Maruf Sanni

Personal Information and Contact Details

Marital status:MarriedNationality:NigerianCurrent Employment:Assitant Director (Research)Address:National Centre for Technology ManagementP M B, O12, Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

Phone: +234 8057070192 (mobile) Email: <u>maruf.sanni@nacetem.gov.ng</u>; <u>maruf.sanni@eiee.org</u>; <u>marufsanni@gmail.com</u>

Professional Qualification

PhD in Public Policy, University of KwaZulu-Natal, Durban, South Africa;

Master of Science in Geography, Obafemi Awolowo University, Ile Ife, Nigeria;

Bachelor of Science in Geography, Obafemi Awolowo University, Ile Ife, Nigeria;

Employment

2006 – To Date

Assistant Director (Research) at the National Centre for Technology Management, Nigeria

September, 2022 – To date

Head, Technology Management Education and Training Department at the National Centre for Technology Management

23, October, 2019 to 22, October, 2021

Marie Sklodowska Curie Fellow at RFF-CMCC European Institute on Economics and the Environment (EIEE). Euro-Mediterranean Center on Climate Change, Milan, Italy (CMCC)

October 2017 – October, 2019

Head, Technology Management Education and Training Department at the National Centre for Technology Management

2016 –

Visiting Scholar at the United Nations University Institute for Natural Resources in Africa, Accra, Ghana

01/02/2016 - 30/04/2016

Home-based Intern at the United Nations Development Programme on Climate Change Adaptation and Action Intelligent Platform projects

15/03/2015 - 01/11/2015

Massachusetts Institute of Technology, Climate CoLab Fellow at the Department of Collective Intelligence, MIT, Boston, USA (Pro bono)

01/03/2015 - 30/07/2015

PhD Visiting Scholar at Department of Business and Management, Aalborg University, Denmark.

01/04/2011 - 15/12/2011

Research Fellow, International Centre for Science and High Technology of the United Nations Industrial Development Organization AREA Science Park, Padriciano 99,, 34149 Trieste, Italy

03/10/2005 - 30/12/2005

Intern, Space Applications and Environmental Science Laboratory, Institute of Ecology and Environmental Studies Obafemi Awolowo University, 220005 Ile Ife, Nigeria

01/06/2005 - 30/08/2005

Statistician, Ultra Brains Institute of Information Technology, Training Institute Ede Road, 220005 Ile Ife (Nigeria)

02/06/2003 - 15/12/2004

Research Assistant, Adaptation for, Impact on, and Assessment of Climate Change (AIACC) project, Department of Geography, Obafemi Awolowo University, Ile-Ife, Nigeria.

Research Focus

Low-carbon Innovation Development Pathways; Sustainable Technological Innovation Development; Climate Resilient Development; Climate Change Policy

Teaching and Supervision

Courses taught Sustainability development

Technological Change and Innovation Management

Environmental Impact Assessments

Research Methodology in Science, Technoogy and Innovation Management

Statisical software programme instructor

Administrative and other activities

Head, Technology Management Education and Training, National Centre for Technology Management.

Chairman, The Project Management Committee, National Centre for Technology Management

Associate Editor, African Journal of Science, Technology and Innovation Development with Taylor and Francis, Routledge

Reviewer for Elsevier, Taylor & Francis and Routledge and Inderscience

Fellowships and Awards

Marie Sklodowska Curie Fellow at RFF-CMCC European Institute on Economics and the Environment (EIEE). Euro-Mediterranean Center on Climate Change, Milan, Italy (CMCC)

Visiting Scholarship programme at the United Nations University Institute for Natural Resources in Africa, Accra, Ghana

STEPS Centre scholarship for Summer School on pathways to sustainability at the Institute of Development Studies, University of Sussex, Brighton, United Kingdom.

Internship programme at the United Nations Development Programme on Climae Change Adaptation and Action Intelligent Plaform projects

PhD Sandwich Fellowship Programme at Department of Business and Management, Aalborg University, Denmark as PhD Visiting Scholar.

SPAEL Postgraduate Research Fellowship Award by the Space Application and Environmental Science Laboratory (SPAEL), Obafemi Awolowo University, Ile Ife, Nigeria.

Best Researcher of the Year (2010) Award by National Centre for Technology Management, Federal Ministry of Science and Technology, Nigeria.

International Centre for Science and High Technology of the United Nations Industrial Development Organization (ICS/UNIDO) Fellowship Award by ICS/UNIDO, Trieste, Italy.

Winner of the Massachusetts Institute of Technology, Department of Collective Intelligence (USA) Climate CoLab Contest (2011)

World Bank Science, Technology Education Post Basic (STEP-B) PhD Grant

Skills and Experience

- Statistical Package for Social Sciences (Predictive Analytics Software)
- ArcGIS (Geographical Information System Software)
- QPSMR (Marketing Research Statistical Package)

Research Grants

Ongoing: Promoting Digital Financial Solutions for farmers in remote communities to adapt to Climate Change. Grant from European Commission under the Horizon 2020 Innovation programme. **Project Team member. Eur 822, 916.97**

Ongoing: Development of Science, Technology and Innovation Indicators Project – 3rd Edition (2014 - 2016). A programme of the New Partnership for Africa's Development, office of Science and Technology (NEPAD OST) funded by the Federal Government of Nigeria: **Project Team Member; US\$42,000**

Ongoing: The role of STI in boosting Nigeria's agricultural productivity and food security: benefits of technology adoption and adaption. funded by the Federal Government of Nigeria. **Project team member**

Completed: The design and impact of an apprenticeship-based entrepreneurship intervention in Nigeria. Grant from International Development Research Council, Canada. **Project team member**

Completed: External knowledge sourcing strategies for environmental innovation in the industrial sector of Nigeria (ECO-innovation and the Dynamics of External Knowledge Sourcing (ECO-DEKS). Grant from European Commission under the Horizon 2020 Innovation programme. **Principal Investigator**

Completed: Doing Research in Nigeria: Assessing Social Science Research Systems in a Global Perspective. Grant from International Development Research Council, Canada. **Project team member**

Completed: Technology Audit of Nigeria and Global Technology Trends of Possible Strategic Interest to the Nation. Funded by the Federal Government of Nigeria. **Project Team Member US\$84, 000**

Completed: Building Low Carbon Innovation Energy Systems in Africa (2014 - 2015). Research Grant won from the AfricaLics, Kenya and funded by Swedish International Development Agency (SIDA); **Project Co-principal Investigator; US\$35,000**

Completed: Assessment of Evidence Literacy Level of Policy Makers in the Utilisation of STI Indicators in Nigeria (2012-2013); Research Grant won from the AU-NEPAD Planning and Coordinating Agency

(NPCA) funded by Swedish International Development Agency (SIDA); Project Team Member; US\$20,000

Completed: Development of Science, Technology and Innovation Indicators Project – 2nd Edition (2011 - 2013). A programme of the New Partnership for Africa's Development, office of Science and Technology (NEPAD OST) funded by Swedish International Development Agency (SIDA); **Project Team Member; US\$25,000**

Completed: Development of Science, Technology and Innovation Indicators Project -1st Edition (2008 - 2011); A programme of the New Partnership for Africa's Development, office of Science and Technology (NEPAD OST) funded by Federal Government of Nigeria with ₩37m (US\$240,000) supported by the Swedish International Development Agency (SIDA) US\$50,000; Project Team Member

Completed: An Impact Assessment of the Education Trust Fund's Micro-Science Kits Project (2008 - 2010); A consultancy project to NACETEM by the Education Trust Fund (ETF); **N37m (US\$240,000)**; **Project Team Member**

Publications

Monographs

National Centre for Technology Management (2010) Technological Entrepreneurial Attitude in Nigeria Tertiary Institution. NACETEM Monograph Series (No 3).

National Centre for Technology Management (2012) Characterisation of Technological Entrepreneurship Education in Nigeria Tertiary Institution: Structure, Contents and Delivery Systems. NACETEM Monograph Series.

