

INAUGURATION CEREMONY OF
THE AFRICAN METEOROLOGICAL SOCIETY (AFMS)
NOVEMBER 30, 2022



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1 INAUGURATION PROGRAM

#	Name	Designation	Duration	Introduction by	Topic
1	Harinder Ahluwalia	President IFMS	8	Self-Introduction	Welcome and Introduction to the meeting
2	Buruhani Nyenzi	Chair - AfMS	10	Will be introduced by Harinder Ahluwalia	Welcome address
3	Amos Makarau	Director WMO-RA1	8	To be introduced by Workneh Degefu	Collaboration between WMO-RA1 & AfMS
4	Harinder Ahluwalia	President IFMS	20	To be introduced by SK Dash	Creating capacity around the world
5	Abdel Brahm	Special Advisor to IFMS President to cover French and Arabic aspect	6	Harinder Ahluwalia to introduce him	Specially requested to make a presentation on the gist of the meeting in French and Arabic
6	David Grimes	Past President WMO	35	To be introduced by Buruhani who knows him best	The Worthy Roles of Scientific Associations in Supporting the Hydrometeorological Value Chain
7	SK Dash	Chair E&T Committee IFMS	9	To be introduced by Buruhani	He will speak about Teacher/Student Training Program
8	Richard Clark	President AMS	9	To be introduced by Mike Farrar	Rich will speak about the assistance AMS has been providing to AMS and IFMS and the future assistance it can provide.
9	Tatsuya Kimura	Director PPP Program - WMO	9	To be introduced by Keith Seitter	Introduce the latest activities of WMO, preparing training materials for WMO Members, to be available soon. He will also speak about OCP.
10	Robert Varley	Vice President of RMetS	10	To be introduced by Liz Bentley	Will speak about assistance RMetS has provided to AfMS regarding professional training.
11	Shanti Majithia	EMS	9	To be introduced by Liz Bentley	Will be representing EMS President and speak about collaboration EMS plans provide to AfMS

#	Name	Designation	Duration	Introduction by	Topic
12	Charles Ichoku	Chair Diaspora Committee	10	To be introduced by Belay Demoz if he agrees, otherwise by Harinder	Role of Diaspora & Friends of Africa in the development of AfMS
13	Ashish Raval	HMEI - President	9	If somebody is prepared to introduce him, otherwise Harinder Ahluwalia will introduce him.	Introduces HMEI & how it can help AfMS in its development
14	Walter Dabberdt	Chair AMS International Partnership Program	9	To be introduced by Keith Seitter	Introduction to the Global Partners Program which seeks to connect AMS members who are interested in providing specialized expertise and services to international professionals in academia, government service and other nonprofit organizations.
15	Liz Page	COMET	9	To be introduced by Mike Farrar	How COMET Programs related to Training and PAWS Program can help AfMS.
16	Mr. Kinfe Hailemariam	Deputy Director General of Ethiopian Meteorological Institute (EMI)	9	To be introduced by Workneh Degefu	How EMI has helped EtMS and how it will be helping AfMS.
			179	Including Introduction Time	

2 ACRONYMS

ACPC	African Climate Policy Centre
ACMAD	African Centre for Meteorological Application for Development
AfDB	African Development Bank
AfMS	African Meteorological Society
AMS	American Meteorological Society
AU	African Union
CMS	Chinese Meteorological Society
E&T	Education and Training
EMS	European Meteorological Society
EWS	Early Warning System
FLISMET	Federation of Latin American and Liberian Meteorological Societies
GA	General Assembly
GW&CC	Global Warming and Climate Change
GWE	Global Weather Enterprise
HMEI	HydroMet Equipment Industry Association
ICPAC	IGADD Climate Prediction, Application Centre
IFMS	International Forum of Meteorological Societies
IGADD	Inter-Governmental Authority on. Drought and Development
IMS	India Meteorological Society
JMA	Japanese Meteorological Agency
MSJ	Meteorological Society of Japan
NMHS	National Meteorological/Hydrological Service:
NMSoc	National Meteorological Society
PPA	Public, private and Academic Sectors
RMS	Regional Meteorological Society
RMetS	Royal Meteorological Society
S&T	Science and Technology
WMO	World Meteorological Organization
WB	World Bank
WXBC	Weather Business Connections

3 Introduction (English)

The effects of Global Warming and Climate Change (**GW&CC**) are causing more and more severe weather events resulting in a lot of damage to life and property, creating a lot of news worldwide. It is a topic that not only interests the professionals in the field of meteorology but also the general public, bureaucrats, and politicians. Whereas the continent of Africa has been least responsible for causing GW&CC, it is destined to suffer most because of a lack of knowledge-base, infrastructure, Early Warning Systems (**EWS**), and institutional and societal capacity to handle disasters.

We believe that the National Meteorological Societies (**NMSocs**), and Regional Meteorological Societies (**RMSs**) with the coordination capability of the International Forum of Meteorological Societies (**IFMS**) have the best chance of creating capacity in the countries which badly need it. This is because Meteorological Societies are volunteer-based societies that can attract active professionals, retired professionals, those from the diaspora, and other philanthropic people around the world from all three sectors (Public, Private & Academic – **PPA**).

Therefore, IFMS decided that the best way to create capacity in Africa is by uniting the existing societies of Africa into a cohesive unit called the African Meteorological Society (AfMS) to build capacity in Africa. This society was created in early 2021 and incorporated in early 2022, in Addis Ababa Ethiopia where the RA-1 office of WMO is located because we expect to have strong cooperation with that office.

We are now in the process of inaugurating the AfMS which plans to create NMSocs in all African countries and work jointly with them to create capacity in all countries through joint activities. We have already started the Education and Training (**E&T**) Program with a Pilot project to educate Teachers/students and created a portal for professional learning. In addition, a portal for professional training has been created. Hopefully, in collaboration with WMO, we will be strengthening the quality and wide availability of these programs.

