



Engineers get to grips with materials science

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Engineering postgraduates will be immersed in materials science – sometimes described as the “science of stuff” – at next month’s Pan-African School of Materials (PASMAT).

The school will be held in Nigeria for the first time. It will run for two weeks in September on the campus of the African University of Science and Technology (AUST), located in Abuja.

Wole Soboyejo, who serves on the AUST scientific advisory board, said the school would take in about 20 students from African universities. The deadline for applications has been extended until tomorrow.

Soboyejo, who is a lecturer at Princeton University in the USA, will present the first week of lessons, focusing on structural fatigue and fracture.

“These are two key topics at the heart of materials science and engineering,” he told Research Africa.

“The tools that postgraduates acquire at PASMAT will prepare them for materials research, as well as future efforts to develop new materials,” the mechanical and aerospace engineer said.

The entire event runs from 5 to 17 September 2011. Interested master’s and PhD students should send their curriculum vitae and a one-page description of their thesis research to Tracey Odigie at tracey@aust.edu.ng by 31 August 2011.

Lesley Cornish, assistant dean of research at South Africa’s University of the Witwatersrand (Wits), will present the second week of training.

“I am hoping that the students will be able to bring their research problems to the course and we can discuss them in class to make it a learning experience for all,” Cornish told Research Africa.

At Wits, Cornish also directs the Centre of Excellence in Strong Materials, another collaborative effort begun in 2004 and funded by the government’s department of science and technology and the National Research Foundation.

She is also the director of African Materials Science and Engineering Network (AMSEN), established in 2008, which is one of the partners organising PASMAT.

The network, which focuses on increasing skills in materials science and engineering in order to add value to Africa’s extensive mineral deposits, has branches at Wits; the University of Botswana; the University of Namibia; the University of Nairobi, Kenya; and the Federal University of Technology, Nigeria.

AMSEN itself is one of five networks established by the Regional Initiative in Science and Education (RISE).

RISE is implemented by the Science Initiative Group (SIG), whose board includes Sudanese-born physicist Mohammed Hassan, the former president of the African Academy of Sciences.

SIG is located at the 70-year-old Institute for Advanced Study – once home to Albert Einstein - in Princeton, USA.

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