Technical Reports

- Maruf Sanni, Abdulai Jalloh and Aliou Diouf (2014) Review of research and policies for climate change adaptation in urban areas of West Africa. Working Paper Series of the Future Agriculture Consortium, Sussex, United Kingdom.
- Willie. O. Siyanbola, Omolayo Oluwatope, Boladale Adebowale, Olawale Olaopa, David Adeyeye, **Maruf Sanni**, Titilayo Aladesanmi (2014) An assessment of literacy level of policy makers in the utilisation of science, technology and innovation indicators in policy making process in Nigeria. NEPAD/ASTII African Innovation Outlook Series Research Paper No.1 March 2014.
- An Impact Assessment of the Education Trust Fund's Micro-Science Kits Project (NACETEM Consultancy Project Report submitted to the Education Trust Fund [ETF], Abuja)
- Nigeria's Science, Technology and Innovation Indicators: Report of 2005 2007 National Innovation Survey – (NACETEM Policy Research Project)
- Nigeria's Science, Technology and Innovation Indicators: Report of 2006/07 R&D Survey (1st Edition) – (NACETEM Policy Research Project)
- Adaptation Strategies for Climate Change in Nigeria
- Issues on and strategies for Technology Transfer for Adaptation to climate change in Nigeria
- Food Security, Climate Variability and Climate Change in Sub-Saharan West Africa
- An assessment of the awareness and utilization of patents by Nigerian researchers
- Evaluation of the Source and Quality of S&T Information Available to Ministry Officials and Members f the National Assembly in Nigeria
- Report on Paradigm Shift in Primary Science Education in Nigeria and Development of a Business Plan for the Production of Primary Science Kits [PSK] (Report prepared for the National Agency for Science and Engineering Infrastructure [NASENI], Abuja)

Book

 F.A. Adesina, T.O. Odekunle, O. Ajayi, O. Eludoyin, O. Babatimehin, A. Dami, M. Sanni, O. Aloba, A. Magaret and O.T. Adetiloye (2008): Adaptation Strategies of Action for Nigeria. A working document prepared for the Special Climate Change Unit and Urban Development, Abuja. *Heinrich-Boll Stiftung, Nigeria.*

Book Chapter Contributions

- Sanni, M. (2020). An Assessment of the Impact of Barriers on Eco-Innovation Within Small and Medium-Sized Manufacturing Firms in the Peripheral Regions of Lagos. In *Inclusive Green Growth* (pp. 253-279). Springer, Cham.
- 2. Egbetokun A., Oluwatope O., Adeyeye D., **Sanni M**. (2019) The Role of Industry and Economic Context in Open Innovation. In: Rexhepi G., Hisrich R., Ramadani V. (eds) Open Innovation and Entrepreneurship. Springer, Cham
- 3. **Sanni M.**, Jalloh A., Diouf A., Atoyebi M.K., Ilevbare O.E., Olotu S.J. (2019) Strengthening Climate Change Adaptation in the Cities of West Africa: Policy Implications for Urban Resilience. In: Leal Filho W. (eds) Handbook of Climate Change Resilience. Springer, Cham
- Napi Wouapi, H. A., & Sanni, M. (2018). Enhancing Resilience of Livelihoods and Production Systems to Climate Variability and Other Related Risks in Africa. *Handbook of Climate Change Resilience*, 1-15.
- 5. Ilevbare O., **Sanni M.**, Ilevbare F., Ali G. (2014): Transition to Low-carbon Future in Nigeria: The Role of Pro-Environmental Behaviours. In: Leal W. (Ed.) Handbook of Climate Change Adaptation: SpringerReference (www.springerreference.com). Springer-Verlag Berlin Heidelberg.
- Sanni, M., Odekunle, T. O., & Adesina, F. A. (2012). Spatio-Temporal Variation of Drought Severity in the Sudano-Sahelian Region of Nigeria: Implications for Policies on Water Management. In *Climate Change and the Sustainable Use of Water Resources* (pp. 415-430). Springer, Berlin, Heidelberg.
- Sanni M., Jesuleye, O.A., Ali, G.A., Olotu S.J., Ogunkanbi, D.A., Rasaq, M. and Siyanbola, W.O. (2012). Addressing the Challenges of Harnessing Biogas for National Development in Nigeria. In Building a Non-oil Export Based Economy for Nigeria: The Potential of Value-Added Products from Agricultural Residues. Cuvillier Verlag, Gottingen, Germany.
- 8. **Sanni M.**, Ogundari, I.O., Egbetokun, A.A., Dada, A.D. and Siyanbola, W.O. (2012). Starving People to Feed Cars? Analysing the Conflicts between Green Politics and Food Security. In Building a Non-oil Export Based Economy for Nigeria: The Potential of Value-Added Products from Agricultural Residues. Cuvillier Verlag, Gottingen, Germany.
- Ogundari I.O., Sanni M., Oladipo O.G., Famurewa A.J., Ali G.A. and Siyanbola W.O. (2012) Technological and Economic Assessment of Sustainable Jatropha Biofuel Production in Nigeria. In Building a Non-oil Export Based Economy for Nigeria: The Potential of Value-Added Products from Agricultural Residues. Cuvillier Verlag, Gottingen, Germany.
- 10. **Maruf Sanni**, James O. Adejuwon, Idowu Ologeh and William O. Siyanbola (2011): "Path to the Future for Climate Change Education: A University Project Approach" in The Economic, Social and Political Elements of Climate Change by Leal Filho, Walter (ed.). ISBN: 978-3-642-14775-4. Springer.
- 11. **Sanni, M.**, Egbetokun, A. A., Dada, A. D., Muritala, R. B. and Siyanbola, W. O. (2010). Promoting Sustainable Agriculture in a Perturbed Environment: the Need for Science and Technology. In:

Adebooye, O. C., Taiwo, K. A. and Fatufe, A. (eds.) Biotechnology Development and Threat of Climate Change in Africa, Volume 1. Gottingen: Cuvllier Publishers.

- 12. Dada A.D., Aladesanmi, O.T., **Sanni, M.**, Oladipo, O.G. and Siyanbola, W.O. (2010): Agricultural Biotechnology, Food Security and Economic Development: Implications for Policy in Nigeria. Cuvllier Publishers, Gottingen, Germany.
- Sanni, M., Egbetokun, A. A. and Jesuleye, O. A. (2010). Clean technologies as mitigating strategies against the potential impacts of climate change in 21st century Nigeria. In: Allam, A and Nwankwo, S. (eds.). Achieving Sustainable Development in Africa: Science, Technology and Innovation Trajectory. Brighton: World Association for Sustainable Development.
- Egbetokun, A.A., Siyanbola, W.O., Sanni, M., Olamade, O.O., Adeniyi, A.A. and Irefin, I.A. (2010). The determinants of innovation capability in Nigeria. In Allam, A. and Nwankwo, S. (eds.). ISBN 978-1-907106-07-1. Achieving Sustainable Development in Africa: Science, Technology and Innovation Trajectory. Brighton: World Association for Sustainable Development.
- J.O Adejuwon, A.I. Ojo and M. Muhammed-Sanni (2006): Impact of Projected Climate Change on Food Crop Productivity during 21st Century in Climate Change and Food Security in Nigeria (2006): in J.O Adejuwon and O.O. Ogunkoya (eds): ISBN 978-136-160-3. Obafemi Awolowo University Press, pp 140-156.