In the second half of 2023, we are planning to start a “Journal of Meteorology and Hydrology of AfMS”. An in-person Conference is also expected to be organized in 2024 in a suitable African country. We also plan to start a certification/accreditation program in the future, say 2024. Let’s all build capacity in Africa through collaboration between African Nations through AfMS.

Please join us on November 30, 2022, at 9:00 AM US/Canada EST i.e., 14:00 UTC. If you have not done that yet, please register at the following link.

<https://us02web.zoom.us/meeting/register/tZ0rd-6ogD4rE9EnnaAm7qr3oLjr2vXf3dk3>

The following Sections present the program of the Inauguration event.



4 Introduction (Français)

Les effets du Réchauffement Planétaire et des Changements Climatique (RP & CC) provoquent de plus en plus de sévres événements météorologiques entraînant de nombreux dommages à la fois aux vies et aux biens, faisant les nouvelles dans le monde entier. C'est un sujet qui intéresse non seulement les professionnels de la météorologie mais aussi le grand public, les bureaucrates et les politiciens. Alors que le continent africain a été le moins responsable des causes de RP&CC, il est destiné à souffrir le plus en raison du manque de connaissances de base, d'infrastructures, de Systèmes d'Alerte Précoce (SAP), de capacités institutionnelles et sociétales pour gérer les catastrophes.

Nous pensons que les Sociétés Météorologiques Nationales (SocsMN), les Sociétés Météorologiques Régionales (SMR) avec la capacité de coordination du Forum International des Sociétés Météorologiques (FISM) disposent des meilleures chances de créer des capacités dans les pays qui en ont cruellement besoin. Cela est dû au fait que les sociétés météorologiques sont essentiellement des sociétés basées sur le volontariat qui peuvent rassembler des professionnels actifs et à la retraite, ceux de la diaspora et d'autres personnes philanthropiques du monde entier des trois secteurs (Public, Privé et Academic - PPA).

Par conséquent, l'IFMS a déterminé que la meilleure façon de créer des capacités en Afrique c'est d'unir les sociétés africaines existantes en une unité cohérente appelée la Société météorologique africaine. Cette société a été créée l'année dernière et incorporée à Addis-Abeba, en Éthiopie, où se trouve le bureau RA-1 de l'OMM, étant donné que nous espérons avoir une coopération étroite avec ce bureau.

L'SMAf, que nous sommes maintenant en train d'inaugurer prévoit de supporter la création des SocsMN dans tous les pays africains qui n'en a pas encore et de travailler conjointement avec l'ensemble des ces sociétés pour créer des capacités dans tous les pays par des activités communes conjointes. Nous avons déjà lancé le programme d'éducation et de formation (E&F) avec un projet pilote pour perfectionner les enseignants/étudiants et créé un portail pour l'apprentissage professionnel. Ces programmes seront suivis pour renforcer leur qualité et leur large disponibilité.

Nous prévoyons une conférence présentielle en 2024 dans un pays africain et prévoyons aussi de lancer le Journal de la Météorologie et l'Hydrologie. Nous prévoyons également de lancer un programme de certification et d'accréditation dans un proche avenir.

Rassemblons-nous tous pour renforcer les capacités en Afrique grâce à la collaboration entre les nations africaines - SMAf.

Veillez-vous joindre à nous le 30 novembre 2022 à 9 h 00 HNE É.-U./Canada, c'est-à-dire 14 h 00 UTC. Si vous ne l'avez pas encore fait, veuillez-vous inscrire sur le lien suivant.

<https://us02web.zoom.us/meeting/register/tZ0rd-6oqD4rE9EnnaAm7qr3oLjr2vXf3dk3>



مقدمة 5

تتسبب تأثيرات الاحتباس الحراري وتغير المناخ في حدوث المزيد والمزيد من الظواهر الجوية القاسية التي تؤدي إلى أضرار جسيمة لكل من الأرواح والممتلكات، مما يجعل تنصدر الأخبار في جميع أنحاء العالم. إنه موضوع اهتمام ليس فقط لمتخصصي الأرصاد الجوية ولكن أيضًا لعامة الناس والبيروقراطيين والسياسيين. في حين أن القارة الأفريقية كانت الأقل مسؤولية عن أسباب، إلا أنه مقدر لها أن تعاني أكثر من غيرها بسبب نقص المعرفة الأساسية والبنية التحتية وأنظمة الإنذار المبكر والقدرات المؤسسية والمجتمعية لإدارة الكوارث.

أن الجمعيات الوطنية للأرصاد الجوية والجمعيات الإقليمية للأرصاد الجوية بفضل القدرة التنسيقية للمنتدى الدولي لجمعيات الأرصاد الجوية تمتلك بلا شك أفضل الفرصة لبناء القدرات في البلدان التي هي في أمس الحاجة إليها. هذا لأن جمعيات الأرصاد الجوية هي في الأساس مجتمعات قائمة على التطوع يمكنها أن تجمع بين المهنيين النشطين والمتقاعدين، والذين يعيشون في المهجر وغيرهم من الأشخاص الخريجين من جميع أنحاء العالم من جميع القطاعات الثلاثة - العامة والخاصة والأكاديمية.

لذلك، ارتئي المنتدى الدولي لجمعيات الأرصاد الجوية أن أفضل طريقة لبناء القدرات في أفريقيا هي توحيد الجمعيات الأفريقية الحالية في وحدة متماسكة تسمى الجمعية الأفريقية للأرصاد الجوية. تم إنشاء هذه الشركة في العام الماضي وتم تأسيسها في أديس أبابا، إثيوبيا حيث يقع مكتب الجهة | للمنظمة العالمية للأرصاد الجوية، حيثما نأمل أن يكون لدينا تعاون وثيق مع هذا المكتب.

