

Dr Kolawole Olonade is an Associate Professor at the University of Lagos, Nigeria, and a Senior Lecturer at the Western Campus of Kampala International University, Uganda. Dr Olonade is a structure and cement-based materials expert, with focus on utilisation of various wastes (agricultural and industrial) for the production of high-performance concrete. He is a chartered engineer by the Council for the Regulation of Engineering in Nigeria (COREN). In 2018, he received the German African Innovation Incentive Award. Dr Olonade joined RILEM in 2013 and since then he has been a very active member, joining several Technical Committees, and co-organising several events, amongst which, the [East African Student Seminar on Materials technologies for sustainable construction](#) in 2020 and the [Graduate Symposium on Sustainable Concrete and Structures](#) in Nigeria in 2021.

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**Dr Daniela Ciancio - RILEM Implementation Manager (RIM):** Good morning, Kola, and thank you for your time today. You are in Berlin at the moment, am I correct?

**Dr Kolawole Olonade (Kola):** Yes, presently I'm in Berlin to attend the ordinary meeting of the Joint Committee on the [Globe Consensus](#) (JCGC). I was involved in developing the draft document of GLOBE (*Editor's note: Dr Olonade was one of the [GLOBE initiating members](#)*). Like many of the African initiators of GLOBE, I was unable to travel to attend the GLOBE meetings, for obvious reasons... we do not really get the funds to attend the meetings that are often held in Europe; but fortunately, there were funds to sponsor the travel of a few participants, and I was one of those who were asked to attend.

**RIM:** Wolfram (*Editor's note: Dr Wolfram Schmidt, RILEM Regional Convener for the [Sub-Saharan region](#)*) suggested this interview, as he thinks that your story could be of inspiration for other young researchers in Africa. So... here we are! Let's start from the very beginning. You were awarded your Ph.D. in Civil and Environmental Engineering in structures and materials from the University of Lagos in 2015.

**Kola:** Yes! All my PhD work was conceived, done, and then defended in Nigeria. I worked on cassava peels: that was what my PhD was all about. I saw that for the first time somebody could work on cassava peels as potential supplementary cementitious materials. When I wanted to start my PhD, I met my supervisor and I said "OK, I want to work on my Ph.D.". He suggested that I should read about pozzolanic materials because those were the areas that he was working on. I was motivated and I discovered that some people used rice husks as pozzolanic material. In the town in which I was working at that time, the cassava process happened in very large quantities. I used to see heaps of cassava, like mountains of cassava.

**RIM:** Cassava processed for what?

**Kola:** Fufu, they call it Fufu. It's food. It is obtained by cooking ground cassava after fibres are removed. When you have cassava flour, you put hot water and then you mix it. It produces a solid substance, and that solid substance is what you call Fufu. The way it is produced is this: they peel

cassava, then soak it in water, maybe for three days. After that they drain it, and they remove some fibres. What is left after this process is grinded, cooked and mixed with water and then it becomes something solid. That is what you call Fufu. So... I saw heaps of cassava peels like mountains and then nobody was really using it, then. It was something environmentally dangerous because cassava releases an obnoxious odour wherever processed; the odour coming from it is really not comfortable. You can smell it from about maybe 1-2 kilometres! I collected some samples converted to ash. We tried to determine the chemical composition. We found out that the chemical composition is not far from rice husk ash that people are using as pozzolanic material. So that was how I started!

**RIM:** Fantastic! I can see that you became a RILEM member in 2013, before you completed your PhD.

**Kola:** Actually, everything started with a conference in South Africa. A friend who was schooling in South Africa sent the flyer to me (*Editor's note: it was the RILEM co-sponsored event [ACCTA 2013 - Advances in Cement and Concrete Technology in Africa](#)*). I sent an abstract and it was accepted for presentation. I developed the paper, it was accepted for presentation. Then the issue was "how do I attend?", because I had to pay for the flight, for the conference, for the accommodation... too much! So I had to do some savings. I had to make a lot of savings. The money I spent for that conference was equivalent to three months of my salary.

**RIM:** This was during your PhD.

**Kola:** Yes! Before I completed my PhD! I was working at the university to take care of my family and to take care of myself. I also had to pay for the tuition fees in the university, as I didn't enjoy any scholarship. I attended that conference based on the savings that I was able to make. Finally, I attended the conference. There, I had the opportunity of meeting Wolfram. I also met Mark Alexander (*Editor's note: Prof. Alexander, RILEM President in 2012-2015*). During the conference they talked about RILEM, and it really fascinated me. I spoke to Mark Alexander, and he sent me the form; I submitted it and then there was no opportunity to have a 3-year free membership, like we have now! I found that, the annual fees were about €160 (*Editor's note: Nigerian residents benefit from a discount of 60% on the annual fees*), which is more than my monthly salary! I just felt that actually I could be saving certain amount of money every month, and this is what I have been doing for the last 12 years. From next year, the annual fees for Nigeria residents have been drastically reduced to €43-45, which is very good for me (*Editor's note: from 2024, [RILEM applies a higher discount \(90%\) to certain countries](#)*)! I have even paid for 2024. If we convert that amount into Nigerian Naira... I don't see anybody sacrificing their salary to make such payment. People are finding it difficult to pay even the fees for local professional bodies in the country, that is around or just about €30, I cannot even talk of somebody paying €160.00!!! Another challenge was "how do you pay?". I had to be looking for somebody with a RILEM account outside Nigeria. I found a friend in UK to pay on my behalf, and then I had to pay him back. Many things have changed now. Now I have my domiciliary, I can always pay with my card, or transfer from my own account. But before that, maybe in the first five years, I had to look for somebody abroad to help me pay and then see how to pay back this person.