Journal Articles

- Leal Filho, Walter; Wolf, Franziska; Totin, Edmond; Zvobgo, Luckson; Simpson, Nicholas; Musiyiwa, Kumbirai; Kalungu, Jokastah; **Sanni, Maruf**; Adelekan, Ibidun; Efitre, Jackson; Donkor, Felix; Balogun, Abdul-Lateef; Rui Mucova, Serafino; Ayal, Desalegn, (2022) Is African local knowledge serving climate adaptation? Evidence of local and indigenous knowledge cases from various African regions. *Development Policy Review.* https://doi.org/10.1111/dpr.12664
- Sanni, M., & Verdolini, E. (2022). Eco-innovation and openness: Mapping the growth trajectories and the knowledge structure of open eco-innovation. *Sustainable Futures*, *4*, 100067. <u>https://doi.org/10.1016/j.sftr.2022.100067</u>
- 3. Olofinyehun, A., Egbetokun, A., Ayo-Lawal, A., **Sanni, M**., Oluwatope, O., & Yusuff, U. Diffusion of social science research in Nigeria. *International Social Science Journal*.
- 4. Egbetokun, A., Olofinyehun, A., **Sanni, M**., Ayo-Lawal, A., Oluwatope, O., & Yusuff, U. (2022). The production of social science research in Nigeria: status and systemic determinants. *Humanities and Social Sciences Communications*, *9*(1), 1-9.
- Akerlof, K., Tyler, C., Foxen, S. E., Heath, E., Soler, M. G., Allegra, A., ... & Maruf Sanni (2019). A collaboratively derived international research agenda on legislative science advice. *Palgrave Communications*, 5(1), 1-13. https://doi.org/10.1057/s41599-019-0318-6
- David Adeyeye, Abiodun Egbetokun, Omolayo Oluwatope & Maruf Sanni (2019): The determinants and complementarity of organizational innovation practices among Nigerian manufacturing and service firms, African Journal of Science, Technology, Innovation and Development, DOI: 10.1080/20421338.2018.1552649
- 7. **Maruf Sanni** (2018) Drivers of eco-innovation in the manufacturing sector of Nigeria. Technological Forecasting & Social Change. *Technological Forecasting & Social Change* 131, 303–314
- 8. Radhika Perrot & **Maruf Sanni** (2018) Building low-carbon energy innovation systems in Africa, *African Journal of Science, Technology, Innovation and Development*, 10:5, 519-524, DOI: 10.1080/20421338.2018.1523033

- 9. Adeyeye, D., Egbetokun, A., Opele, J., Oluwatope, O., and **Sanni, M**. (2018). How barriers influence firms' search strategies and innovative performance. International Journal of Innovation Management.
- Maruf Sanni (2017) Mapping dynamics of low-carbon energy innovation for small hydropower technology in Nigeria. African Journal of Science, Technology, Innovation and Development. <u>https://doi.org/10.1080/20421338.2017.1380587</u>
- 11. Olajumoke Adeyeye and **Maruf Sanni** (2016) Climate Change Adaptation, Indigenous Practices and Food Security: A Gender Perspective. *International Journal of Agricultural Economics and Rural Development*.
- 12. **Maruf Sanni**, Omolayo Oluwatope, Adedamola Adeyeye and Abiodun Egbetokun (2016) Evaluation of the quality of science, technology and innovation advice available to lawmakers in Nigeria. Palgrave Communications. 2:16095 doi: 10.1057/palcomms.2016.95.
- 13. **Sanni Maruf**, Adelowo Caleb M., Dada, A.D., Oyewale, A.A. and Ogunkanbi, D. A. (2016) Climate Change and Intellectual Property Rights in Africa: Environmental Necessity-Economic Opportunity. African Journal of Science, Technology, Innovation and Development.
- 14. Oluwatope O.B., Adeyeye A.D., Egbetokun A.A., **Sanni M**. and Aremu, F.S. (2016) Knowledge sources and innovative performance: evidence from nigerian manufacturing firms. *Int. J. Business Innovation and Research, Vol. 10, Nos. 2/3, 2016*
- Oyewale, A. A., Dada, A. D., Sanni, M., Adelowo, C. M., and Siyanbola, W. O. (2015) Patenting and Wealth Creation in a Latecomer Economy: Issues and Policy Direction. Asia Pacific Journal of Innovation and Entrepreneurship. Volume 9, No.3, 2015.
- Siyanbola W.O., Adeyeye A.D., Egbetokun A.A., Sanni M., and Oluwatope O.B. (2014). From Indicators to Policy: Issues from the Nigerian Research and Experimental Development Survey. International Journal of Technology, Policy and Management. Vol. 14, No. 1. <u>https://doi.org/10.1504/IJTPM.2014.058726</u>
- Maruf Sanni, Oluwatosin Oladipo, Ibikunle Ogundari and Titilayo Aladesanmi (2014) Adopting latecomers' strategies for the development of renewable energy technology in Africa. African Journal of Science, Technology, Innovation and DevelopmentVol. 6, No. 4 <u>http://dx.doi.org/10.1080/20421338.2014.924265</u>
- Siyanbola W.O., Famurewa, A.J., Adebowale B. A, Ogundari, I.O., Aladesanmi, O.T., Sanni, M., Ogunkanbi D.A., (2013) Technology Management Options for Addressing Climate Change and Food Security Issues In Nigeria. *International Journal of Ecology and Environmental Studies*. Vol. 1, No 1.
- W.O. Siyanbola, O.O. Afolabi, O.A. Jesuleye, A.A. Egbetokun, A.D. Dada, H.O. Aderemi, Maruf Sanni and M.A. Rasaq (2012) Determinants of entrepreneurial propensity of Nigerian undergraduates: an empirical assessment. Vol. 5, No. 1. Int. J. Business Environment.
- Willie O. Siyanbola, Abiodun A. Egbetokun, Isola Oluseyi, Olumuyiwa O. Olamade, Helen O. Aderemi, Mohammed Sanni (2012) Indigenous Technologies and Innovation in Nigeria: Opportunities for SMEs. American Journal of Industrial and Business Management Vol.2, 64-75.
- 21. Siyanbola, W. O; Aderemi, H. O; Egbetokun, A. A; **Sanni, M** (2011) Framework for Technological Entrepreneurship Development: Key Issues and Policy Directions. Vol 1, No 1. Pp 10-20. American Journal of Industrial and Business Management.
- Momodu, A.S., Abraham, O.E. Ogundari, I.O., Jesuleye, O.A., Sanni, M., Ibuoye, T.F. and Siyanbola, W.O. (2011) "Cost-benefit analysis of promoting energy efficiency diffusion in Nigeria's residential and commercial buildings." Nigeria Journal of Solar Energy, Vol. 22. pg. 105-119.
- 23. **Maruf Sanni**, A.A. Egbetokun and W.O. Siyanbola (2010): A Model for the Design and Development of a Science and Technology Park in Developing Countries. *International Journal for Management and Enterprise Development*. Vol. 8 No. 1, 2010. Inderscience Publishers

- Oladipo, O.G., Olayinka, A., Aladesanmi, O.T., Sanni, M., Famurewa, A.J. "Risk Mitigation Strategies and Policy Implications for Carbon Dioxide (CO₂) Emission in organically amended soils in Nigeria" (2010). African Journal of Environmental Science and Technology. *African Journal of Environmental Science and Technology* Vol. 4(11), pp. 801-806.
- Oyewale A.A., Dada A.D., Sanni M. and Siyanbola W.O. (2009) Patenting for Economic Development: How Aware are Nigerian Pharmaceutical Researchers? Nig. J. Nat. Prod. and Med. Vol. 13, pp 69-75.
- 26. A.A. Egbetokun, W.O. Siyanbola, **M. Sanni** and O.O. Olamade (2009) "What drives innovation? Inferences from an industrywide survey in Nigeria". *Int. J. Technology Management, Vol. 45, Nos. 1/2, 2009,* Inderscience.

Accepted Manuscripts

Manuscripts

F Gasmi, D Kouakou, **M Sanni** (2022) The effect of firm informality on sustainable and responsible innovation in developing countries: Evidence from Nigeria

Maruf Sanni (20xx) Many are called, few are needed: Eco-innovation typology and degree of novelty in open eco-innovation mode

Maruf Sanni and Yeon Jae Kim (20xx) How open are African inventors? Open green technologies and entrepreneurship development in Africa

Work in progress

Maruf Sanni, Oluwadare, A.J., Ilevbare, O., Omoruyi, M.G. and Atoyebi, M.K. (20xx) Comparative analysis of eco-innovative and non eco-innovative manufacturing firms: Some insights from a latecomer economy.

