africa
 - Asia/Pacific
 - **Americas**

SUBMIT YOUR ABSTRACT

This Call for Papers is announced both for peer review papers and non-peer review papers. The submission of abstracts will be in English.

Submit your abstract here





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

PRIZES

SURVEY REVIEW PRIZE



The Survey Review Biennial Prize is sponsored by Survey Review, a learned journal covering the fields of positioning and measurement, engineering survey, cadastre and land management, and spatial information management.

The Survey Review prize will, again this year, be offered to the author and presenter of an outstanding selected peer-review paper. Papers submitted by young surveyors will be prioritized. (under the age of 35 or within 10 years of qualifying). In the abstract submission form you can tick a box indicating that you want your paper to be taken into consideration for the Prize.

The paper will be clearly marked in the proceedings as the Survey Review prize paper and will be presented onsite in a suitably high profile session. Survey Review Ltd will fund the prize of € 2,000. Payment will be made to the individual once the paper has been presented. If the paper is jointly authored and presented, the prize value remains € 2,000 and can be paid to one of the individuals, or shared between them at their choice.

The abstract of the paper will be in included in the FIG proceedings, but the full text of the paper will appear on the SR publisher's website, to which the FIG proceedings will link. There will be permanent free access to the paper on the Survey Review publisher's website. FIG will also use the paper as a FIG Article of the Month in the FIG newsletter. For more information on Survey Review see: www.tandfonline.com/loi/ysre20

NAVXPERIENCE AWARD



NavXperience and FIG would like to announce that the best peer review paper in the field of Positioning and Measurement (FIG Commission 5) will be chosen for the NavXperience award. The award winner will receive an award of € 600. The condition is that the author/presenter will attend the Working Week in presence.





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

BECOME AN AUTHOR

1. SUBMIT YOUR ABSTRACT

Guide to submit an abstract Submit your abstract here

2. GET ACCEPTED

See important deadlines here

3. REGISTER FOR THE WORKING WEEK

Register here

4. SUBMIT FULL PAPER AND VIDEO **PRESENTATION**

Paper Guidelines Guide to prepare a video presentation

5. PUBLICATION OF PROGRAMME

6. ATTENDING THE FIG WORKING WFFK





19-24 May Accra, Ghan

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

SUBMISSION OF ABSTRACT

We invite you to submit an abstract for the FIG Working Week

- an abstract and full paper for peer review by: 2 October 2023
- an abstract for non-peer-review by: 1 November 2023

We encourage you to consider the overall theme of FIG Working Week 2024: Your World, Our World: Resilient Environment and Sustainable Resource Management for all and the main topics when submitting your abstract and paper. Many topics are multi-disciplinary and are relevant in both developing and developed world contexts. We encourage submissions of cross-disciplinary nature cutting across many disciplines/subject-areas.

You are encouraged to submit an abstract. Abstracts will be reviewed and if your abstract is accepted, you will be asked to submit a full paper and a video presentation. All abstracts, papers, presentation handouts and videos will be included in the final proceedings for this conference.

The conference sessions will be thoughtfully curated to align with the topic, incorporating various formats such as presentation sessions, discussion panels, interview sessions, open discussion sessions, or a blend of different types. Only a chosen group of authors selected from the open Call for Papers will have the opportunity to actively participate in these sessions.

How to submit

We invite you to submit an abstract for the FIG Working Week.

Before you begin - To submit your abstract you will need to have the following items ready:

- Your 250-500 words abstract describing the objectives, results, conclusions and significance of your work. Please feel free to submit an abstract on any topic related to the specific topics of FIG Working Week 2024.
- The names and email addresses of all contributing authors.
- The full title of the paper as you would like it to appear in the programme book / proceedings.
- Your choice of maximum three (3) commissions/task forces etc. in prioritized order, which best corresponds to the subject of your paper.
- Keywords for your paper.
- Whether you want to submit your paper as a peer review paper or non-peer review paper.
- Choice of author(s) as the presenter(s) at the Working Week.

Submitting your abstract





19-24 May Accra, Ghan

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

- Begin by filling in the abstract submission form https://fig.net/fig2024/submission.htm
 Ensuring that you fill in all mandatory fields. Please note that submission of an abstract is NOT equivalent to registering for the Working Week.
- Please note that when you submit your abstract the number of abstracts is limited to a maximum of two per author; **one** as first author and **one** as co-author. Further, an author can only present **one paper**.
- An email from fig@fig.net will serve as confirmation of a successful abstract submission. Your contribution ID will be contained in the confirmation email.
- Please note that abstracts must be submitted for non-peer review papers by 1 November
 2023 and submission of full paper and abstract for peer review papers is 2 October 2023.

SUBMISSION OF FULL PAPERS

If you wish to present a peer review paper at the FIG Working Week 2024, submit your **full paper** by **2 October 2023**, for non-peer review paper the deadline is **8 January 2024**. When preparing the paper, please follow the guidelines prepared for papers (**paper guidelines** and the specific **paper template** for FIG Working Week 2024 that are available on the conference web site, www.net/fig2024/presenter_practicalities.htm). Please include at the end of your paper all your contact details, including your name, address, phone number and email address.