إن الجمعية الأفريقية للأرصاد الجوية، التي نحن الآن بصدد تدشينها، تخطط لدعم إنشاء جمعيات وطنية للأرصاد الجوية في جميع البلدان الأفريقية التي ليس لديها واحدة حتى الآن والعمل بشكل مشترك مع جميع هذه الجمعيات لخلق القدرات في جميع البلدان من خلال الأنشطة المشتركة. ولقد أطلقنا بالفعل برنامج التعليم والتدريب بمشروع تجريبي لتطوير كفاءات المعلمين والطلاب وإنشاء بوابة للتعليم المهني. وستتم مراقبة هذه البرامج لتحسين جودتها وإتاحتها على نطاق واسع.

وإننا نخطط لعقد مؤتمر حضوري خلال العام 2024 في دولة أفريقية ونخطط أيضًا لإطلاق مجلة الأرصاد الجوية والهيدرولوجيا. كما نخطط لإطلاق برنامج التصديق والاعتماد في المستقبل القريب.

دعونا نجتمع جميعًا لبناء القدرات في أفريقيا من خلال التعاون بين الدول الأفريقية من خلال الجمعية الأفريقية للأرصاد الجوية.

الرجاء الانضمام إلينا يوم 30 نوفمبر 2022 الساعة 9:00 صباحًا بتوقيت شرق الولايات المتحدة الأمريكية / كندا، أي الساعة 2:00 مساءً بالتوقيت العالمي المنسق. إذا لم تكن قد قمت بذلك حتى الآن، فيرجى التسجيل على الرابط التالي.

<https://us02web.zoom.us/meeting/register/tZ0rd-6oqD4rE9EnnaAm7qr3oLjr2vXf3dk3>



6 Our honourable Chief Guest – Mr. David Grimes

Former President of WMO – 2011 to 2019

David Grimes served as Canada's Permanent Representative to the WMO from 2006 to 2019 and was President of the World Meteorological Congress from 2011 to 2019.



When Mr. Grimes was first elected President in 2011, one of his goals was to increase the focus on polar regions at WMO, including advocating for better weather monitoring and information services in the North. He never lost sight of that goal.

Some of Mr. Grimes' most notable achievements at WMO include:

- The establishment of the WMO Executive Council Expert Panel on Polar High Mountain Observation Research and Services
- The establishment of the WMO Executive Council Panel of Experts on Education and Training
- The establishment of the Global Cryosphere Watch (GCW), an international mechanism for supporting all key cryospheric, in situ, and remote sensing observations, to meet the needs of WMO Members and partners in delivering services to users, the media, the public, decision- and policy-makers
- The establishment of the Intergovernmental Board on Climate Services (IBCS), the main governing body of the Global Framework for Climate Services (GFCS)
- The Year of Polar Prediction (YOPP) as the flagship activity of the Polar Prediction Project (PPP), a 10-year (2013–2022) WMO World Weather Research Programme endeavour.
- The WMO Special Dialogue on the Complementary and Cooperative Contributions of Public and Private Sector Institutions to Meteorology and Hydrology
- The Pan-Arctic Climate Outlook Forum (PARCOF) is a flagship activity of the Arctic Regional Climate Centre Network to meet the Arctic adaptation and decision-making needs.

In 2020, Mr. Grimes was named a Member of the Order of Canada for his “outstanding leadership in meteorology and for his pioneering development of a global strategy on climate change and disaster risk preparedness.” The Order of Canada is one of Canada’s top civilian honours. Its iconic snowflake is a fitting tribute to Mr. Grimes’ commitment to the cryosphere, increasing observations and forecasts in Polar regions, and the impact of climate change on the Arctic.

WMO has also recognized Mr. Grimes with its own top honor – the IMO Prize – for his outstanding contribution to meteorology. He will deliver a scientific lecture at the WMO Executive Council in 2021.

Mr. Grimes, a Brock University graduate, was Assistant Deputy Minister and head of Environment and Climate Change Canada's Meteorological Service from 2006-2019. His leadership resulted in its transformation and modernization, including a realization of substantial investments into the Service. Over his 40-year career with the Meteorological Service his accomplishments – in weather forecast operations, the Canadian Climate Centre, and science-policy development – were many. He is recognized for his strategic and innovative thinking, effective problem-solving, and engaging leadership style.

Throughout his career, Mr. Grimes has been supported by his dedicated, lifelong companion Karen, his three children, Chris, Allison, and Kim, and three lovely grandchildren. Exercising a passion for science and enjoying a loving family coalesces into to a meaningful and fulfilling life experience.

7 Contents of the Inauguration Event

The Program consists of a keynote speech by our honourable Chief Guest Mr. David Grimes, immediate past President of WMO, a welcome address by the Chair of the AfMS Board (Dr. Buruhani Nyenzi), and a welcome address and a presentation by the President of IFMS (Dr. Harinder Ahluwalia).

The other speakers have been selected on the following basis:

The important organizations which are already helping AfMS to grow such as IFMS, AMS (Dr. Richard Clark), RMetS Dr. Robert Varley), etc. We are hoping to create a strong partnership with WMO which is represented by (Mr. Tatsuya Kimura and Dr. Amos Makarau) and EMS (Dr. Shanti Majithia representing EMS President Dr. Bert Holtslag) to create capacity in Africa. Other speakers are those who are assisting AfMS in various ways e.g., the Education and Training (E&T) Program (Prof. Sushil Dash and Dr. Robert Varley), Science and Technology (S&T) Collaboration (Prof. Charles Ichoku and Dr. Walter Dabberdt), Training Program and Sensor development Program (Dr. Elizabeth Page – Director COMET Program of UCAR). We have also asked the Acting Chair (Mr. Ashish Raval) of HMEI to present at the Inauguration Event to outline how the industry can help AfMS grow.