Capacity Building Programmes

Marie Sklodowska Curie Fellowship at RFF-CMCC European Institute on Economics and the Environment, c/o BASE Via Bergognone 34 20144 Milano, Italy. October, 2019 to September, 2021.

Enhancing the Quality of Industrial Policies (EQuIP) Policy Facilitation organized by the United Nations Development Organisation. September to November 2021. Online

Research and Proposal Writing in the Sciences online course (2021) organized by AuthorAID. 7th September to 2nd November 2021. Online

COVID-19 and development – effects and new realities for the Global South. Organized by United Nations University World Institute for Development Economics Research (UNU-WIDER), Finland. 6-8 September 2021. Online

Research and Proposal Writing. Organised by the National Centre for Technology Management, Nigeria. 8 September 2021. Online

Oxford School of Climate Change Organised by Oxford Climate Society, United Kingdom. 8-week climate seminar series January 19th to March 9th, 2021

Group review of the First Order Draft of the Sixth Assessment Report (AR6) Climate Change 2021: Impacts, Adaptation and Vulnerability from the Working Group II (WGII) - (Autumn 2019). organized in partnership with the Associations of Polar Early-Career Scientists (APECS),

PAst Global ChangES Early-Career Network (PAGES-ECN), Permafrost Young Research; Network (PYRN) and Young Earth System Scientists (YESS) community, Mountain Research Initiative (MRI) and the Intergovernmental Panel on Climate Change (IPCC). Friday 18 Oct 2019 -Friday 13 Dec 2019.

Certificate Training Course on Understanding Research Methods organized by University of London and SOAS University of London, Feb 02, 2020

Expert meeting on the **Revision of Phase 4 R&D/Innovation Questionnaires - Team 1 (Anglophone)** organized by the African Union Development Agency of the New Partnership for African Development (AUDA-NEPAD) in collaboration with Human Sciences Research Council, Pretoria, 0001, South Africa. Sep 23, 2020.

Group review of Second Order Draft of the IPCC Sixth Assessment Report Climate Change 2021: The Physical Science Basis, by the Working Group I. Organized in partnership with the Associations of Polar Early-Career Scientists (APECS), PAst Global ChangES Early-Career Network (PAGES-ECN), Permafrost Young Research; Network (PYRN) and Young Earth System Scientists (YESS) community, Mountain Research Initiative (MRI) and the Intergovernmental Panel on Climate Change (IPCC). Monday 02 Mar 2020 - Sunday 26 May 2020.

STEPS Centre Summer School on pathways to sustainability organised by the Institute of Development Studies, University of Sussex, Brighton, United Kingdom from 16 to 27, May 2016.

Writeshop on Innovation and Development hosted at the Institute for Economic Research on Innovation (IERI), Tshwane University of Technology, Pretoria, South Africa from 24 and 28 August 2015

The 10th International Ph.D. School on Innovation and Economic Development, GLOBELICS Academy 2015, Tampere, Finland, 1st of June – 12th of June, 2015.

African Network for the Economics of Learning, Innovation, and Competence Building Systems (AfricaLics) PhD Academy, March 15, 2015 – March, 30, 2015 at Moi University, Mombasa Campus, Kenya

Certificate Training Course on Climate Resilient Development. March 3, 2014 – March 22, 2014. World Bank e-Institute, Washington DC. (Online)

Certificate Training Course on Policies for Growth. Jan. 21, 2014 – Feb. 11, 2014. World Bank e-Institute, Washington DC. (Online)

Certificate Training Course on Policy Instruments for Low Emissions Development: From Strategy Design to Implementation. Nov. 18, 2013 – Dec. 09, 2013. World Bank e-Institute, Washington DC. (Online)

Certificate Training Course on Low Carbon Development – Integrated Course. Nov. 04, 2013 – Dec. 09, 2013. World Bank e-Institute, Washington DC (Online)

Evidence and Lessons from Latin America: Learning Alliance on Climate Resilient Cities. Rio de Janeiro, Brazil. January to May, 2013 (Online)

Evidence and Lessons from Latin America: Learning Alliance on Climate Change Adaptation in Semi-Arid and Arid Lands. Rio de Janeiro, Brazil. March to September, 2012 (Online).

International Certificate Training Course by the Central European University: Summer University on Green Industry: Moving Towards the Industry of the Future. Budapest, Hungary. 26 March – 23 April, 2012 (Online)

International Centre for Science and High Technology of the United Nations Industrial Development Organization (ICS/UNIDO) Training on the use of Geographic Information Science for Mapping Quality Infrastructure in the Economic of West African States Region for Sustainable Industrial Development. April to Dec, 2011.

International Certificate Training Course by the International Institute for Industrial Environmental Economics (IIIEE) at Lund University, Sweden on Scenarios as a tool for energy policy making. 27th June to 7th August, 2010 (Online).

A training course on environmental impact assessment auditing and implementation in industries. Organized by National Centre for Technology Management (NACETEM). Held between July 5th and 9th, 2010. - Coordinator and instructor for the Training course-

A training course on application of Statistical Package for Social Sciences (SPSS) to statistical analysis and data presentation in the research institutes organised by the National Centre for Technology Management, Lagos office, Victorial Island, Nigeria. Held between June, 7th and 11th, 2010. Invited as a resource person for the workshop.

A training course on application of Statistical Package for Social Sciences (SPSS) to statistical analysis anddata presentation for the staff of National Centre for Technology Management, Head office, Ile Ife, Nigeria.Held between July, 13th and 17th, 2009. Participated as a resource person at the workshop.

A training course on environmental impact assessment auditing and implementation in industries. Organizedby National Centre for Technology Management (NACETEM). Held between April 20th and 24th, 2009.-Coordinator of the course –

Research Methodology Workshop organized by the Directorate of Linkages and Sponsored Research (supported by Carnegie Corporation of New York), Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 1st - 3rd, December, 2008.

A training course on application of Statistical Package for Social Sciences (SPSS) to statistical analysis and data presentation for the National Centre for Technology Management, Headquarter, Ile ife, Nigeria. Held between 28 and 29th of September, 2005. **Participated as an instructor for the course.**

Space Application and Environmental Science Laboratory (SPAEL) Training on the use of Geographic Information Science for Monitoring and Evaluation of Environmental Change at Obafemi Awolowo University, Ile Ife, Nigeria in 2005.

Published conference proceedings and presented papers at conferences, workshops, seminars