**RIM:** It sounds expensive and complicated!

**Kola:** Yes! If the interest is not strong, I don't see anybody sacrificing for that. Because I sacrificed a lot. But I have never, never regretted it. That conference was really a turning point of my career. I met a lot of people; I met Wolfram who was fascinated with what I presented. Then, when the call for this [German Africa Innovation Incentive award](#) opened, I applied for it, and I won it. And then from there things have always been better and better.

**RIM:** When did you receive this award?

**Kola:** That was in 2018, about five years after the conference. Meanwhile, I had the opportunity to be a guest scientist at [BAM](#); as part of the award, I also visited the BAM laboratory to do some work. I was also in Brazil at the University of São Paulo, working with Prof. Holmer Savastano for 3 months: I met Holmer in Ghana in 2017; then I had the opportunity of getting a grant from Nigeria to work in a laboratory abroad; I contacted Holmer and then he invited me.

**RIM:** Are you currently supervising any Ph.D. student?

**Kola:** Yes, and also Master students. With Master students, once they finish their masters, they want to start their Ph.D. abroad, so they will leave.

**RIM:** Do they usually come back?

**Kola:** They don't come back. They believe that that life is relatively easier if they get to work abroad: the pay, the environment and everything, better than coming back to Nigeria. It's a brain drain, a serious one.

**RIM:** I see that you have been a member of many technical committees.

**Kola:** Yes! That's the way I can benefit from the investment I'm making: to participate in RILEM technical committees (TCs) because that is where I can get knowledge, I can share knowledge, I can interact with people, I can meet people and know what they are doing. From the TCs, I have gained a lot of things that are also transferred to my students. I started with the Technical Committee [251-SRT : Sulfate resistance testing](#), then subsequently I joined many more related to what I am doing.

**RIM:** I have a question related to the [initiative that you are attending these days: GLOBE](#). What do you think of Globe?

**Kola:** It is a good initiative. It's a good idea, but at the moment it is not very much known, in terms of its goals and objectives, and how they want to really achieve these; maybe because it is at the developmental stage. And there is no way GLOBE can achieve anything meaningful if Africa is not carried along. They shouldn't make the same mistake. Take RILEM for instance: it started in Europe and it stayed in Europe at first; only after several years they started to see how to carry Africa along. GLOBE should not be done in that way. From inception, they should find a way of bringing in the committee, at the organisation level, those who are in Africa, who are living in Africa, who understand the problems and challenges in Africa; they should make sure these people are fully involved and carried along. Also, some activities should be brought to Africa, not only limited in Europe as we know that there are challenges for us, for scientists in Africa, in terms of mobility, in terms of a lot of other things.

**RIM:** What would you say to African students? What would be your advice to help them in their career?

**Kola:** There is no gain without pain. If you don't sacrifice anything, there is no way you can benefit from it. RILEM is a scientific community. Not only just, it's an international one! If you want to nurture your career as an academic or as a researcher, then you have to really leverage on the existing opportunities and the opportunities lie with people. And the more people you know, the more benefit you get. And the only way for you to do that is that you have to sacrifice something and

pay the annual fees to become a RILEM member. RILEM has already found a way of further reducing the fees for participants from Africa.

**RIM:** Do you think this is enough?

**Kola:** No, RILEM has just started doing something for African researchers, but it is still not enough, because, for instance, now I've been willing to attend the RILEM annual week, because that is another great opportunity to network and learn, but there is no way I can afford a flight fare, accommodation, and conference registration. There is no way I can afford it. If I do that, it means I must save about seven months of my salary. To do that every year is very extremely unrealistic. So, maybe RILEM should waive registration fees for African researchers.

**RIM:** Any chance that you'll be joining in person next year the RILEM Annual Week or the Spring Convention?

**Kola:** I was thinking that I should submit a paper to the 2024 RILEM Annual Week, but when I looked at all the costs, I said to myself "do I have the funds?". I can sponsor my flights, but if I have to pay for registration and accommodation, no matter how small it is, I cannot afford it.

**RIM:** What about the 80<sup>th</sup> RILEM Week, which will take place in Nairobi, Kenya, in 2026? It will be the first Annual Week in East Africa. Are you planning to attend this event?

**Kola:** You can count me in!