8 Program of AfMS Inauguration

8.1 Presentation P-01: Dr. Harinder Ahluwalia: President IFMS (www.ifms.org)

Dr. Harinder P. S. Ahluwalia is the President of the International Forum of Meteorological Societies (IFMS) which aims at creating collaboration between the National Meteorological Societies of the world to leverage each other's strengths. Previously he was the President of the Canadian Meteorological and Oceanographic Society (CMOS). He is also the President and CEO of Info-Electronics Systems Inc. (IES) based in Montreal with an office in New Delhi. Incorporated in 1981, IES is a systems engineering, development, and implementation company in Hydrometeorology, Remote Sensing, and environment monitoring. His strength in managing a number of technologically and logistically challenging projects for his company has been illustrated in his contribution to the strengthening of



IFMS and the creation of AfMS. Dr. Ahluwalia has been a member of the National Round Table on Environment and Economy advising the Government of Canada on Sustainable Development issues. He is a strong proponent of building National Meteorological Societies in all countries and Regional Meteorological Societies in all continents for creating capacity in all parts of the world by supplementing the efforts of the NMHSs and WMO. In addition, he believes that all components (Public, Private or Academic) of the Global Weather Enterprise must work together to combat GW&CC. He has won many awards for his outstanding contribution to Canada and the hi-tech industry. He is a member of many societies and is a Fellow of CMOS. He has published a number of papers/articles in Meteorology and Electromagnetics.

Presentation Abstract

Dr. Ahluwalia will welcome attendees to this very important event to inaugurate the newly created AfMS. He will first welcome all attendees for their kind presence including the Chief Guest, Mr. David Grimes – immediate past President of WMO - who led WMO for 8 years as its President and made a strong contribution. He will then explain the structure of the Program and the rationale behind it and how the speakers were selected. He will then introduce Dr. Buruhani Nyenzi, the appointed Chair of the African Meteorological Society (AfMS).

8.2 Presentation P-02: Dr. Buruhani Nyenzi



Dr. Buruhani Nyenzi is the Chair of the AfMS Board. He is also the Vice-President-Administration of IFMS and the President of the Tanzanian Meteorological Society. Dr. Buruhani Nyenzi was reappointed the Chair the board of directors of the Tanzania Meteorological Authority (TMA) for four years with effect from 18 November 2019. He is a retired Senior International Civil Servant Meteorologist from the World Meteorological Organization, a specialized UN Agency where he worked for about ten years from 2000 to 2010. During that assignment he served the World Meteorological Organization (WMO) in different capacities which included Chief of the Climate Applications and Prediction Services (CLIPS) project; Director, of the World Climate Programme (WCP); Director of the Climate Prediction and Adaptation Branch; Director and Secretary of the World Climate Conference-3 Secretariat and Special Advisor to the Director, WMO Climate and Water Department; and Manager (Consultant) to the High-Level Taskforce on the Global Framework for Climate Services (GFCS). He has also served other international organizations such as the IPCC, UNFCCC, World Bank, SADC, UNECA, and African Development Bank in relevant various research activities.

Presentation Abstract

Opening Remarks by Dr. Buruhani Nyenzi

Since late 2021 effort of establishing an African Meteorological Society (**AfMS**) was initiated by the President of the International Forum of Meteorological Societies (IFMS), Dr. Harinder P.S. Ahluwalia, African members of IFMS Council (Dr. Buruhani S. Nyenzi, Mr. Workneh Degefu), and Mr. Tafesse Gurmu. They were also encouraged by the WMO Regional Office for Africa and some other colleagues from existing African National Meteorological Societies and National Meteorological and Hydrological Services to create the AfMS. The thinking of establishing the society was based on having a forum that can bring together African meteorologists to address issues related to meteorological and other related sciences for the benefit of the continent following existing examples from other parts of the globe such as Europe and South America. These efforts bore some fruits in February 2021 when AfMS was formally established in Addis Ababa, Ethiopia ensuring that AfMS operates near the WMO RA1 Office which is located there. AfMS was subsequently registered in February 2022.

The AfMS board takes this opportunity to thank all those people and societies that have so far helped in supporting our course. The AfMS Board calls for resident African experts to come up strongly in supporting the AfMS aims and objectives. The growth of AfMS can't be realised by just depending on foreign support. It is the duty of the African resident scientists to serve society through volunteering for different committees that we have established, and other organs of the society.

8.3 Presentation P-03: Dr. Amos Makarau



Dr. Amos Makarau was the Director of the Zimbabwe Meteorological Services Department. He was also the Chair of the AMCOMET Bureau. He is currently the Director of the RA-1 Office of WMO. **Dr. Makarau was elected unanimously as the new President of the RA-1 of WMO in a Regional Association meeting held in Cape Verde and will serve as the President for the next four years.** He replaces Dr. Lamin Bah, Director of Meteorology of the Republic of Guinea and the PR with WMO who has been the President of RA I for the past 8 years. He has been appointed at a time Africa is feeling the effects of severe weather and adverse effects of climate change and is the most vulnerable continent in terms of weather and climate and should feature

strongly in WMO plans. Dr. Makarau automatically becomes a member of the governing body of the World Meteorological Organisation's Executive Council which meets in Geneva at the WMO headquarters.

Presentation Abstract

Having been the Director of the *Meteorological Services Department of Zimbabwe (national level experience) and the Director of WMO's Region-1 Office in Addis Ababa, Ethiopia (continental level experience)*, Dr. Makarau has a deep knowledge and understanding of the needs of Africa, both at the national and the continental level. He was one of the strongest supporters of the creation of AfMS and assisted gracefully whenever he was requested. With his deep knowledge of the needs of Africa, he will outline his vision of the potential collaboration between the AfMS and WMO – especially RA-1 office.