- 1. **Maruf Sanni** (2021) Many are called, few are needed: Eco-innovation typology and degree of novelty in open eco-innovation mode. 16th Globelics Conference, 3 5 November 2021, Costa Rica. Hybrid event
- Maruf Sanni (2021) Eco-innovation typology and degree of novelty in open eco-innovation mode. International Conference on Africa's Sustainable Development (ICASuD) 2021. 20 –21 October, 2021.Lagos Chamber of Commerce and Industry (LCCI), Conference and Exhibition Center, Alausa, Ikeja, Lagos State, Nigeria
- 3. Maruf Sanni and Elena Verdolini (2021) Open Eco-Innovation Research Landscape in the Industrial Sector: A Systematic Review and Future Outlook. 61st ANG Annual Conference: Obafemi Awolowo University, Nigeria, 1 5 August 2021. Virtual Conference.
- 4. **Maruf Sanni and Elena Verdolini** (2021) Open Eco-Innovation Research Landscape in the Industrial Sector: A Systematic Review and Future Outlook. African Institute for Science Policy and Innovation Biennial Conference, Nigeria. 12 to 14th July, 2021. Virtual Conference
- Maruf Sanni and Elena Verdolini (2021) Open Eco-Innovation Research Landscape in the Industrial Sector: A Systematic Review and Future Outlook. ISPIM Innovation Conference 2021 (Berlin), "Innovating Our Common Future". 20 – 23 June, 2021. Virtual Conference
- 6. **Maruf Sanni** (2021) Many are called, few are needed: Eco-innovation typology and degree of novelty in open eco-innovation mode. Faculty of Science International Conference. Between 8th and 9th June, 2021Virtual Conference.
- 7. **Maruf Sanni and Yeon Jae Kim** (2021) How open are African inventors? Open green technologies and entrepreneurship development in Africa. Annual International Conference on Entrepreneurship Education and Pedagogy (AICEEP), Nigeria. 25th 27th May, 2021.
- 8. **Maruf Sanni (2021)** Many are called, few are needed: Eco-innovation typology and degree of novelty in open eco-innovation mode. National Centre for Technology Management, Nigeria. 20th May, 2021.
- 9. **Maruf Sanni and Yeon Jae Kim** (2021) How open are African inventors? Open green technologies and entrepreneurship development in Africa. European Institute on Economics and the Environment (EIEE). 13 April, 2021.
- 10. Maruf Sanni and Elena Verdolini (2021) Open Eco-Innovation Research Landscape in the Industrial Sector: A Systematic Review and Future Outlook. 3rd World Symposium on Sustainability Science and Research, Thursday 8th April 2021. Virtual Conference
- 11. **Maruf Sanni** (2020) The role of Science, Technology and Innovation in a world with COVID-19. NACETEM Webinar Series organized by the National Centre for Technology Management, Ile Ife, Nigeria on. Jul 27, 2020.

- Maruf Sanni (2019) Investigating Choice of Environmental Policy for Sustainable Industrial Development in Africa. Presentation at the Centre for Sustainable Development, University of Ibadan, Ibadan, Nigeria. 10th – 12th April 2019.
- 13. **Maruf Sanni** (2019) Effective Structures for Harnessing Climate Change Research across Universities in Nigeria. Workshop on Climate Communication and Awareness at the AFRIGIS Coulibaly Hall, Obafemi Awolowo University, Ile-Ife, Nigeria, 11th March, 2019.
- Maruf Sanni, Oluwadare, A.J., Ilevbare, O., Omoruyi, M.G. and Atoyebi, M.K. (2018) Comparative analysis of eco-innovative and non eco-innovative manufacturing firms: Some insights from a latecomer economy. 16th Globelics International Conference, Accra, Ghana. 24th – 26th, 2018
- Maruf Sanni, Abdulai Jalloh, Aliou Diouf, Atoyebi, M.K. and Oluwatosin Ilevbare (2018). Strengthening Climate Change Adaptation in the Cities of West Africa: Policy Implications for Urban Resilience. Symposium on Climate Change Adaptation in Africa. 14th-15th May 2018. University of Ibadan, Nigeria.
- 16. Napi Wouapi, Herve Alain and **Maruf Sanni** (2018) Enhancing Resilience of the Livelihoods and Production Systems to Climate Variability and other related risks in Africa. Symposium on Climate Change Adaptation in Africa. 14th-15th May 2018. University of Ibadan, Nigeria.
- 17. **Maruf Sanni** (2017) Dynamics of knowledge search strategies for eco-innovation in the manufacturing sector of Nigeria. November 25 29, 2017 AfricaLics Conference 2017. University of Oran2, Mohamed Ben Ahmed, Oran, Algeria.
- Maruf Sanni (2017) Policy Strategies to Promote Eco-Innovation in the Manufacturing Sector of Nigeria. September 24-27, 2017. Conference Centre and Guest Houses Limited, Obafemi Awolowo University, Ile Ife, Osun State.
- 19. Napi Wouapi, Herve Alain and **Maruf Sanni** (2017) A Reflection on the Commitment to Enhancing Resilience of the Livelihoods and Production Systems to Climate Variability and other related risks in Africa. September 18-19, Columbia University, Alfred Lerner Hall, New York, NY
- 20. **Maruf Sanni** (2016) Obstacles to Environmental Innovation: An Assessment of SMEs in the Peripheral Regions of Lagos. Presentation at the 14th GLOBELICS Conference 12th 14th October, 2016 Bandung, Indonesia.
- Sanni Maruf and Michael Francis (2015) Drivers of eco-innovation in the manufacturing sector of Nigeria. 2nd International Africalics Conference, University of Rwanda, Kigali, 17th November – 19th November, 2015
- 22. Oluwatosin E. Ilevbare, Ogunkanbi, D. A., Olotu, S. J., Godwin A. Ali and **Maruf Sanni**, (2015): Gender Awareness and Perception on Climate Change in West Africa. Presented at the Fifth Conference on Climate Change and Development in Africa (CCDA-V) "Africa, Sustainable Development and Climate Change: prospects of Paris and beyond" October 28–30, 2015 Victoria Falls, Zimbabwe
- 23. **Sanni Maruf** (2015) Building Low-Carbon Learning, Innovation and Competence in Africa: The Case of Nigerian and South African Manufacturing Sectors. Presented at the Presentation at the Globelics PhD Academy, 01- 15 June, 2015, University of Tampere, Tampere, Finland, Denmark.
- 24. **Sanni Maruf** (2015) Building Low-Carbon Learning, Innovation and Competence in Africa: The Case of Nigerian and South African Manufacturing Sectors. Presented at the DOME PhD training course: "Innovation and Entrepreneurship Theory", Roskilde University, Denmark, 20-24 April 2015.
- 25. **Sanni Maruf** (2015) Building Low-Carbon Learning, Innovation and Competence in Africa: The Case of Nigerian and South African Manufacturing Sectors. Presented at the at the AfricaLics PhD Academy, 01-15, March, 2015, Moi University, Mombasa Campus, Kenya

- 26. G. A. Ali, M. M. Sanni and O. E. Ilevbare (2014) Promoting Irrigation Farming as Climate Change Impact Reduction Strategy: A Case of Participating Farmers in the Ogun-Osun River Basin, Nigeria. 7th Annual Conference of the Institute of Ecology and Environmental Studies, at Conference Centre Obafemi Awolowo University, Ile-Ife, 24-26th June, 2014.
- 27. Sanni Maruf (2014) Review of research and policies for climate change adaptation in urban areas of West Africa. Paper presented at a regional validation of synthesis on research and policy related to climate change adaptation in regions of sub-Saharan Africa. Held at the Eda-Oba Hotel, Lome, Togo. 30th to 31st May, 2014.
- 28. **Sanni Maruf** (2013) Review of research and policies for climate change adaptation in urban areas of West Africa. Paper presented at a regional validation of synthesis on research and policy related to climate change adaptation in regions of sub-Saharan Africa. Held at the Radisson Blu Hotel, Dakar, Senegal. July, 12 2013.
- 29. **Sanni Maruf** (2013) A Tracer Study of Graduates of Entrepreneurship Education in Nigeria. Presented at the National Centre for Technology Management, Ile-Ife, Nigeria.
- 30. O. A. Jesuleye and **Sanni Maruf** (2012) Existing Structure for Entrepreneurship in Nigerian Tertiary Institutions: Empirical Evidence and its Policy Implications. Paper presented at the stakeholders' meeting on entrepreneurship in nigerian tertiary institutions. NACETEM, Headquarters, Ile Ife, 8th, November 2012
- 31. W.O. Siyanbola, O.,T. Aladesanmi, A. J. Famurewa, G. A. Ali, **M. Sanni**, (2012) Evaluation of Source and Quality of Science and Technology Information Available to Ministry Officials and Members of The National Assembly in Nigeria. International Conference on Evidence-Informed Policy Making, organsized by National Centre for Technology Management, Ile Ife, Nigeria, 27-29th February 2012.
- 32. **M. Sanni,** J.O. Adejuwon, I. Ologeh and W.O. Siyanbola (2012) Climate proofing the economics of socially sustainable small-scale agricultural systems in Africa. A Briefing Presented at the UN Headquarters and U.S. House of Representatives in New York and Washington DC. 23-26th, January, 2012.
- 33. Ogundari, I.O., Olaopa, O.R. Famurewa, A.J., Sanni, M., Akarakiri, J.B. and Siyanbola, W.O. (2011) On the Food/Fuel Debate: Should Landmass Use for Biofuel Development Raise Food Security Concerns in Nigeria? In: Green Energy and Energy Security: Options for Africa (Eds: Adeninkinju et al), Proceedings of the 2011 NAEE Conference, Abuja, pg 449-460.
- 34. **Sanni M.** (2011): Application of GIS to Optimal Site Planning for Quality Infrastructure: a Case Study of ECOWAS. International Centre for Science and High Technology United Nations Industrial Development Organization. Praia, Cape Verde. 28th Nov. 2nd Dec, 2011.
- 35. **Sanni M.** (2011): Quality Infrastructure for Industrial Competitiveness in the ECOWAS Region. International Centre for Science and High Technology – United Nations Industrial Development Organization. Praia, Cape Verde. 28th Nov. - 2nd Dec, 2011.
- 36. **Sanni M.** (2011): Cluster Analysis and Data Interchange between ArcGIS, SPSS and MATEDIT. International Centre for Science and High Technology – United Nations Industrial Development Organization. Praia, Cape Verde. 28th Nov. - 2nd Dec, 2011.
- 37. M. Ghribi M., M.S. Kamara and **S.M. Muhammed** (2011) "GIS for mapping energy resources in Developing GIS for mapping energy resources in Developing Countries" International Centre for Science and High Technology United Nations Industrial Development Organization.
- 38. Oladipo, O.G., Olayinka, A., Aladesanmi, O.T., **Sanni, M.**, Famurewa, A.J. (2010) "Risk Mitigation Strategies and Policy Implications for Carbon Dioxide (CO₂) Emission in organically amended soils in Nigeria". African Journal of Environmental Science and Technology. Presented at the TWOS Fourth General Assembly and International Conference: Women Scientists in a Changing World.
- 39. **M. Sanni**, I.O. Ogundari, A.D. Dada, A. A. Egbetokun and W.O. Siyanbola (2010): Starving People to Feed Cars? Analysing the Conflicts between Green Politics and Food Security. A Paper