Full papers shall be submitted in **electronic format** to International Federation of Surveyors by email to **fig@fig.net**.

If you have problems emailing the paper you can contact FIG for assistance at fig@fig.net.

Receipt of your abstract and paper will be acknowledged electronically according to the time schedules.

When submitting a paper and video, the author(s) agree that FIG has the right to publish the paper and video in the conference proceedings (at the conference and on the FIG web site); in the FIG Surveyors Reference Library; and in the FIG online journal (if selected for this purpose) without any further agreement or compensation. The copyright of the paper remains by the author(s).

PEER REVIEW PAPER

This review process is "double-blinded". At least two independent anonymous experts are reviewing your anonymized paper twice. To have your paper peer reviewed, there is a fee of € 50 plus an administration fee. The sum will be forfeited in the conference registration fees. After submitting your abstract, you will receive a confirmation email including a link to pay the fee. Please submit full paper and pay the fee by 2 October 2023, otherwise your paper will be dropped from the peer review process, and your abstract will be handled as a regular paper instead.





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

In the conference programme a paper that has been accepted by the peer review process will be marked "This is a peer reviewed paper". Papers that are not accepted by the peer review process can be offered to the conference as non-peer reviewed papers.

Accepted peer review papers will be published in FIG Peer Review Journal (ISSN No 2412-916X). For the journal, please visit www.fig.net/resources/publications/prj/index.asp

When preparing the paper, it is important to follow the guidelines outlined at https://www.fig.net/fig2024/presenter practicalities.htm.

SCIENTIFIC COMMITTEE

The Scientific Committee of the Technical Programme:

Mr. Timothy Burch, United States

Dr. Dimo Todorovski, Netherlands

Dr. Sagi Dalyot, Israel

Dr. M.D. Eranda K. Gunathilaka, Sri Lanka

Dr. Ryan Keenan, Australia

Prof. Dr. Werner Lienhart, Austria Dr. Rohan Bennett, Australia

Dr. Kwabena Obeng Asiama, Ghana

Mr. Peter Ache, Germany

Ms. Mercy lortyer, Nigeria

The Scientific Committee of the Peer Review Papers:

Chief Editor: Volker Schwieger, Germany

Members:

Timothy Burch, United States Dimo Todorovski, Netherlands Hartmut Müller, Germany Eranda K. Gunathilaka, Sri Lanka Ryan Keenan, Australia

Werner Lienhart, Austria Rohan Bennett, Australia Marije Louwsma, Netherlands Heidi Falkenbach, Finland

Review team of more than 100 reviewers. For the list of reviewers, please visit: fig.net/resources/publications/prj/index.asp





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

IMPORTANT DEADLINES

Deadlines for submitting abstracts, papers and registration are:

NON-PEER REVIEWED PAPERS	PEER REVIEWED PAPERS
1 November 2023	2 October 2023
Deadline for authors to submit non peer	Deadline for authors to submit full papers for
reviewed abstracts.	peer review.
1 December 2023	11 December 2023
Confirmation to authors of acceptance of non-	First notification to authors of acceptance of
peer reviewed abstracts.	peer reviewed papers.
	For accepted papers, authors will also be
	notified of any modifications required by the
	reviewers.
	Authors of papers not accepted for peer review
	will be offered to convert the paper to the non-
	peer review process.
	8 January 2024
	Deadline for authors to submit revised full
	paper for 2nd round of peer review (depending
	on proposed corrections from reviewers).
	3 February 2024
	Second notification to authors of acceptance of
	peer reviewed papers with the possibility of
	further modifications from the 2 nd round of
	peer review.

ALL PAPERS (PEER REVIEWED AND NON PEER REVIEWED)

8 January 2024

Deadline for non-peer review authors to register.

8 January 2024

Deadline for all authors to submit Full Papers.

19 February

Deadline early bird

Deadline for peer review authors to register.

28 February 2024

First draft of the technical programme will be published on the web.

19 April 2024

Deadline for normal registration.

19 - 24 May 2024

FIG WORKING WEEK - ACCRA, GHANA





19-24 May Accra, Ghana

Your World, Our World: Resilient Environment and Sustainable Resource Management for All

FURTHER INFORMATION

For any information see the conference web site: http://www.fig.net/fig2024.

Please note that if you have submitted a paper that is accepted for oral presentation you must register for the conference before **8 January 2024**, or your presentation will otherwise not be included in the technical programme.

Any inquiries on call for Papers, abstracts, peer review process and technical programme, please contact the FIG Office (Email: fig@fig.net, tel +45 3886 1081).

We look forward to meeting you in Accra, Ghana

Yours sincerely,

Ms. Louise FRIIS-HANSEN
FIG Director/
Co-Conference Director

Surv. **Stephen DJABA** Co-Conference Director LiSAG

Surv. **Sulemana MAHAMA**Co-Conference Director
GhIS