8.4 Presentation P-04: Dr. Harinder Ahluwalia

Resume of the speaker is on Page 10.

Presentation Abstract

Dr. Harinder Ahluwalia will speak about the need for having a unified approach to create capacity through sharing resources and creating as much collaboration as possible. He will speak about the value of the three levels of Meteorological Societies (National, Continental and International).

We strongly advise large organization like WMO, World Bank and NMHSs to support NMSocs, RMSs and IFMS because they can effectively assist them in building capacity in all corners of the world through E&T and S&T collaboration. As a part of their Value Proposition, NMSocs provide a home to all three sectors of the Global Weather Enterprise (**GWE**) for networking, exchanging ideas, attending conferences, collaborating in research, publishing articles in the Society Journal, etc.



There are regular conferences and high-level meetings to discuss reducing Global Warming. However, for the least developed and developing countries – especially in Africa which did not cause the problem - protection from disasters caused by GW&CC is even more important.

He will urge all governments to strongly support their NMHSs and all NHMSs to fully support their NMSocs to strengthen their response to weather related disasters. It is only through collaboration that we will be able to ensure that even the least developed and developing countries do not suffer disproportionately because of this monster called Global Warming and Climate Change.

8.5 Presentation P-05: Mr. Abdel Brahm

Mr. Brahm has over 30 years of experience in the field of hydro-met. First on the client side, for over a period of 10 years, within **Maroc-Meteo**, one of the most advanced National Weather Services in Africa's developing countries; and later, for the last 22 years, on the supplier side with **IES**.



In addition to his engineering background, Mr. Brahm has developed great experience in parallel support, logistical and administrative assignments and responsibilities and developed and implemented effective business processes in compliance with the ISO Quality System requirements and the market best practices. He is highly skilled at providing coaching and consultation and has a long experience with international professional groups and events such as CIMO, Metorex and CMOS where he helped in promoting the mentoring program.

Presentation Abstract

He will summarize Dr. Harinder Ahluwalia's presentation in French and Arabic for the benefit of those attendees who are from countries that speak French and Arabic. Being originally from Morocco, in addition to English he is proficient in Arabic and French.

He also plans to help us by making a presentation in French on how to create an NMSoc.

8.6 Presentation P-06: Mr. David Grimes

Please see his resume on Page 9.

Presentation Abstract



“Worthy Roles of Scientific Associations in Supporting the Hydrometeorological Value Chain”. The gist of his presentation can be inferred from the title but it will highlight all the contributors to the value chain, the need for engagement, and close partnerships to support the positive outcomes of the value chain. He wants to speak more to the audience and stress their importance. He will also highlight the role they should play in other WMO priority initiatives.

8.7 Presentation P-07: Prof. (Dr.) S. K. Dash



[Dr. Sushil Kumar Dash](#) is the past-President of the Indian Meteorological Society (**IMS**) and Council Member for WMO Region II, in the International Forum of Met Societies (**IFMS**). Currently, he chairs the Education and Training committee of IFMS. Formerly he was a Professor and Head of the Centre for Atmospheric Sciences at the Indian Institute of Technology Delhi (**IITD**). At present, he is engaged in his R&D activities at IITD as part of the DST Centre of Excellence in Climate Modelling and three more important projects. He is also the Founder and President of a charitable organisation called the Foundation for Education and Research in Climate Change (FERCC). Prof. Dash is a Fellow of the Royal Met Society and of the IMS. In addition, he is a Life Member a number of international bodies such as the American Meteorological Society and the National Academy of Sciences, India.

Presentation Abstract:

Pilot Project on E&T in the Horn of Africa and East Africa

Capacity development based on existing knowledge and skills in Weather and Climate is one of the objectives of the International Forum of Meteorological Societies (IFMS). In this short presentation, the selective approach of IFMS to emphasize Education and Training programmes for Teachers and Students training in weather and climate-related issues will be discussed. The necessity of such a programme for the Eastern African countries comprising two traditionally recognized regions: East Africa, made up of Kenya, Tanzania, and Uganda; and the Horn of Africa, made up of Somalia, Djibouti, Eritrea, Ethiopia, Sudan, and South Sudan will be highlighted. Results of some past important studies on the need for climate-related educational programmes in schools, intermediate colleges, and institutes of higher learning will be presented. Some experimental studies made in African countries will also be narrated. IFMS' initial steps taken to launch a pilot project on E&T in the Horn of Africa and East Africa will be discussed and steps will be suggested to move ahead for the success of the pilot project.

8.8 Presentation P-08: Dr. Richard Clark



Dr. Richard Clark is the 2022 AMS President and Fellow and former member of the AMS Council and the UCAR Board of Trustees. Until his recent retirement, he was Chair of the Department of Earth Sciences and Professor of Meteorology at Millersville University where he created and coordinated the transdisciplinary M.S. in *Integrated Scientific Applications* program, which focuses on creating business-ready scientists, and the graduate certificate program in *Space Weather and Environment: Science, Policy, and Communication*. His research interests span boundary layers and turbulence and air chemistry with a special emphasis on field observations and instrumentation using airborne and balloon-borne platforms. He is the recipient of the 2006 Unidata DeSouza Award for outstanding community service and the 2008 AMS Teaching Excellence Award (now the Lorenz Award). Rich has a Ph.D. in atmospheric science from the University of Wyoming ('87).