Presented at the Humboldt International Conference Ladoke Akintola University of Technology,Ogbomoso, Nigeria Jan 11 – 14, 2010.

- Sanni M., Jesuleye, O.A., Ali, G.A., Olotu S.J., Ogunkanbi D.A., Rasaq M. and Siyanbola W.O. (2010) Addressing the Challenges of Harnessing Biogas for Rural Development in Nigeria: Policy Guideline. A Paper Presented at the Humboldt International Conference Ladoke Akintola University of Technology,Ogbomoso, Nigeria Jan 11 – 14, 2010.
- I.O. Ogundari, G.A. Ali, M.Sanni, A.J Famurewa and Siyanbola, W.O. (2010): Technological and Economic Assessment of Sustainable Jatropha Biofuel Production in Nigeria. A Paper Presented at the Humboldt International Conference Ladoke Akintola University of Technology,Ogbomoso, Nigeria Jan 11 – 14, 2010.
- 42. Momodu, A.S., Abraham, O.E. Ogundari, I.O., Jesuleye, O.A., **Sanni, M.**, Ibuoye, T.F., and Siyanbola, W.O. (2009) "Options for promoting energy efficiency diffusion in Nigeria's residential and commercial buildings." Presented at the 2nd Annual NAEE/IAEE International Conference Titled "Nigeria Energy Industry Restructuring: Interactions Between Business, Economics, and Policy" between April 23-24, 2009, at Sheraton Hotel, Abuja, Nigeria
- 43. Rasaq M.A., Siyanbola W.O. and **Sanni M.** (2009): "A Dyanamic Analysis of the Energy Supply Shock and Economic Growth Nexus: A Case Study of Nigeria" Presented at the 2nd Annual NAEE/IAEE International Conference Titled "Nigeria Energy Industry Restructuring: Interactions Between Business, Economics, and Policy" between April 23-24, 2009, at Sheraton Hotel, Abuja, Nigeria
- 44. Odeyemi Y.A and Sanni M. (2008)"Global Warming, Environmental Change and Human Security Nexus: A Case of Forest-Savanna Region of Southwestern Nigeria" Presented at the 3rd Annual Conference of the Faculty of Social Sciences, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 25th – 27th November, 2008.
- 45. Sanni M., Odekunle T.O., Ogundari I.O. and Aladesanmi O. T. (2008) "Spatio-Temporal Variation of Drought Severity in the Sudano-Sahelian Region of Nigeria: Implications for Global Warming" Presented at the 3rd Annual Conference of the Faculty of Social Sciences, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 25th – 27th November, 2008.
- 46. Ogundari I.O., Sanni M., Aladesanmi O. T. and Siyanbola W.O. (2008) "Bio-Energy Strategies for Climate Change Adaptation Issues for National Food Security" Presented at the 3rd Annual Conference of the Faculty of Social Sciences, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 25th – 27th November, 2008.
- 47. Aladesanmi O. T., Sanni M. and Ogundari I.O. "Water Pollution and Food Security in the Advent of Global Warming: A Case of Asejire Lake in South-West, Nigeria" Presented at the 3rd Annual Conference of the Faculty of Social Sciences, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 25th – 27th November, 2008.
- 48. O. Afolabi, , A. A. Egbetokun, **M. Sanni** A.D. Dada, O.A. Jesuleye and W.O. Siyanbola (2008) "Explaining Gender Effects on Entrepreneurial Behaviour of Students: The Case of Nigeria" " Conference Proceedings of the first Chike Okoli International Conference on Entrepreneurship. "Entrepreneurship and Africa's Quest for Development" Eds: B.C. Osisioma and Anayo D. Nkamnebe. Chike Okoli Centre for Entrepreneurial Studies, Nnamdi Azikwe University, Awka, Nigeria, 2008.
- 49. O. Afolabi, A. A. Egbetokun, **M. Sanni**, A.D. Dada, O.A. Jesuleye and W.O. Siyanbola (2008): "Determinants of Entrepreneurial Propensity of Nigeria University Students: An Institutional Assessment. Conference Proceedings of the first Chike Okoli International Conference on Entrepreneurship. "Entrepreneurship and Africa's Quest for Development" Eds: B.C. Osisioma and Anayo D. Nkamnebe. Chike Okoli Centre for Entrepreneurial Studies, Nnamdi Azikwe University, Awka, Nigeria , 2008.
- 50. **M. Sanni,** O. Afolabi, A. A. Egbetokun, A.D. Dada, O.A. Jesuleye and W.O. Siyanbola (2008): "Do Undergraduates Have What It Takes To Be Entrepreneurs And Managers Of Small Businesses In

Nigeria?: An Inquiry Into Students' Personal Entrepreneurial Characterisitics" Conference Proceedings at the 3rd Singapore Management University EDGE 2008 Conference."Bridging The Gap: Entrepreneurship In Theory And Practice" Organized by the Lee Kong Chian School Of Business, Singapore Management University, Singapore. 9th - 11th July 2008.

