



*By virtue of the power to award degrees granted
by its Charter and by the authority of the Academic Board,
UMIST has this day awarded the Degree of*



DOCTOR OF PHILOSOPHY

TO

ABU BAKARR KANU

**WHO HAS SATISFIED THE EXAMINERS FOR THE DEGREE BY RESEARCH IN
INSTRUMENTATION & ANALYTICAL SCIENCE**

A handwritten signature in black ink, which appears to read 'Ian F. Baldwin', is written over a thick horizontal line.

Ian F. Baldwin - Secretary and Registrar

31.10.03

UMIST is one of the oldest institutions of higher learning of its kind in Europe, its origins going back to the early nineteenth century and the Manchester Mechanics Institute (founded in 1824). In 1905 UMIST was incorporated as the Faculty of Technology in the Victoria University of Manchester (which had itself been founded as Owens College in 1851 and became an independent university in 1903). As a Faculty, UMIST retained its financial and legal independence as an institution of higher learning, in due course receiving its own Royal Charters, with the power to award its own Degrees, if it wished. Whilst UMIST became, in due course, entirely responsible for its own academic affairs, it did not immediately break its link with the University of Manchester and a new Agreement, entered into in 1994 to replace that of 1905, allowed UMIST to authorise the award and the conferring of the degrees of the Victoria University of Manchester, graduates receiving degree certificates which bear the insignia of both institutions. In August 1999 UMIST implemented the right, set out in its Charter, to award its own Degrees. Students who, therefore, entered UMIST before that date are entitled to choose whether they wish to be awarded a joint University of Manchester/UMIST degree or a UMIST degree (but not both), students entering thereafter, except those on a joint course with the Victoria University of Manchester who will continue to be awarded a joint degree, will graduate with a UMIST degree.



UMIST

The University of Manchester Institute of Science and Technology

PO Box 88, Manchester M60 1QD
 Telephone:
 Main Number 0161 236 3311
 Transcript Office 0161 200 4046
 Fax 0161 200 3635

Diploma in Technical Science (offered to candidates admitted before September 1996)

The Diploma in Technical Science was offered to graduates and those holding other equivalent approved qualifications, who registered before September 1996. The course for the Diploma was of nine months duration and was identical with that offered to MSc candidates but required the writing of a Diploma report in place of a Dissertation. A candidate for the degree of MSc, who passed the examinations at MSc level, was eligible to be considered for the award of Diploma Class I, other candidates were eligible for the award of Class III(i), II(ii) or III or the award of a Pass.

Postgraduate Diploma (offered to candidates admitted in or after September 1996)

The postgraduate Diploma is offered to graduates and those holding other equivalent approved qualifications. The course for the Diploma is of nine months duration and is identical with that offered to MSc candidates but requires the writing of a report embodying an appropriate piece of work, instead of a Dissertation. A candidate for the degree MSc, admitted in September 1997 or September 1998, and who has passed the examinations at MSc level, is eligible to be considered for the award of the Diploma with Distinction; other candidates are eligible for the award of Pass.

Advanced Diploma (offered to candidates admitted in or after September 1999)

The advanced Diploma is offered to graduates and those holding other equivalent qualifications. The course for the Advanced Diploma is of nine months duration and is identical with that offered to MSc candidates but requires the writing of a report embodying an appropriate piece of work, instead of a Dissertation. A candidate for the Advanced Diploma must pass the MSc Advanced Diploma course at MSc level, but is required to write a report embodying an appropriate piece of work, instead of an MSc Dissertation. The Advanced Diploma may be awarded as a Pass or with Distinction.

Master of Science by Examination and Dissertation (MSc) and Master of Research (MRes)

These degrees consist of taught element over one-and-a-half or two semesters, followed by a Dissertation in the case of those who pass the taught element at an appropriate level. The prescribed period of study for the degree is one calendar year and the Dissertation will take four to six months.

Master of Philosophy (MPhil)

All Departments provide research facilities for students proposing to qualify for a Master's degree wholly by research. Such students are required to submit a thesis and the prescribed period of registration for the degree is one calendar year. The degree was first offered to students who registered in September 1995. Previously the degree was entitled Master of Science (MSc) and students who registered before September 1995 but submitted their theses after September 1995 will have been awarded the degree of MSc.