Presentation Abstract

The American Meteorological Society (**AMS**) welcomes and applauds the African Meteorological Society, and as part of the International Forum of Meteorological Societies, we are committed to your success. The AMS has and continues to support the AfMS through in-kind technical infrastructure, web page maintenance, and security. We offer AMS staff time for the needs of the web page and provide real support for a web page developer to assist with the AfMS web page. We also assist indirectly by handling the legal expenses related to sustaining the IFMS non-profit status. We are looking forward to our half-day meeting in Denver, CO during the 103rd Annual Meeting of the AMS. The AMS is providing both real and in-kind support for this upcoming meeting, including support for Dr. Buruhani Nyenzi, Chair of the AfMS, to travel to the Denver meeting, and is contributing a 2-page ad in the newsletter.

8.9 Presentation P-09: Mr. Tatsuya Kimura



Mr. Tatsuya Kimura is the Director of the Public-Private Engagement Office at the WMO Secretariat. He has extensive experience in public-private partnerships, including promoting and regulating private-sector activities.

Prior to his current appointment, Mr. Kimura's recent focus at the Japan Meteorological Agency (**JMA**) was on the promotion of Public-Private Engagement in Japan through leading the Secretariat of the new Weather Business Consortium (**WXBC**), relaxing the regulation of private forecasting services and intensifying data provision to, and exchange with, the private sector.

Presentation Abstract

He will introduce the latest activities of WMO which include preparing training materials for WMO Members which will be available soon. Also presented will be the Open Consultative Platform-centered activities such as White Paper #2 on the Future of National Meteorological or Hydrometeorological Services – Evolving Roles and Responsibilities, its Regional Forums held recently and planned to be held soon.

8.10 Presentation P-10: Dr. Robert Varley DSc CMet

Currently, Dr. Robert Varley is an International Strategic Consultant, Weather, and Climate Risk.

After graduating with First Class Honours in Environmental Sciences from the University of East Anglia in 1983, Robert trained as a meteorological forecaster with the UK Met Office. Over the next 35 years, he worked in a variety of roles within the Met Office including ten years in



professional training. During that time, he trained over 250 operational meteorologists from many countries across Africa, Asia, Central America, and Europe. In 2007 he joined the Executive Board, and between 2014 and 2018 served as Chief Executive. In 2016 he was awarded the honorary degree of Doctor of Science by the University of East Anglia.



In 2018 Rob retired from his Met Office role and has since built a diverse portfolio, working with WMO, Eumetsat, the World Bank, the Green Climate Fund, and the Australian Bureau of Meteorology amongst others. He was a key contributor to the WMO's initiatives to establish the Global Basic Observing Network in 2019, and the Sustainable Observations Financing Facility, which announced its support for the first 26 countries at COP earlier this month.

Rob has a particular concern for hydromet capacity development as an enabler of climate adaptation. He was the lead author of the Green Climate Fund's recently published Sectoral Guide on Climate Information and Early Warning Systems, and a contributor to the World Bank's guide Charting a Course for Sustainable Hydrological and Meteorological Observation Networks in Developing Countries.

Rob is a Vice President, Trustee, and Chartered Meteorologist of the Royal Meteorological Society, and has been a Society Fellow since 1983. Previous international leadership roles include President of Eumetnet, the collective body of European NMSs from 2015 to 2018, and First Vice-president of WMO from 2017 to 2018.

Robert is married to Jane and they have three grown-up children and three grandchildren. They live in rural Devon, UK, with Rosie the cat, and two chickens. Robert enjoys exploring Britain's wild countryside, traveling more widely, and appreciating the natural environment – whatever the weather.

Presentation Abstract

"Education is the most powerful weapon which you can use to change the world" ...Nelson Mandela

The African Meteorological Society (AfMS) **aims to bring local knowledge from all individual societies to cooperate, build capacity, and share best practices** in the field of weather and climate across Africa. It aspires to organise education and training events, share resources, host conferences, and encourage science and technology collaborations. It will pay particular attention to those aspects of meteorology which can be solved only on an Africa-wide basis or are best approached on that scale.

The Royal Meteorological Society (RMetS) is supporting the African Meteorological Society (AfMS) **with its vision** for strengthening the meteorological capacity in Africa, recognising that training is of central importance. Ahead of the 27th UN Climate Change Conference of Parties (COP27), held in Egypt from 7 to 18 November 2022, RMetS helped AfMS produce a suite of learning resources for their website africanmetsociety.org. The American Meteorological Society also provided support in developing the web pages.

There is a lot of useful learning material already available online. As a Vice-President of RMetS, Dr. Varley led a small team of experts to collate, review and group over 70 learning resources for different audiences. The team was supported by a review group of international experts from Africa, Asia, and Europe.



The new [learning portal](#) offers a suite of materials and learning resources and provides a clear, single point of reference for people across Africa to access recommended courses and resources that have been subject to expert scrutiny.

Altogether, there are seven lists of learning resources, each one developed with a specific audience in mind e.g., school children and teachers. In every list, there is some detail about each resource, such as who created it. There is also a brief description of what it contains, the languages it is available in, a website link, and the connectivity requirements for accessing the resource. Each list can be used online or downloaded from the website.

RMetS sends warm greetings to the new African Meteorological Society and wishes it every success in supporting the development of meteorology across all the nations of Africa.

8.11 Presentation P-11: Dr. Shanti Majithia

Mr Shanti Majithia is a fellow of the Royal Statistical Society and Royal Meteorological Society with extensive experience in the Energy Industry and Climate Change adaptation. He delivered a climate adaptation programme for the UK Energy Industry in a ground-breaking study on Climate Change. He has been a leading stakeholder in the internationally published Engineering and Physical Sciences Research Council (EPSRC) projects on Climate Change. Shanti is currently working in an independent advisory capacity in the energy sector; linking the Climate Change adaptation and mitigation challenges. His recent work on a European-funded project was to demonstrate how to improve long-term seasonal forecasts to add practical and economic value to decision-making processes and outcomes in the energy and water sector.