- 51. O. Afolabi, W.O. Siyanbola, A. A. Egbetokun, A.D. Dada, **M. Sanni**, O.A. Jesuleye and (2008) "Gender Influence on Entrepreneurial Behaviour of Nigerian Undergraduate Students" Conference Proceedings at the 3rd Singapore Management University EDGE 2008 Conference."Bridging The Gap: Entrepreneurship In Theory And Practice" Organized by the Lee Kong Chian School Of Business, Singapore Management University, Singapore. 9th - 11th July 2008.
- 52. M. Sanni, A. A. Egbetokun and O.A. Jesuleye, I.O. Ogundari and A.S. Momodu (2008): "Clean Technologies as Mitigating Strategies against the Potential Impacts of Climate Change in the 21st Century Nigeria" Conference Proceedings at the 1st Annual Conference of the Institute of Ecology and Environmental Studies on "Towards a Low Carbon Economy", Conference Centre and Guest Houses Limited, O A U, Ile Ife, Nigeria. 10th 12th June, 2008. Edited by A.T. Salami, I.E. Ofozie and O.O. Awotoye
- 53. A.S. Momodu, O.A. Jesuleye, I.O. Ogundari, M. Sanni, W.O. Siyanbola (2008): "Adopting Appropriate Techniques for Managing Emissions from Land Use, Land Use Change and Forestry (LULUCF) in Nigeria". Conference Proceedings at the 1st Annual Conference of the Institute of Ecology and Environmental Studies on "Towards a Low Carbon Economy", Conference Centre and Guest Houses Limited, O A U, Ile Ife, Nigeria. 10th 12th June, 2008. Edited by A.T. Salami, I.E. Ofozie and O.O. Awotoye
- 54. Afolabi O. O., Egbetokun A. A., Dada A. D., **Sanni M.**, Jesuleye O. A. and Siyanbola W. O. (2008): Stimulating Entrepreneurial Behaviour Among Nigerian Youth: The Influence Of Entrepreneurial Education. African Entrepreneurship Seminar. Organised by the School of Entrepreneurship and Business University of Essex. 31 March and 2 April, 2008.
- 55. A.A. Oyewale, W.O. Siyanbola, A.D. Dada and **M. Sanni** (2007): Understanding of Patent Issues Among Nigeria's Researchers: A Baseline Study. Conference Proceedings at the The International Conference on Regional and National Innovation Systems for Development, Competitiveness and Welfare: the Government-Academia-Industry Partnership (theory, problems, practice and prospects) Saratov, Volga Region, Russia, September 19-23, 2007.

Seminars, Workshops and Conferences

COVID-19 and development – effects and new realities for the Global South. Organized by United Nations University World Institute for Development Economics Research (UNU-WIDER), Finland. 6-8 September 2021.

Climate Conversations: Decarbonization. Organized by The Climate Communications Initiative. February 18, 2021

India's Energy Transition: At Crossroads? Organised by Oxford Climate Society, United Kingdom. 8week climate seminar series. February 17th, 2021

Challenging Research for Sustainability Transdisciplinary methods, relationships, politics and praxis. Online dialogue event. Organised by the ESRC STEPS Centre, University of Sussex. 17th February 2021

Development challenges in Africa in the wake of the COVID-19 pandemic Online conference organized by the United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT), Netherlands, 11-12 February 2021.

Chris Freeman Centenary Lectures on **The Evolutionary Core of National Systems of Innovation**. Lecture Series organized by Global Network for Economics of Learning, Innovation, and Competence Building Systems (GLOBELICS), Aalborg University, Department of Business and Management in collaboration with The United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT), Netherlands. Feb 05, 2021. Consultative Meeting on the National Sustainable Development Goals (SDGs) Implementation Plan (2021-2030) organised by the Civil Society of Nigeria. Feb 5, 2021.

Webinar on **Technology and Innovation Report 2021** orgnaised by the University of Johannesburg and SARChI transformative, Innovation, 4IR and sustainable development, and Global Network for Economics of Learning, Innovation, and Competence Building Systems (GLOBELICS). Feb 5, 2021

AfricaLics Webinar series on **Innovation and development studies research in Africa**. Webinar series organized by the African Network for the Economics of Learning, Innovation, and Competence Building Systems (AfricaLics), Nairobi, Kenya. Feb 4, 2021.

15th RIHN International Symposium, entitled **Transitioning Cultures of Everyday Food Consumption and Production: Stories from a Post-growth Future**. Organized by Research Institute for Humanity and Nature, Kyoto, Japan. Wednesday, January 13th, 2021 - Saturday, 16th, 2021.

RFF-CMCC European Institute on Economics and the Environment Webinar on **Technology Adoption and Structural Transformation: The Case of Tractors in France** delivered by Jacint Enrich Moya. Jan 26, 2021

World Intellectual Protection Organisation webinar series: **Overview of PATENTSCOPE**. Organised by World Intellectual Protection Organisation, Switzerland. Jan 19, 2021

Chris Freeman Centenary Lectures on **Theoretical Foundations of National Systems of Innovation**. Virtual Lecture Series organized by Global Network for Economics of Learning, Innovation, and Competence Building Systems (GLOBELICS), Aalborg University, Department of Business and Management in collaboration with The United Nations University - Maastricht Economic and Social Research Institute on Innovation and Technology (UNU-MERIT), Netherlands. Jan 28, 2021.

Workshop on **Doing Research in Nigeria: bridging the research gap and improving development policies**. Organised by the National Centre for Technology Management, Nigeria and Global Development Network, India. Sep 8, 2020.

NACETEM Webinar Series organized by the National Centre for Technology Management, Ile Ife, Nigeria on Harnessing Science, Technology and Innovation (STI) for COVID-19 response in Nigeria. Lecture delivered by Dr. Boladale Adebowale. Aug 31, 2020.

NACETEM Webinar Series organized by the National Centre for Technology Management, Ile Ife, Nigeria on The role of Science, Technology and Innovation in a world with COVID-19. Lecture delivered by Maruf Sanni. Jul 27, 2020.

Webinar series by Resources for the Future on **Driving Behavior: How COVID-19 Pumped the Brakes on Transportation**. Jul 23, 2020

Webinar series organised by Nigeria Youth Academy **Should Nigeria start preparing for the next pandemic?** Jul 18, 2020

NigeriaLics Webinar Series organized by NigeriaLics Network on **Managing Research Productivity with Appropriate Technology During Pandemic**. Jun 25, 2020

Conference organised by New Economic Thinking at the Centre for Sustainable Development, University of Ibadan, Ibadan, Nigeria. 10th – 12th April 2019.

Workshop on Climate Communication and Awareness at the AFRIGIS Coulibaly Hall, Obafemi Awolowo University, Ile-Ife, Nigeria, 11th March, 2019.

Symposium on Climate Change Adaptation in Africa. 14th-15th May 2018. University of Ibadan, Nigeria.

AfricaLics Conference 2017. 27-29 November, 2017 at the University of Oran2, Mohamed Ben Ahmed, Oran, Algeria.

Obafemi Awolowo University, Tek Conference, September 24-27, 2017, at the Conference Centre and Guest Houses Limited, Obafemi Awolowo University, Ile Ife, Osun State.

Fifth International Conference on Sustainable Development (ICSD) 2017. 18 to 19 September, 2017 at the Alfred Lerner Hall, New York, NY

Presentation at the 14th GLOBELICS Conference 12th - 14th October, 2016 Bandung, Indonesia.

National Validation and Dissemination Workshops on Improving the Development Outcomes of Private-Public-Partnerships (PPPs) in Agriculture and the Environment at The United Nations University Institute for Natural Resources in Africa (UNU-INRA) in Accra, Ghana on 7th, April, 2016.

Fifth Conference on Climate Change and Development in Africa (CCDA-V) "Africa, Sustainable Development and Climate Change: prospects of Paris and beyond" October 28–30, 2015 Victoria Falls, Zimbabwe

Writeshop on Innovation and Development hosted at the Institute for Economic Research on Innovation (IERI), Tshwane University of Technology, Pretoria, South Africa from 24 and 28 August 2015

GLOBELICS PhD Academy, University of Tampere, Tampere, Finland, Denmark, 01-15 June, 2015,

PhD Program in Innovation Management – Advanced at the Business Administration & Management Department, Copenhagen Business School, Denmark, May 11-13, 2015.

DOME PhD course: "Innovation and Entrepreneurship Theory", Roskilde University, Denmark, 20-24 April 2015.

AfricaLics PhD Academy, Moi University, Mombasa Campus, Kenya, March 15, 2015 – March, 30, 2015

7th Annual Conference of the Institute of Ecology and Environmental Studies, Obafemi Awolowo University, Ile-Ife, 12th June, 2014

A Two-day National Stakeholders' validation Meeting on the Second National Communication (SNC). Held at the Lapour Hotels, Plot 794 Okonjo Iweala Way, Abuja. Wednesday 11 to Thursday 12, December, 2013

Regional validation of synthesis on research and policy related to climate change adaptation in regions of sub-Saharan Africa. Held at the Radisson Blu Hotel, Dakar, Senegal on the 12th July, 2013.