Doctor of Philosophy

Candidates for this degree must have had some previous experience of research work. This may involve registering for the degree of Master of Philosophy (MPhil) in the first instance and, at the end of the first year of research, transferring, by submitting a substantial piece of work (comparable to an MPhil thesis), to a course leading to the degree of PhD over two or three years. In certain cases, candidates may register for the degree of PhD over three years, submitting a substantial First Year Report (comparable to an MPhil thesis) at the end of the first year.

The degree of Doctor of Philosophy is awarded in recognition of the successful completion of a course of supervised research, the result of which are judged to constitute an addition to knowledge.

Transcript of Academic Record

Surname KANU

Other Name(s) ABU BAKARR

Date of Birth 09.12

Course of Study MSc (E & D) Instrumentation & Analytical Science

From September 1998 To September 1999

Student: KANU, ABU BAKARR

Course: MSc (E & D) Instrumentation & Analytical Science

Session: Year	1998/1999		Subjects	Marks
Subjects:	<p><i>Commenced a full time postgraduate course in the Department of Instrumentation & Analytical Science leading to the award of MSc.</i></p> <p><i>Satisfied the examination portion of the course in May 1999.</i></p>	<p><i>A Dissertation was submitted entitled:-</i></p> <p><i>"Investigating the Desorption Profiles Produced Through Cold Vapour Desorptions Using Gas Chromatography/Gas Chromatography-mass Spectrometry".</i></p>	<p><i>Core Examination</i> 101/150</p> <p><i>Specialist Examination</i> 108.5/150</p> <p><i>Laboratory Training</i> 35.5/50</p> <p><i>Research Training</i> 100.5/130</p> <p><i>Problem Class</i> 19.5/25</p>	
Examination: Result:	<p><i>Recommended for the award of MSc.</i></p>			

Course Result: Graduated with the degree of MSc on the 14 December 1999.

M. P. Akwai
Senior Administrative Officer for the Registrar



FOURAH BAY COLLEGE

University of Sierra Leone



Our Ref: F/STU(Se.)

N^o 0607

Your Ref: Letter of 19/9/96
(Mr. A.S. Adams)

Date: 25th September, 1996

Transcript of Academic Record

The following details of academic record are submitted for person named below who pursued ~~the course~~ a course of study at this institution:

Name and Admission No: Abu Nassar KANS; 14120

Period of Enrolment: From October 1991 To June 1996

Course(s) of Study Pursued: Bachelor of Science

Subjects offered at each level	Date of Study and Examination	*Grades Obtained	
		(a)	(b)
Preliminary (Applied Mathematics) Preliminary (Chemistry) Year (Geology) Year (Pure Mathematics) (Foundation Course)	October 1991 (a) June 1992 (b) Sept 1992	A) Ref. B) Pure B) Mathematics E) Pass)))) Pass A))
Intermediate (Chemistry) Intermediate (Geology) Year (Pure Mathematics)	October 1992 June 1993	B) B) A))) Pass)
Qualifying (Chemistry) Year (Geology) Year (Pure Mathematics)	October 1993 June 1994	B) B+) B+))) Pass)
Final (Hons.I) Year (Chemistry)	October 1994 June 1995	results carried forward to final Hons.II year	
Final (Hons.II) Year (Chemistry)	October 1995 June 1996	- P A S S	

Date of completion of Course: JUNE 1996

Qualification Obtained: B.Sc.(HONS.) IN CHEMISTRY

*Honours Division: SECOND CLASS FIRST DIVISION

Date of Conferment of degree(s): NOT YET CONFERRED

Awarding Body: UNIVERSITY OF SIERRA LEONE

*Grades are communicated to University or similar Institution only

The Grading System used is as follows

A — 70% and over; B — Between 60% and 69% B — Between 59% and 50%
 C+ — Between 49% and 45%; C — 44% and 40%; D — Between 39% and 35% E — Below 35%
 (Grades D and E represent Failure)

H. M. F. M. - In Charge (Mrs.)
 Deputy Registrar