Shanti is currently the General Secretary of the Royal Meteorological Society UK and is a UK representative at the European Meteorological Society.

Presentation Abstract

His talk will take us through the formation of the European Meteorological Society (**EMS**). Over a period of 20 years, this society has become firmly established as a key part of the European meteorological community. He will give a brief description of how the society was created along with information about its members and activities, and how the EMS and its Member Societies contribute to outreach, education, and training. Finally, he will share some of the challenges and learning points for the benefit of the African Meteorological Society as they embark on a similar journey.

8.12 Presentation P-12: Prof. (Dr.) Charles Ichoku

Dr. Charles Ichoku is a Professor of Earth and Environmental Sciences in the Department of Interdisciplinary Studies within the College of Arts and Sciences (COAS) at Howard University, Washington, DC. He is also the Distinguished Scientist of the NOAA Cooperative Science Center in Atmospheric Sciences and Meteorology (NCAS-M), a nine-member academic consortium constituted to diversify the student population trained in Atmospheric and Environmental Sciences, Meteorology, and other fields that are aligned with NOAA's mission enterprise.



Dr. Ichoku received his Ph.D. in Earth Sciences from the Pierre & Marie Curie University, Paris, France, and his M.S. and B.S. degrees in Remote Sensing and Surveying, respectively, from the University of Nigeria, Enugu Campus. Prior to joining Howard University in the fall of 2018, he was a Research Physical Scientist at NASA Goddard Space Flight Center, Greenbelt, Maryland, where he was involved in a variety of Earth Science research and related activities for 20 years (1998–2018). His scientific activities over

the years have included developing and applying both experimental and remote sensing approaches to research in interdisciplinary earth sciences. He is actively involved in the development of innovative approaches for characterizing land-atmosphere interaction processes, analyzing the energetics and emissions of wildfires and biomass burning, evaluating atmospheric aerosol retrievals from satellite observations, and elaborating the impacts of these phenomena on the environment and climate. He is experienced in environmental research and capacity development in Africa.

Presentation Abstract

Role of the African Diaspora and Friends of Africa in the development of Capacity in Africa through AfMS

Members of the African Diaspora and Friends of Africa engaged in the weather and climate enterprise around the world understand the critical importance of having a strong continental meteorological society in anchoring Africa's preparedness to mitigate the threat of extreme weather and related environmental events that have become increasingly unpredictable due to climate change. We know that this field of knowledge has been crucial in advancing the economic and technological development of the different countries where most of us live and work. Thus, we congratulate our African colleagues on the inauguration of the African Meteorological Society (AfMS). The role of AfMS in accelerating and sustaining African development is critical and is becoming even more so as Africa navigates toward an uncertain future threatened by the rapidly changing climate manifested in a variety of extremes, including drought, flooding, heat waves, wildfires, air pollution, and other such large-scale environmental anomalies. Therefore, so many members of the African diaspora and friends of Africa involved in the weather and climate enterprise from academia, government, and the private sector in various technologically and economically advanced countries of the world have expressed their enthusiasm to participate in this noble effort of bringing the AfMS to life and helping with some of her activities, including assisting the teams that create AfMS education and training (E&T) courses; presenting Webinars on topics of interest to AfMS; participating in international Science and Technology (S&T) collaborations; mentoring African students and early-career scientists and in other ways.

8.13 Presentation P-13: Ashish Raval, Acting Chair, HMEI

President, Synoptic Data PBC (Successful example of Public-Private and Academia)



- Vice President Global Sales with OTT Hydromet
- 25+ Years of International Knowledge,
- Specialist in Implementing large-scale Turn-key Hydromet Networks with Software
- Over \$200M in Large Internationally projects executed over the past 25+ years
- Experience with the WMO, World Bank, ADB, UNDP, FAO, UNESCO, AFB, USAID, USTDA, AFB, CAF, etc.
- MBA from Georgetown University in Washington DC
- MS Electrical Engineering
- Member - ETTAC 2018-2022 Chapter (Environmental Technologies Trade Advisory Committee)
- HMEI Executive Council Member since 2012.
- Short Summary of Presentation

Presentation Abstract



Overview of HMEI

- Activities of HMEI in supporting the public sector in implementing large-scale projects including the release of Tender Specifications.
- How HMEI Can assist NMHSs around the world in implementing and executing successful turn-key projects using best practices Public-Private partnerships and interaction with WMO.

8.14 Presentation P-14: Dr. Walter Dabberdt



Walter Dabberdt is a Past President of the American Meteorological Society and was instrumental in the founding of the International Forum of Meteorological Societies. Dr. Dabberdt earned his Ph.D. in meteorology from the University of Wisconsin. His career includes positions at the Stanford Research Institute, the National Center for Atmospheric Research, and the Vaisala Group. Dabberdt has received multiple awards, including the AMS Helmut Landsberg Award, the Luke Howard Award of the International Association for Urban Climate, and Knight First Class from Order of the Lion in Finland. He currently chairs Seminars at Steamboat, a US public policy program in Steamboat Springs, Colorado.

AMS' Global Partners Program: A Resource for African Scientists

Presentation Abstract

The Global Partners Program seeks to connect AMS members who are interested in providing specialized expertise and services to international professionals in academia, government service, and other nonprofit organizations. Services proffered to these "International Scholars" may include but are not limited to assistance in the course and curriculum development, research planning and collaboration, public engagement, mentoring, and other not-for-profit activities. Such services will typically be provided on a *pro bono* basis. The role of the AMS is limited to functioning as an exchange mechanism that facilitates the matching of those International Scholars seeking relevant services with those AMS member-volunteers desiring to provide them.