Methodology workshop for the review of research and policy related to climate change adaptation in Africa; held at Nairobi, Kenya: January 30 &31, 2013

Stakeholders' Sensitization workshop on Technological Entrepreneurial Attitude in Nigerian Tertiary Institutions, organsized by National Centre for Technology Management, Ile Ife, Nigeria, 8th November, 2012.

International Conference on Evidence-Informed Policy Making, organsized by National Centre for Technology Management, Ile Ife, Nigeria, 27-29th February 2012.

A Briefing on climate change organized by the Massachusetts Institute of Technology at the UN Headquarters and U.S. House of Representatives in New York and Washington DC. 23-26th, January, 2012.

Training Workshop on using GIS for Quality Infrastructure Mapping. Training workshop organised by the International Centre for Science and High Technology - United Nations Industrial Development Organisation. Praia, Cape Verde. 28th Nov. - 2nd Dec, 2011.

Joint ICTP-TWAS Workshop on Science Communication in Developing Countries: Bridging the Gap between Science, Policy and the General Public workshop. At the Abdul Salam International Centre for Theoretical Physics, Trieste, Italy, -17th to 21st of October, 2011

Conference on 'Uncovering Sustainable Development CLEWS; Modelling Climate, Land-use, Energy and Water (CLEW) Interactions' by the Abdul Salam International Centre for Theoretical Physics, Trieste, Italy, 30th of May to 3rd of June - 2011

Workshop on Process simulation for a greener footprint and energy savings at industrial level organised by the International Centre for Science and High Technology - United Nations Industrial Development Organisation. Trieste, Italy, 26th -27th of May 2011.

Conference on the Role of e-Infrastructures for Climate Change Research organised by the International Centre for Theoretical Physics, at Leonardo da Vinci Building, Lobby. Trieste – Italy, 16 – 20 May 2011,

Biofuels and biobased chemicals. An opportunity for developing countries? Conference organised by the International Centre for Science and High Technology - United Nations Industrial Development Organisation. Trieste, Italy, 9th -11th of May 2011.

Expert Group Meeting on Instruments and Potential for the Use of Renewable Energies for Regional Development conference organised by the International Centre for Science and High Technology - United Nations Industrial Development Organisation. Trieste, Italy, 3rd - 5th of May 2011.

International Centre for Science and High Technology - United Nations Industrial Development Organisation meeting on Africa-Mexico cooperation programme on the geothermal area for productive uses. Trieste, Italy, 8th of April 2011.

Humboldt International Conference at Ladoke Akintola University of Technology,Ogbomoso, Nigeria with the theme "Building a Non-Export Based Economy for Nigeria: The Potential of Value-added Products from Agricultural Residue" Jan 11 – 14, 2010.

Workshop on Biomass Energy Modelling with GIS and Remote Sensing held at Makerere University, Kampala, Uganda in conjunction with AfricaGIS 2009 between 29th and 30th of October, 2009.

Joint ICTP/IAEA Workshop on Alternative Response Actions to Climate Change and Energy Options, ICTP, Trieste, Italy 5 - 9 October 2009, Giambiagi Lecture Hall.

Stakeholders' meeting on the Nigeria's Perspectives on Technology Transfer in the Copenhagen Climate Negotiations. Held at the International Centre for Energy, Environment & Development, Bassan Plaza, 3rd Floor, Block F, Plot 759 Central Business District, Abuja. September 15, 2009.

National Climate Change Roundtable Conference by Federal Ministry of Environment. Held at the Sheraton Hotels and Towers, Abuja, Nigeria, on the 27th August, 2009.

GIS Day Conference organized by the Regional Centre for Training In Aerospace Surveys, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 11th December, 2008

3rd Annual Conference of the Faculty of Science,"The Role of Sciences in Combating Global Warming and esponse to Sustainable National Development" organized by the Faculty of Sciences, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. 25th – 27th November, 2008.

3rd Singapore Management University EDGE 2008 Conference."Bridging The Gap: Entrepreneurship In Theory And Practice" Organized by the Lee Kong Chian School Of Business, Singapore Management University, Singapore. 9th - 11th July 2008.

Workshop on Strategic Management of Science, Technolgoy and Innovation (STI) for Economic Development In Nigeria, Organised by National Centre for Technology Management Southwest Zonal Office, Lagos, May 27 - 29, 2008 in Lokoja.

Workshop on Research Development, , RECTAS Mini-Hall, Obafemi Awolowo University, Ile Ife, Osun State, Nigeria. Organized by Development Partnership in Higher Education (DELPHE), March, 10 and 11, 2008

Sciece Technology and Innovation Policy Dialogue for State Ministries and Local Governments, 29th October and 1st November, 2007, Ogunbanjo Hall, Obafemi Awolowo University,Ile Ife, Nigeria.

International Workshop on The Use of Regionally Owned Space Infrastructure for Disaster management in West and North Africa- Status Quo and Propects, 15th – 16th October, 2007, Rockview Hotel Abuja, Nigeria.

Cumputer for All Nigerians Initiatives (CANi), Conference Centre and Guest Houses Limited, O A U, Ile Ife, Nigeria, 2007.

Efficient Management Of Technical Colleges In Nigeria For Sustainable Industrial Development, February 14 – 16, 2007, Onitsha, Nigeria.

International Stakeholders' Workshop on Geo-Information System-Based Forest Monitoring In Nigeria, NUC Auditorium, Maitama District, Abuja, March 27-30, 2006.

Stakeholder's workshop on Adaptation for, Impact on, and Assessment of Climate Change (AIACC) held at the Conference Centre, Obafemi Awolowo University, Ile-Ife, Nigeria, 2005.

Local and International Projects Undertaken

Assessment Social Science Research Systems: Doing Research programme. Grant from the Global Development Network, New Delhi India

Technology Audit of Nigeria and Global Technology Trends of Possible Strategic Interest to the Nation. Funded by the Federal Government of Nigeria.

Building low-carbon innovation energy systems in Africa. A research grant by the African Network for the Economics of Learning, Innovation, and Competence Building Systems (AfricaLics), Kenya.

Preparation of the final draft of the Nigeria's second national communication to the United Nations Framework Convention on Climate Change

Review of research and policy related to urban climate change adaptation in West Africa coordinated by the The West and Central African Council for Agricultural Research and Development (CORAF/WECARD), Dakar, Senegal.

An Impact Assessment of the Education Trust Fund's Micro-Science Kits Project (2008 - 2010); A consultancy project to NACETEM by the Education Trust Fund (ETF)

Assessment of Evidence Literacy Level of Policy Makers in the Utilisation of STI Indicators in Policy Making Process in Nigeria. A project sponsored by the New Partnership for African Development.

Evaluation of Source and Quality of Science and Technology Information Available to Ministry Officials and Members of The National Assembly in Nigeria sponsored by the International Network for Availability Of Scientific Publications (INASP)

Sustainable Industrial Development- GIS for Mapping Quality Infrastructure and Industrial Competitiveness in the ECOWAS/UEMOA Region

Climate Variability, Climate Change and Food Security in sub-Saharan West Africa.

Study on Adaptation to Global Climate Change in Nigeria. Sponsored by Henrich Boll Fundation, Lagos, Nigeria

Study on the Technology Transfer Requirements for Nigeria in relation to Climate Change. Sponsored by Henrich Boll Fundation, Lagos, Nigeria

Study on Technological Entrepreneurial Attitudinal Status in the Nigerian Tertiary Institutions. Sponsored by the World Bank Science and Technology Education Post-Basic (STEP-B) Project

Study on the Development of Science, Technology and Innovation Indicators. Sponsored by the NEPAD