8.15 Presentation P-15: Dr. Liz Page

[Dr. Elizabeth \(Liz\) Page](#) became the COMET Director in July 2017. She has spent much of her career dedicated to the professional development of operational meteorologists worldwide. Liz joined COMET in 1993 as a visitor from the National Weather Service and became a COMET Associate Scientist in 2004 and later a Project Scientist. More recently, she led COMET's education and training operations and the business office.



She began her career as a civilian instructor with the Air Force's Weather Training Division at Chanute AFB, IL. Liz next joined the National Weather Service as an intern in San Diego, CA, and moved to become the Deputy Meteorologist in Charge at the NWS Agriculture and Fire Weather Office in Riverside, CA before joining the NWS team at COMET. She has also taught courses at North Carolina State University and the University of North Carolina, Charlotte.

Liz received her BS in Atmospheric Science from the University of California, Davis, and her MS and Ph.D. in Atmospheric Science from Colorado State University, where she studied cloud physics and microclimate effects of wildfire burn scars, respectively. She was awarded two NOAA Bronze Medals and was recognized with an American Meteorological Society Special Award for



her contributions to the Certified Broadcast Meteorologist test and study guide. Liz has served on the National Weather Association (NWA) Council in different capacities and was President in 2015. She is currently a founding member of the Board of Directors of the NWA Foundation, the charitable branch of the organization. Liz is also the chair of the UCAR Management Forum (UMF).

Presentation Abstract

Dr. Elizabeth Page will cover two main topics on which she provided us articles for the special IFMS Newsletter being issued for AfMS Inauguration. These topics are the COMET Training Program and PAWS (3D-Printed Automated Weather Stations)

About Training Program:

Internationally known for the training portal, MetEd (www.meted.ucar.edu), COMET set the standard for online distance learning in meteorology by bringing together instructional design concepts, scientific experts, and multimedia designers and web developers to create engaging, scientifically sound training with real-world applications. These highly interactive lessons have evolved over time with technological advances in e-learning. To date, COMET has created over 1000 e-learning lessons. A registration system allows learners to access the site, and take quizzes to document their completion. Learners can subscribe to have booster questions sent to them following their training to help them retain what they learned through the lesson.

COMET offers synchronous, instructor-led courses and workshops, both in person and online, developed for sponsor agencies, including Environment and Climate Change Canada, Korea Meteorological Administration, China Meteorological Administration, the National Weather Service (NWS) in the United States, and the World Meteorological Organization to name a few. Sponsors identify the themes of these courses and COMET facilitators bring together experts on the topics related to those themes to expand the forecasting skills of the participants.

About PAWS Program:

Increasing the density of atmospheric and hydrological observation sites increases the accuracy of forecasting and monitoring hydrologic and weather hazards. Accurate and reliable real-time monitoring and dissemination of atmospheric and hydrologic observations are critical for short-term and long-term applications. Short-term applications include flood warnings, agriculture operations, water resource management, and food security monitoring. Long-term applications include expanding long-term historical climate databases in data-sparse regions. These long-term records are critical for monitoring climate change and associated impacts, which are critical in building climate adaptation strategies to create climate-resilient communities.

The goal of the program is to build local capacity to fabricate, assemble, install, maintain, and utilize observations that can support local weather and climate applications. The open-source solution enables local partners to take ownership of the building and maintain sustainable observation networks. The technology and knowledge are transferred through comprehensive training with local partners, who can include national meteorological and hydrological services (NMHSs), international research institutes, non-governmental organizations, and local universities and schools.



8.16 Presentation P-16: Mr. Kinfе Hailemariam



Mr. Kinfе Hailemariam joined the then National Meteorological Service Agency (NMSA) of Ethiopia in 1989, as a fresh Physics graduate from Addis Ababa University. He worked as a junior meteorologist for three years and then studied for a one-year Post Graduate Diploma in Meteorology in Pune, India in 1992. Then, he worked in Forecast, Research, and Data management Departments in different positions, from expert level to team leader level, for close to 10 years. He also studied Computer Science at Addis Ababa University evening program during this period. Then, in 2002/2003 he studied for his MSc in Weather, Climate, and Modelling at Reading University in the United Kingdom. Afterward, he served as the head of different departments of the National Meteorological Agency (NMA), including the Data Management, ICT, and Research Departments. Since June 2018, he is serving as a Deputy Director General of NMA, which is upgraded to Ethiopian Meteorological Institute in 2021.

Presentation Abstract

After thanking AfMS for inviting him to speak at its inauguration ceremony, Mr. Kinfе Hailemariam will make the following remarks.

Ethiopia established the Ethiopian Meteorological Society, **EtMS**, in 2007. The Ethiopian National Meteorological Agency, now called Institute, cooperated and assisted EtMS by providing office space and office materials to enable it to start functioning. The two Institutions have signed an MoU to cooperate in areas of awareness creation, research, and publication of the scientific journal. He will express his happiness that Ethiopia serves as a host nation for AfMS.

Ethiopian professionals are engaged in running the AfMS Office in Addis Ababa including as Executive Director and holding support staff positions. He will also express his pleasure that Ethiopia hosts the Office of the WMO Regional Office for Africa.

This is a welcome opportunity that the WMO RA-1 Office and AfMS are collocated which enables the two institutions to work together for the benefit of Africa.

We will continue to provide support to AfMS in the future including the provision of adequate Office space at the new 9-story building currently under construction.

Finally, he will express his wish for a successful AfMS inauguration ceremony.

9 Conclusion

The following documents are being distributed:

Summary Description of the African Meteorological Society

This Program Book

A special edition of the IFMS Newsletter to celebrate the Inauguration of the AfMS.

The Inauguration will be followed by a questionnaire after the Conference to gauge the interest of attendees in helping their NMSocs to grow and if their country does not have one, ask us for help in creating one.